



## **MONTGOMERY COUNTY PUBLIC SCHOOLS LEAD IN DRINKING WATER TESTING 2018**

**Executive Summary:**  
**Goshen Elementary School**  
18820 Strawberry Knoll Road  
Gaithersburg, MD 20879

|                             |            |
|-----------------------------|------------|
| Date of Test Report:        | 03/12/2018 |
| Round of Testing:           | Initial    |
| # of Outlets Tested:        | 78         |
| # of Outlets $\geq$ 20 ppb: | 0          |
| Low Value (ppb):            | < 1.0      |
| High Value (ppb):           | 13.9       |

### **Project Status**

**Initial testing complete:** All results less than 20 ppb.



March 12, 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: Goshen Elementary School  
8701 Warfield Road  
Gaithersburg, MD 20882

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 Goshen Elementary School, located at 8701 Warfield Road, Gaithersburg, MD 20882.

**Scope of Services:**

PSI conducted lead in water testing at Goshen 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 01/31/18 and 02/01/18 to collect samples from 78 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 02/01/18 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.**

A handwritten signature in black ink that reads "Nand Kaushik".

Nand Kaushik, P.E.  
Department Manager, Environmental Services  
[Nand.Kaushik@psiusa.com](mailto: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 Goshen Elementary School

| Barcode ID | Room Number | Location                              | Location Notes                | Equipment Type   | Result (PPB)* | Pass/Fail | Status           |
|------------|-------------|---------------------------------------|-------------------------------|------------------|---------------|-----------|------------------|
| LW00663    |             | Hallway                               | Next To Storage 249           | Cooler           | <1.0          | Pass      | Testing Complete |
| LW00664    | 19          | Classroom                             |                               | Faucet           | 2.2           | Pass      | Testing Complete |
| LW00665    |             | Hallway                               | Across From Room 10           | Cooler           | <1.0          | Pass      | Testing Complete |
| LW00666    | 8           | Classroom                             |                               | Faucet           | 3.5           | Pass      | Testing Complete |
| LW00667    |             | Break Room                            | Staff Lounge                  | Faucet           | 1.2           | Pass      | Testing Complete |
| LW00668    |             | Hallway                               | Between Gym And Elevator      | Cooler           | <1.0          | Pass      | Testing Complete |
| LW00669    |             | All Purpose Room<br>Dual Purpose Room |                               | Bubbler - Indoor | 6.5           | Pass      | Testing Complete |
| LW00670    |             | Break Room Office                     | Combined With Conference Room | Faucet           | 7.4           | Pass      | Testing Complete |
| LW00671    |             | Conference Room Office                | Next To Principal Office      | Faucet           | 1.9           | Pass      | Testing Complete |
| LW00672    |             | Health Room Office                    |                               | Faucet           | 2.9           | Pass      | Testing Complete |
| LW00673    |             | Hallway                               | Next To Multipurpose Room     | Cooler           | <1.0          | Pass      | Testing Complete |
| LW00674    | K2          | Classroom                             |                               | Faucet           | 2.5           | Pass      | Testing Complete |
| LW00675    |             | Break Room                            | Next To Kitchen               | Faucet           | <1.0          | Pass      | Testing Complete |
| M35222     | K4          | Classroom                             |                               | Faucet           | 3.8           | Pass      | Testing Complete |
| M35223     | K4          | Classroom                             |                               | Bubbler - Indoor | 1.9           | Pass      | Testing Complete |
| M35225     | K3          | Classroom                             |                               | Faucet           | 1.4           | Pass      | Testing Complete |
| M35226     | K3          | Classroom                             |                               | Bubbler - Indoor | 2.1           | Pass      | Testing Complete |
| M35229     | K2          | Classroom                             |                               | Bubbler - Indoor | <1.0          | Pass      | Testing Complete |
| M35231     | K1          | Classroom                             |                               | Faucet           | 1             | Pass      | Testing Complete |
| M35232     | K1          | Classroom                             |                               | Bubbler - Indoor | 1.4           | Pass      | Testing Complete |
| M35245     |             | Kitchen                               |                               | Faucet           | 1.7           | Pass      | Testing Complete |
| M35246     |             | Kitchen                               |                               | Faucet           | 2             | Pass      | Testing Complete |
| M35247     |             | Kitchen                               |                               | Faucet           | 3.3           | Pass      | Testing Complete |

| Barcode ID | Room Number | Location                              | Location Notes          | Equipment Type   | Result (PPB)* | Pass/Fail | Status           |
|------------|-------------|---------------------------------------|-------------------------|------------------|---------------|-----------|------------------|
| M35248     |             | Kitchen                               |                         | Faucet           | 13.9          | Pass      | Testing Complete |
| M35250     |             | Material Prep Media Center            |                         | Faucet           | 1.1           | Pass      | Testing Complete |
| M35254     |             | Computer                              | Across From Storage 106 | Faucet           | 1.3           | Pass      | Testing Complete |
| M35257     | 6           | Classroom                             |                         | Faucet           | 1.3           | Pass      | Testing Complete |
| M35258     | 6           | Classroom                             |                         | Bubbler - Indoor | 2.4           | Pass      | Testing Complete |
| M35259     | 7           | Classroom                             |                         | Faucet           | 3             | Pass      | Testing Complete |
| M35260     | 7           | Classroom                             |                         | Bubbler - Indoor | <1.0          | Pass      | Testing Complete |
| M35262     | 8           | Classroom                             |                         | Bubbler - Indoor | 3             | Pass      | Testing Complete |
| M35263     | 9           | Classroom                             |                         | Faucet           | 5.7           | Pass      | Testing Complete |
| M35264     | 9           | Classroom                             |                         | Bubbler - Indoor | 3             | Pass      | Testing Complete |
| M35265     | 10          | Classroom                             |                         | Faucet           | 5.4           | Pass      | Testing Complete |
| M35266     | 10          | Classroom                             |                         | Bubbler - Indoor | 3.5           | Pass      | Testing Complete |
| M35276     | 2           | Classroom                             |                         | Faucet           | 1.7           | Pass      | Testing Complete |
| M35277     | 2           | Classroom                             |                         | Bubbler - Indoor | <1.0          | Pass      | Testing Complete |
| M35279     | 3           | Classroom                             |                         | Bubbler - Indoor | <1.0          | Pass      | Testing Complete |
| M35280     | 4           | Classroom                             |                         | Faucet           | 2.9           | Pass      | Testing Complete |
| M35281     | 4           | Classroom                             |                         | Bubbler - Indoor | <1.0          | Pass      | Testing Complete |
| M35282     | 5           | Classroom                             |                         | Faucet           | 5.3           | Pass      | Testing Complete |
| M35283     | 5           | Classroom                             |                         | Bubbler - Indoor | 1.3           | Pass      | Testing Complete |
| M35286     | 1           | Classroom                             |                         | Faucet           | 1.7           | Pass      | Testing Complete |
| M35287     | 1           | Classroom                             |                         | Bubbler - Indoor | 6.1           | Pass      | Testing Complete |
| M35290     |             | All Purpose Room<br>Dual Purpose Room |                         | Faucet           | 1.6           | Pass      | Testing Complete |
| M35292     |             | Music                                 |                         | Faucet           | 2             | Pass      | Testing Complete |
| M35301     | 12          | Classroom                             |                         | Faucet           | 1.8           | Pass      | Testing Complete |
| M35302     | 12          | Classroom                             |                         | Bubbler - Indoor | 1.6           | Pass      | Testing Complete |
| M35303     | 14          | Classroom                             |                         | Faucet           | 1.3           | Pass      | Testing Complete |
| M35304     | 14          | Classroom                             |                         | Bubbler - Indoor | 1.2           | Pass      | Testing Complete |
| M35305     | 11          | Classroom                             |                         | Faucet           | <1.0          | Pass      | Testing Complete |

| Barcode ID | Room Number | Location   | Location Notes | Equipment Type   | Result (PPB)* | Pass/Fail | Status           |
|------------|-------------|------------|----------------|------------------|---------------|-----------|------------------|
| M35306     | 11          | Classroom  |                | Bubbler - Indoor | 1.8           | Pass      | Testing Complete |
| M35307     | 13          | Classroom  |                | Faucet           | 1.8           | Pass      | Testing Complete |
| M35308     | 13          | Classroom  |                | Bubbler - Indoor | <1.0          | Pass      | Testing Complete |
| M35309     | 15          | Classroom  |                | Faucet           | <1.0          | Pass      | Testing Complete |
| M35310     | 15          | Classroom  |                | Bubbler - Indoor | 3.5           | Pass      | Testing Complete |
| M35311     | 16          | Classroom  |                | Faucet           | 1.1           | Pass      | Testing Complete |
| M35312     | 16          | Classroom  |                | Bubbler - Indoor | 1.6           | Pass      | Testing Complete |
| M35312     | 16          | Classroom  |                | Bubbler - Indoor | 2             | Pass      | Testing Complete |
| M35314     | 17          | Classroom  |                | Bubbler - Indoor | 4.9           | Pass      | Testing Complete |
| M35315     |             | Break Room | Next to CR 16  | Faucet           | 3.7           | Pass      | Testing Complete |
| M35316     | 18          | Classroom  |                | Faucet           | 1.4           | Pass      | Testing Complete |
| M35317     | 18          | Classroom  |                | Bubbler - Indoor | 1             | Pass      | Testing Complete |
| M35319     | 19          | Classroom  |                | Bubbler - Indoor | <1.0          | Pass      | Testing Complete |
| M35320     | 20          | Classroom  |                | Faucet           | 10.2          | Pass      | Testing Complete |
| M35321     | 20          | Classroom  |                | Bubbler - Indoor | 3.2           | Pass      | Testing Complete |
| M35322     | 21          | Classroom  |                | Faucet           | 3.2           | Pass      | Testing Complete |
| M35323     | 21          | Classroom  |                | Bubbler - Indoor | 1             | Pass      | Testing Complete |
| M35332     | R           | Reading    | Reading Room   | Faucet           | 1.1           | Pass      | Testing Complete |
| M35334     | 22          | Classroom  |                | Faucet           | 2.1           | Pass      | Testing Complete |
| M35335     | 22          | Classroom  |                | Bubbler - Indoor | 1.9           | Pass      | Testing Complete |
| M35336     | 23          | Classroom  |                | Faucet           | 1.6           | Pass      | Testing Complete |
| M35337     | 23          | Classroom  |                | Bubbler - Indoor | <1.0          | Pass      | Testing Complete |
| M35338     | 24          | Classroom  |                | Faucet           | 2.9           | Pass      | Testing Complete |
| M35340     | 25          | Classroom  |                | Faucet           | 1.7           | Pass      | Testing Complete |
| M35340     | 25          | Classroom  |                | Faucet           | 2.6           | Pass      | Testing Complete |
| M35342     | 26          | Classroom  |                | Faucet           | 2.6           | Pass      | Testing Complete |
| M35343     | 26          | Classroom  |                | Bubbler - Indoor | 1.5           | Pass      | Testing Complete |

\*ppb = parts per billion