



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

May 11, 2018

### Executive Summary:

#### Blake High School

300 Norwood Road

Silver Spring, Maryland 20905

Round of Testing:	Initial
# of Outlets Tested:	52
# of Outlets $\geq 20$ ppb:	1
Low Value (ppb):	<1.0
High Value (ppb):	100
Follow-Up Testing Required (Samples $\geq 20$ ppb):	Kitchen B110E (100 ppb)

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

### Project Status:

#### Testing Complete: Remediation Plan

Kitchen B110E - Replace fixture (M39376), in addition to supply line and valve located under sink



May 11, 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: Blake High School**

300 Norwood Road  
Silver Spring, Maryland 20905

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 Blake High School, located at 300 Norwood Road in Silver Spring, Maryland 20905.

**SCOPE OF SERVICES**

KCI conducted lead in water testing at Blake 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 4/5/2018 and 4/6/2018 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 5/2/2018, one 30 second follow-up samples 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>
M39376	Ice Maker - Kitchen B110E	4/6/2018	100	5/2/2018	ND

The initial lead in water sample results (4/6/2018) and 30 second follow up result (5/2/2018) 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 Blake High School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW05858	B110	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW05859	A102M	Break Room Counselor		Faucet	<1.0	Pass	Testing Complete
LW05860	A101	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW05863		Office	Directors Office	Faucet	1.0	Pass	Testing Complete
LW05864	D153	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW05865	C146	Hallway	Across From	Cooler	<1.0	Pass	Testing Complete
LW05866	C146	Hallway		Cooler	<1.0	Pass	Testing Complete
LW05869	H1000	Concession Gymnasium	Across From	Icemaker	<1.0	Pass	Testing Complete
LW05870	H1007	Locker Room - Girls		Cooler	<1.0	Pass	Testing Complete
LW05871	H1011	Locker Room - Boys		Cooler	<1.0	Pass	Testing Complete
LW05872	H1011	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW05873	H1007	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW05874	G184	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW05875	G190	Special Ed		Faucet	<1.0	Pass	Testing Complete
LW05877		Hallway	Across From E165	Cooler	<1.0	Pass	Testing Complete
LW05878		Hallway	Across From 162	Cooler	<1.0	Pass	Testing Complete
LW05879	E160	Day Care		Cooler	<1.0	Pass	Testing Complete
LW05880	E160	Day Care		Cooler	<1.0	Pass	Testing Complete
LW05881		Hallway	Outside Of C130	Cooler	<1.0	Pass	Testing Complete
LW05882		Hallway	Outside Of A216	Cooler	<1.0	Pass	Testing Complete
LW05883	A202	Special Ed Office		Faucet	<1.0	Pass	Testing Complete
LW05885		Hallway	Next To C239	Cooler	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW05886		Hallway	Across From C231	Cooler	<1.0	Pass	Testing Complete
LW05887		Hallway	Across From E260	Cooler	<1.0	Pass	Testing Complete
LW05888		Hallway	Across From E268	Cooler	<1.0	Pass	Testing Complete
M38729	C231B	Office Media Center		Faucet	1.4	Pass	Testing Complete
M38731	B229	Break Room		Faucet	1.1	Pass	Testing Complete
M38736		Hallway	Across Rm A257	Cooler	<1.0	Pass	Testing Complete
M38737		Hallway	Across Rm A257	Cooler	<1.0	Pass	Testing Complete
M38790	F305	Dept. Office Math		Faucet	<1.0	Pass	Testing Complete
M38791	F300	Classroom	Office	Faucet	<1.0	Pass	Testing Complete
M38806	B223	Office		Faucet	5.6	Pass	Testing Complete
M38807	A217	English Office		Faucet	1.1	Pass	Testing Complete
M38841	A159A	Concession Auditorium		Faucet	1.2	Pass	Testing Complete
M39242	C135	Office		Faucet	<1.0	Pass	Testing Complete
M39258	D148A	Band Office		Faucet	<1.0	Pass	Testing Complete
M39270	H1000	Concession Gymnasium		Faucet	<1.0	Pass	Testing Complete
M39271	H1000	Concession Gymnasium		Faucet	1.5	Pass	Testing Complete
M39363	B125	Office Science	Dept. Office	Faucet	<1.0	Pass	Testing Complete
M39364	B119	Fine Arts Dept. Office		Faucet	<1.0	Pass	Testing Complete
M39366	B120	Break Room		Faucet	<1.0	Pass	Testing Complete
M39370	B110E	Kitchen		Faucet	3.4	Pass	Testing Complete
M39371	B110E	Kitchen		Faucet	<1.0	Pass	Testing Complete
M39372	B110E	Kitchen		Faucet	1.5	Pass	Testing Complete
M39373	B110E	Kitchen		Faucet	2.0	Pass	Testing Complete
M39374	B110E	Kitchen		Faucet	<1.0	Pass	Testing Complete
M39375	B110E	Kitchen		Faucet	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M39376	B110E	Kitchen		Ice Maker	100	Fail	Follow Up Testing Needed
M39378	B110E	Kitchen		Faucet	<1.0	Pass	Testing Complete
M39379	B110E	Kitchen		Faucet	<1.0	Pass	Testing Complete
M39390		Health Room		Faucet	<1.0	Pass	Testing Complete
M39399	A1000	Work Room Admin		Faucet	<1.0	Pass	Testing Complete

\*PPB = parts per billion



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

Follow Up Sample Result for Blake High School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
M39376	B110E	Kitchen	Ice Maker	N/A	57.5	ND	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.