



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

May 11, 2018

### Executive Summary:

#### Jackson Road Elementary School

900 Jackson Road

Silver Spring, Maryland 20904

Round of Testing:	Initial
# of Outlets Tested:	91
# of Outlets $\geq 20$ ppb:	1
Low Value (ppb):	<1.0
High Value (ppb):	40.9
Follow-Up Testing Required (Samples $\geq 20$ ppb):	ESOL 135 (40.9 ppb)

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

### Project Status:

#### Testing Complete: Remediation Plan

ESOL 135 - Replace fixture (LW03736), 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: Jackson Road Elementary School**

900 Jackson Road  
Silver Spring, Maryland 20904

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 Jackson Road Elementary School, located at 900 Jackson Road in Silver Spring, Maryland 20904.

**SCOPE OF SERVICES**

KCI conducted lead in water testing at Jackson Road Elementary 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 4/12/2018 and 4/13/2018 to collect samples from 91 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 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>
LW03736	Bubbler - Indoor - ESOL 135	4/13/2018	40.9	5/2/2018	1.5

The initial lead in water sample results (4/13/2018) 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 Jackson Road Elementary School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW03606	147	Classroom		Bubbler - Indoor	2.7	Pass	Testing Complete
LW03607	147	Classroom		Faucet	1.2	Pass	Testing Complete
LW03608	150	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW03609	150	Classroom		Faucet	3.6	Pass	Testing Complete
LW03610		Hallway		Cooler	<1.0	Pass	Testing Complete
LW03612	153	Classroom		Faucet	3.8	Pass	Testing Complete
LW03613	152	Classroom		Bubbler - Indoor	1.7	Pass	Testing Complete
LW03614	152	Classroom		Faucet	3.1	Pass	Testing Complete
LW03615	154	Classroom		Bubbler - Indoor	3.5	Pass	Testing Complete
LW03616	154	Classroom		Faucet	3.6	Pass	Testing Complete
LW03697	211	Classroom		Bubbler - Indoor	2.0	Pass	Testing Complete
LW03698	211	Classroom		Faucet	2.0	Pass	Testing Complete
LW03700		Hallway	Across From Elevator	Cooler	<1.0	Pass	Testing Complete
LW03710	106	Classroom		Bubbler - Indoor	2.1	Pass	Testing Complete
LW03711	175	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03712	175	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW03713	174	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03714	174	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW03715	374	Classroom		Faucet	3.9	Pass	Testing Complete
LW03716		Hallway	Next To Room 204	Cooler	<1.0	Pass	Testing Complete
LW03717	202	Classroom		Bubbler - Indoor	1.9	Pass	Testing Complete
LW03718	202	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03719	204	Classroom		Bubbler - Indoor	2.3	Pass	Testing Complete
LW03720	204	Classroom		Faucet	4.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW03721	206	Classroom		Bubbler - Indoor	1.8	Pass	Testing Complete
LW03722	206	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03723	109	Classroom		Bubbler - Indoor	5.8	Pass	Testing Complete
LW03724	109	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03725	107	Classroom		Bubbler - Indoor	1.4	Pass	Testing Complete
LW03726	107	Classroom		Faucet	2.6	Pass	Testing Complete
LW03727	108	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03728	108	Classroom		Faucet	1.5	Pass	Testing Complete
LW03730	105	Classroom		Faucet	2.6	Pass	Testing Complete
LW03732	105	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03733	106	Classroom		Bubbler - Indoor	1.7	Pass	Testing Complete
LW03734	106	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03735	106	Classroom		Faucet	1.2	Pass	Testing Complete
LW03736	135	ESOL		Bubbler - Indoor	40.9	Fail	Follow Up Testing Needed
LW03737	135	ESOL		Faucet	<1.0	Pass	Testing Complete
LW03738	126	Work Room		Bubbler - Indoor	19.7	Pass	Testing Complete
LW03739	126	Work Room		Faucet	<1.0	Pass	Testing Complete
LW03740	114	Classroom		Bubbler - Indoor	16.5	Pass	Testing Complete
LW03741	114	Classroom		Faucet	2.3	Pass	Testing Complete
LW03742	114	Classroom		Faucet	3.6	Pass	Testing Complete
LW03743	114	Classroom		Bubbler - Indoor	1.0	Pass	Testing Complete
LW03744	113	Classroom		Bubbler - Indoor	1.7	Pass	Testing Complete
LW03745	113	Classroom		Faucet	2.9	Pass	Testing Complete
LW03746	110	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03747	110	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW03748		Hallway	Across From 110	Cooler	<1.0	Pass	Testing Complete
LW04425	124	Health Room		Faucet	1.2	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW04427	118A	Media Center Office		Faucet	2.4	Pass	Testing Complete
LW04428	138	Kitchen		Faucet	<1.0	Pass	Testing Complete
LW04429	138	Kitchen		Faucet	2.5	Pass	Testing Complete
LW04430	138	Kitchen		Faucet	1.8	Pass	Testing Complete
LW04431	138	Kitchen		Faucet	4.7	Pass	Testing Complete
LW04432	139	Music		Bubbler - Indoor	1.4	Pass	Testing Complete
LW04433	139	Music		Faucet	2.0	Pass	Testing Complete
LW04434	143	Classroom		Bubbler - Indoor	2.1	Pass	Testing Complete
LW04435	143	Classroom		Faucet	2.8	Pass	Testing Complete
LW04436	145	Classroom		Bubbler - Indoor	1.4	Pass	Testing Complete
LW04437	145	Classroom		Faucet	2.8	Pass	Testing Complete
M09878	166	Classroom		Faucet	<1.0	Pass	Testing Complete
M09880	168	Classroom		Faucet	<1.0	Pass	Testing Complete
M09881	168	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M09882		Hallway	Across from CR 169	Cooler	<1.0	Pass	Testing Complete
M09883		Hallway	Across from CR 169	Cooler	<1.0	Pass	Testing Complete
M09884	169	Classroom		Faucet	<1.0	Pass	Testing Complete
M09885	169	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M09886	171	Classroom		Faucet	<1.0	Pass	Testing Complete
M09887	171	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M09888	172	Classroom		Faucet	<1.0	Pass	Testing Complete
M09889	172	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M09912	363	Classroom		Faucet	<1.0	Pass	Testing Complete
M09914	366	Classroom		Faucet	<1.0	Pass	Testing Complete
M09915	366	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M09916	368	Classroom		Faucet	<1.0	Pass	Testing Complete
M09918		Hallway	Across from CR 369	Cooler	<1.0	Pass	Testing Complete



Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M09918		Hallway	Across from CR 369	Cooler	<1.0	Pass	Testing Complete
M09927	375	Classroom		Faucet	<1.0	Pass	Testing Complete
M09928	375	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M09929	369	Classroom		Faucet	<1.0	Pass	Testing Complete
M09931	371	Classroom		Faucet	<1.0	Pass	Testing Complete
M09932	371	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M09933	372	Classroom		Faucet	<1.0	Pass	Testing Complete
M09934	372	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M09936	374	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M09937	374	Classroom		Faucet	<1.0	Pass	Testing Complete
M09938	374	Classroom		Bubbler - Indoor	1.4	Pass	Testing Complete
M50685		Hallway	Across from APR of Stage	Cooler	<1.0	Pass	Testing Complete
M50686		Hallway	Across from APR of Stage	Cooler	<1.0	Pass	Testing Complete

\*PPB = parts per billion

**Contractor:** KCI Technologies, Inc.

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

Follow Up Sample Result for Jackson Road Elementary School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
LW03736	135	ESOL	Bubbler - Indoor	N/A	6.7	1.5	Remediation required – replace fixture, in addition to supply line and valve located under sink

\*PPB = parts per billion