MONTGOMERY COUNTY PUBLIC SCHOOLS
LEAD IN DRINKING WATER TESTING 2018

Executive Summary:
Candlewood Elementary School

7210 Osprey Drive
Rockville, MD 20855

Date of Test Report:	04/03/2018
Round of Testing:	Initial
# of Outlets Tested:	85
# of Outlets ≥ 20 ppb:	0
Low Value (ppb):	< 1.0
High Value (ppb):	7.2

Project Status

Initial testing complete: All results less than 20 ppb.

April 3, 2018

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 Testing Service

Location: Candlewood Elementary School
7210 Osprey Drive
Rockville, MD 20855

Dear Mr. Mullikin:

Professional Services Industries (PSI), Inc. is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of initial lead in water testing at Candlewood Elementary School, located at 7210 Osprey Drive, Rockville, MD 20855.

Scope of Services:

PSI conducted lead in water testing at Candlewood 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.

PSI visited the site on 03/15/18 and 03/16/18 to collect samples from 85 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.

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:

There were no results of the lead in water analysis at or above 20 parts per billion (ppb).

The lead in water sample results < 20 ppb for sample collection date 03/16/18 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.

Respectfully Submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Nand Kaushik, P.E.
Department Manager, Environmental Services
Nand.Kaushik@psiusa.com

Attachments: A – Lead in Water Test Summary Table

ATTACHMENT A

Lead in Water Test Summary Table

Contractor: Professional Services Industries, Inc.
Certified Laboratory: Microbac Laboratories, Inc.

Sample Results for Candlewood Elementary School

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
M04587		Hallway	Outside of APR 168	Cooler	<1.0	Pass	Testing Complete
M04588		Hallway	Outside of APR 168	Cooler	<1.0	Pass	Testing Complete
M32612	228	Support Room		Faucet	<1.0	Pass	Testing Complete
M32622		Hallway	Across from Rm 222	Cooler	<1.0	Pass	Testing Complete
M32623		Hallway	Across from Rm 222	Cooler	<1.0	Pass	Testing Complete
M32624	222	Classroom		Faucet	<1.0	Pass	Testing Complete
M32625	222	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32626	218	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32627	218	Classroom		Faucet	<1.0	Pass	Testing Complete
M32628	216	Classroom		Faucet	<1.0	Pass	Testing Complete
M32630	212	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32631	212	Classroom		Faucet	<1.0	Pass	Testing Complete
M32632		Hallway	Across from Rm 212	Cooler	<1.0	Pass	Testing Complete
M32633		Hallway	Across from Rm 212	Cooler	<1.0	Pass	Testing Complete
M32642	225	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32643	225	Classroom		Faucet	<1.0	Pass	Testing Complete
M32644	221	Classroom		Faucet	<1.0	Pass	Testing Complete
M32645	221	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32646	219	Classroom		Faucet	<1.0	Pass	Testing Complete
M32647	219	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32656	204	Support Room		Faucet	1.1	Pass	Testing Complete
M32657		Hallway	Next to Rm 200	Cooler	<1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
M32658		Hallway	Next to Rm 200	Cooler	<1.0	Pass	Testing Complete
M32659	200	Support Room		Faucet	1.0	Pass	Testing Complete
M32660	253	Classroom		Faucet	1.1	Pass	Testing Complete
M32661	253	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32662	249	Classroom		Faucet	<1.0	Pass	Testing Complete
M32663	249	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32664	245	Classroom		Faucet	<1.0	Pass	Testing Complete
M32665	245	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32666	243	Classroom		Faucet	<1.0	Pass	Testing Complete
M32667	243	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32668	239	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32669	239	Classroom		Faucet	<1.0	Pass	Testing Complete
M32672	168I	Kitchen		Faucet	3.0	Pass	Testing Complete
M32673		Kitchen		Faucet	<1.0	Pass	Testing Complete
M32674	168I	Kitchen		Faucet	<1.0	Pass	Testing Complete
M32675	168I	Kitchen		Faucet	<1.0	Pass	Testing Complete
M32680	165	Instrumental Music		Faucet	2.5	Pass	Testing Complete
M32681	165	Instrumental Music		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32682	161	Music		Faucet	<1.0	Pass	Testing Complete
M32683	157	Dual Purpose Room		Faucet	1.3	Pass	Testing Complete
M32684	157	Dual Purpose Room		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32688	152	Office		Faucet	<1.0	Pass	Testing Complete
M32692	145	Special Ed		Faucet	<1.0	Pass	Testing Complete
M32693	150	Speech Therapy		Faucet	1.1	Pass	Testing Complete
M32694		Hallway	Next to Rm 146	Cooler	<1.0	Pass	Testing Complete
M32695		Hallway	Next to Rm 146	Cooler	<1.0	Pass	Testing Complete
M32704	146	Classroom		Faucet	7.2	Pass	Testing Complete
M32705	146	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
M32706	142	Classroom		Faucet	<1.0	Pass	Testing Complete
M32707	142	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32708	138	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32709	138	Classroom		Faucet	<1.0	Pass	Testing Complete
M32710	137	Support Room		Faucet	1.3	Pass	Testing Complete
M32711	133	Classroom		Faucet	<1.0	Pass	Testing Complete
M32712	133	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32714	136	Classroom		Faucet	<1.0	Pass	Testing Complete
M32715	136	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32716	132	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32717	132	Classroom		Faucet	<1.0	Pass	Testing Complete
M32718		Hallway	Next to Rm 132	Cooler	<1.0	Pass	Testing Complete
M32719		Hallway	Next to Rm 132	Cooler	<1.0	Pass	Testing Complete
M32728	130	Support Room		Faucet	1.0	Pass	Testing Complete
M32729	130	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32733	128	Classroom		Faucet	<1.0	Pass	Testing Complete
M32734	128	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32736	124	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32737	124	Classroom		Faucet	<1.0	Pass	Testing Complete
M32739	125	Classroom		Faucet	<1.0	Pass	Testing Complete
M32740	125	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32742	122	Classroom		Faucet	<1.0	Pass	Testing Complete
M32743	122	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32745	121	Break Room		Faucet	<1.0	Pass	Testing Complete
M32746	118	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M32747	118	Classroom		Faucet	<1.0	Pass	Testing Complete
M32751	114	Classroom		Bubbler - Indoor	1.4	Pass	Testing Complete
M32752	114	Classroom		Faucet	2.9	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
M32760		Hallway	Across from Gym	Cooler	<1.0	Pass	Testing Complete
M32761		Hallway	Across from Gym	Cooler	<1.0	Pass	Testing Complete
M32767	101A	Material Prep Media Center	Inside Media Center	Faucet	1.1	Pass	Testing Complete
M32768	102	Health Room Health		Faucet	<1.0	Pass	Testing Complete
M32773	104	Work Room		Faucet	<1.0	Pass	Testing Complete
M32774		Hallway	Next to Elevator in the Main Entrance	Cooler	<1.0	Pass	Testing Complete
M32775		Hallway	Next to Elevator in the Main Entrance	Cooler	<1.0	Pass	Testing Complete

*ppb = parts per billion