

April 30, 2019

Ms. Rhonda Munford  
Energy Specialist/ Admin. Associate III Operations  
Prince George Elementary School  
4101 Courthouse Road  
Prince George, Virginia 23875  
[Rmunford@pgs.k12.va.us](mailto:Rmunford@pgs.k12.va.us)



**RE: Lead Drinking Water Sampling  
Prince George Public Schools  
Harrison Elementary School  
Project No.: ENRI190005.04**

Dear Ms. Munford:

The EI Group, Inc (EI) was contracted to perform drinking water sampling at the following school:

- Harrison Elementary School                      12900 East Quaker Road, Disputanta, VA 23842

This survey was performed by Mr. Chadwick Bowman and Ms. Holly Monger, Industrial Hygienists for EI, on April 19, 2019. The purpose of this assessment was to determine if drinking water for the above building contained lead in excess of the regulated levels.

During the assessment, fifty-eight (58) samples were collected from each cold-water supply fixture used for drinking or cooking, as well as fixtures used for emergency eye wash stations. Each sample was sealed in its own plastic jar and delivered on the day of the survey to Environmental Hazards Services, LLC (EHS) in Richmond, Virginia. EHS is accredited by the Virginia Environmental Laboratory Accreditation Program (VELAP) for Drinking Water (VELAP ID 460172).

Sample results indicate water samples meet all regulatory guidelines and regulations, with the exception of four samples taken from the fountains located in Room 117, Room 151, the fountain near Room 102 and the Book Room, and the Copy Room sink at Harrison Elementary School. See Table 1: Drinking Water Sampling Results, below for specific sampling locations and results.

### **Procedures and Standards**

Lead is a toxic metal that is detrimental to human health. There is no known value of lead for the human body. Lead can remain in the bloodstream and bodily organs for up to a few months. Any amount of lead that is not excreted is absorbed into the bones, where it will collect indefinitely. Young children, 6 years of age and younger are at high risk for lead exposure due to frequent hand-to-mouth activity, and because their nervous systems are still undergoing development. There is currently no safe blood lead level for children, and the degree of harm from lead exposure can vary due to a number of factors such as the frequency, duration, and dose of exposure.

On the day of the survey, EI collected water samples in 250 mL plastic bottles at first draw. First draw refers to collecting a water sample after the water has been sitting in the pipes for at least 8 hours, and no longer than 18 hours prior to sampling. A total of fifty-eight (58) water samples were collected at first draw throughout the building.

## Sample Results

The water sampling was conducted by the EI Group on April 19, 2019. The samples were submitted to EHS in Chesterfield, Virginia for analysis using the EPA recommended method SM 3113B-2010. EHS participates in the NELAC Accreditation Program, and the VA Environmental Laboratory Accreditation program (VELAP) for drinking water (VELAP ID 460172). Table 1 on the following page presents the results of the water samples analyzed by EHS on fixtures that were known and accessible to EI during the survey. The laboratory reports are attached in the Appendices.

<b>Table 1: Lead Drinking Water Sampling Results Harrison Elementary School – Prince George County Survey Date: April 19, 2019</b>			
<b>Sample No.</b>	<b>Sample Location</b>	<b>Result (ppb)</b>	<b>Exceedance</b>
19-04-03209-001	Room 101 Fountain	1.94	NO
19-04-03209-002	Room 102 Fountain	5.56	NO
<b>19-04-03209-003</b>	<b>Fountain by Book Room and Room 102</b>	<b>61.6</b>	<b>YES</b>
19-04-03209-004	Room 103 Fountain	2.06	NO
19-04-03209-005	Room 104 Fountain	2.38	NO
19-04-03209-006	Room 105 Fountain	12.8	NO
19-04-03209-007	Room 106 Fountain	7.39	NO
19-04-03209-008	Room 107 Fountain	3.55	NO
19-04-03209-009	Room 108 Fountain	14.8	NO
19-04-03209-010	Room 109 Fountain	14.3	NO
19-04-03209-011	Room 111 Fountain	<1.00	NO
19-04-03209-012	Room 112 Fountain	<1.00	NO
19-04-03209-013	Room 113 Fountain	<1.00	NO
19-04-03209-014	Room 114 Sink	4.11	NO
19-04-03209-015	Room 115 Fountain	<1.00	NO
19-04-03209-016	Room 116 Fountain	<1.00	NO
<b>19-04-03209-017</b>	<b>Room 117 Fountain</b>	<b>26.0</b>	<b>YES</b>
19-04-03209-018	Room 118 Sink	3.76	NO
19-04-03209-019	Room 119 Sink	<1.00	NO
19-04-03209-020	Tall Fountain by Room 119	<1.00	NO
19-04-03209-021	Short Fountain by Room 119	<1.00	NO
19-04-03209-022	Room 120 Work Room Sink	1.51	NO
19-04-03209-023	Room 123 Fountain	<1.00	NO
19-04-03209-024	Room 125 Fountain	<1.00	NO
19-04-03209-025	Room 126 Fountain	2.39	NO
19-04-03209-026	Room 127 Fountain	<1.00	NO
19-04-03209-027	Room 128 Fountain	<1.00	NO
19-04-03209-028	Room 129 Sink	2.59	NO
19-04-03209-029	Room 130 Fountain	<1.00	NO
19-04-03209-030	Room 131 Sink	1.43	NO
19-04-03209-031	Room 133 Sink	4.42	NO
19-04-03209-032	Room 134 Sink	<1.00	NO

19-04-03209-033	Room 135 Fountain	1.85	NO
19-04-03209-034	Room 136 Fountain	<1.00	NO
19-04-03209-035	Room 137 Fountain	5.17	NO
19-04-03209-036	Room 138 Fountain	8.67	NO
19-04-03209-037	Room 139 Fountain	1.24	NO
19-04-03209-038	Room 142 Fountain	14.2	NO
19-04-03209-039	Room 142 Fountain	9.65	NO
19-04-03209-040	Room 144 Fountain	4.83	NO
19-04-03209-041	Room 145 Fountain	3.09	NO
19-04-03209-042	Room 146 Fountain	9.45	NO
19-04-03209-043	Room 147 Fountain	11.0	NO
19-04-03209-044	Room 148 Fountain	8.29	NO
19-04-03209-045	Room 149 Fountain	8.68	NO
<b>19-04-03209-046</b>	<b>Room 151 Fountain</b>	<b>18.4</b>	<b>YES</b>
19-04-03209-047	Clinic Sink	1.74	NO
19-04-03209-048	Clinic Bathroom Sink	4.74	NO
19-04-03209-049	C11 Sink	3.12	NO
19-04-03209-050	Gym Lobby Fountain 1	<1.00	NO
19-04-03209-051	Gym Lobby Fountain 2	<1.00	NO
19-04-03209-052	Fountain by Teacher's Lounge	3.58	NO
19-04-03209-053	Resource Room 150 D Wing Hall Fountain	2.54	NO
19-04-03209-054	Back Wall Kitchen Sink	3.85	NO
19-04-03209-055	Right Wall Kitchen Sink	14.0	NO
19-04-03209-056	Café Left Fountain	<1.00	NO
19-04-03209-057	Café Right Fountain	<1.00	NO
<b>19-04-03209-058</b>	<b>Copy Room Sink</b>	<b>26.7</b>	<b>YES</b>
ug/L = ppb ug/L = micrograms per liter ppb = Parts Per Billion EPA – Maximum Contaminant Level for Lead in Drinking Water – 15 ppb <b>BOLD</b> = Exceedance of EPA Limit			

## Recommendations

Based on the high lead levels found at the fountains located in Room 117 and Room 151, the fountain by the Book Room and Room 102, and the Copy Room sink, EI recommends follow-up flush sampling in order to pinpoint the source (fixtures, or interior plumbing) of each sink and fountains' water contamination. It is important to note that variations in lead concentration may be found among individual outlets in a building due to differences in the flow rates of those outlets, or the building materials used. EI further recommends that this fixture not be used until follow-up flush sampling has been completed.

## Disclaimer

This inspection and report is written for and intended for the use of Prince George Public Schools and their clients only. EI will not be held liable for any interpretations made, opinions formed, or conclusions drawn by any third party as a result of examining the lab results, inspection results or this report. Any interpretations, opinions, and conclusions will be those made, formed, and drawn solely by that third party.

We have endeavored to complete the services identified herein in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality and under similar conditions at this project. Should conditions change, future sampling may need to be conducted. No other representation, express or implied, is included or intended, and no warranty or guarantee is included or intended in this agreement, or any report, opinion, document, or other instrument of service.

EI appreciates the opportunity to provide these environmental services for Prince George Public Schools. Please feel free to call us at (804) 320-9300 if you have any questions or are in need of further assistance.

Sincerely,  
**The EI Group, Inc**



Holly Monger  
Industrial Hygienist, Richmond



Chadwick Bowman  
Manager, Richmond Operations

Appendices:  
Appendix A –EHS Laboratory Reports



Environmental Hazards Services, L.L.C.  
 7469 Whitepine Rd  
 Richmond, VA 23237  
 Telephone: 800.347.4010

## Lead in Drinking Water Analysis Report

Client: The EI Group Inc. - Glen Allen  
 4186 Innslake Dr  
 Glen Allen, VA 23060

Report Number: 19-04-03209  
 Received Date: 04/20/2019  
 Reported Date: 04/26/2019  
 Sampled By: Bowman/Monger  
 Tech Certification #:

Project/Test Address: Harrison Elementary School; 12900 E Quaker Rd; Disputanta, VA 23842

Client Number:  
 48-1920

# Laboratory Results

Fax Number:  
 804-320-9302

Lab Sample Number	Client Sample ID	Collection Date	Collection Location	Concentration ug/L (ppb)	Analysis Date	Narrative ID
19-04-03209-001	HE-1	04/19/2019	ROOM 101 FOUNTAIN	1.94	04/23/2019	
19-04-03209-002	HE-2	04/19/2019	ROOM 102 FOUNTAIN	5.56	04/23/2019	
19-04-03209-003	HE-3	04/19/2019	FOUNTAIN BY BOOK ROOM AND ROOM 102	61.6	04/23/2019	
19-04-03209-004	HE-4	04/19/2019	ROOM 103 FOUNTAIN	2.06	04/23/2019	
19-04-03209-005	HE-5	04/19/2019	ROOM 104 FOUNTAIN	2.38	04/23/2019	
19-04-03209-006	HE-6	04/19/2019	ROOM 105 FOUNTAIN	12.8	04/23/2019	
19-04-03209-007	HE-7	04/19/2019	ROOM 106 FOUNTAIN	7.39	04/23/2019	
19-04-03209-008	HE-8	04/19/2019	ROOM 107 FOUNTAIN	3.55	04/23/2019	
19-04-03209-009	HE-9	04/19/2019	ROOM 108 FOUNTAIN	14.8	04/23/2019	
19-04-03209-010	HE-10	04/19/2019	ROOM 109 FOUNTAIN	14.3	04/23/2019	
19-04-03209-011	HE-11	04/19/2019	ROOM 111 FOUNTIAN	<1.00	04/23/2019	
19-04-03209-012	HE-12	04/19/2019	ROOM 112 FOUNTAIN	<1.00	04/23/2019	
19-04-03209-013	HE-13	04/19/2019	ROOM 113 FOUNTAIN	<1.00	04/23/2019	

# Environmental Hazards Services, L.L.C

Client Number: 48-1920

Report Number: 19-04-03209

Project/Test Address: Harrison Elementary School; 12900 E Quaker Rd;  
Disputanta, VA 23842

Lab Sample Number	Client Sample ID	Collection Date	Collection Location	Concentration ug/L (ppb)	Analysis Date	Narrative ID
19-04-03209-014	HE-14	04/19/2019	ROOM 114 SINK	4.11	04/23/2019	
19-04-03209-015	HE-15	04/19/2019	ROOM 115 FOUNTAIN	<1.00	04/23/2019	
19-04-03209-016	HE-16	04/19/2019	ROOM 116 FOUNTIAN	<1.00	04/23/2019	
19-04-03209-017	HE-17	04/19/2019	ROOM 117 FOUNTAIN	26.0	04/23/2019	
19-04-03209-018	HE-18	04/19/2019	ROOM 118 SINK	3.76	04/23/2019	
19-04-03209-019	HE-19	04/19/2019	ROOM 119 SINK	<1.00	04/23/2019	
19-04-03209-020	HE-20	04/19/2019	FOUNTIAN BY ROOM 119 TALL	<1.00	04/23/2019	
19-04-03209-021	HE-21	04/19/2019	FOUNTAIN BY ROOM 119 SHORT	<1.00	04/23/2019	
19-04-03209-022	HE-22	04/19/2019	ROOM 120 WORK ROOM SINK	1.51	04/23/2019	
19-04-03209-023	HE-23	04/19/2019	ROOM 123 FOUNTAIN	<1.00	04/23/2019	
19-04-03209-024	HE-24	04/19/2019	ROOM 125 FOUNTAIN	<1.00	04/23/2019	
19-04-03209-025	HE-25	04/19/2019	ROOM 126 FOUNTAIN	2.39	04/23/2019	
19-04-03209-026	HE-26	04/19/2019	ROOM 127 FOUNTAIN	<1.00	04/23/2019	
19-04-03209-027	HE-27	04/19/2019	ROOM 128 FOUNTAIN	<1.00	04/23/2019	
19-04-03209-028	HE-28	04/19/2019	ROOM 129 SINK	2.59	04/23/2019	
19-04-03209-029	HE-29	04/19/2019	ROOM 130 FOUNTAIN	<1.00	04/23/2019	
19-04-03209-030	HE-30	04/19/2019	ROOM 131 SINK	1.43	04/23/2019	
19-04-03209-031	HE-31	04/19/2019	ROOM 133 SINK	4.42	04/23/2019	
19-04-03209-032	HE-32	04/19/2019	ROOM 134 SINK	<1.00	04/23/2019	
19-04-03209-033	HE-33	04/19/2019	ROOM 135 FOUNTAIN	1.85	04/23/2019	

# Environmental Hazards Services, L.L.C

Client Number: 48-1920

Report Number: 19-04-03209

Project/Test Address: Harrison Elementary School; 12900 E Quaker Rd;  
Disputanta, VA 23842

Lab Sample Number	Client Sample ID	Collection Date	Collection Location	Concentration ug/L (ppb)	Analysis Date	Narrative ID
19-04-03209-034	HE-34	04/19/2019	ROOM 136 FOUNTAIN	<1.00	04/23/2019	
19-04-03209-035	HE-35	04/19/2019	ROOM 137 FOUNTAIN	5.17	04/23/2019	
19-04-03209-036	HE-36	04/19/2019	ROOM 138 FOUNTAIN	8.67	04/23/2019	
19-04-03209-037	HE-37	04/19/2019	ROOM 139 FOUNTAIN	1.24	04/23/2019	
19-04-03209-038	HE-38	04/19/2019	ROOM 142 FOUNTAIN	14.2	04/23/2019	
19-04-03209-039	HE-39	04/19/2019	ROOM 142 FOUNTAIN	9.65	04/23/2019	
19-04-03209-040	HE-40	04/19/2019	ROOM 144 FOUNTAIN	4.83	04/23/2019	
19-04-03209-041	HE-41	04/19/2019	ROOM 145 FOUNTAIN	3.09	04/23/2019	
19-04-03209-042	HE-42	04/19/2019	ROOM 146 FOUNTAIN	9.45	04/23/2019	
19-04-03209-043	HE-43	04/19/2019	ROOM 147 FOUNTAIN	11.0	04/23/2019	
19-04-03209-044	HE-44	04/19/2019	ROOM 148 FOUNTAIN	8.29	04/23/2019	
19-04-03209-045	HE-45	04/19/2019	ROOM 149 FOUNTAIN	8.68	04/23/2019	
19-04-03209-046	HE-46	04/19/2019	ROOM 151 FOUNTAIN	18.4	04/23/2019	
19-04-03209-047	HE-47	04/19/2019	CLINIC SINK	1.74	04/23/2019	
19-04-03209-048	HE-48	04/19/2019	CLINIC BATHROOM SINK	4.74	04/23/2019	
19-04-03209-049	HE-49	04/19/2019	C11 SINK	3.12	04/23/2019	
19-04-03209-050	HE-50	04/19/2019	GYM LOBBY FOUNTAIN 1	<1.00	04/23/2019	
19-04-03209-051	HE-51	04/19/2019	GYM LOBBY FOUNTAIN 2	<1.00	04/23/2019	
19-04-03209-052	HE-52	04/19/2019	FOUNTAIN BY TEACHERS LOUNGE	3.58	04/23/2019	

# Environmental Hazards Services, L.L.C

Client Number: 48-1920

Report Number: 19-04-03209

Project/Test Address: Harrison Elementary School; 12900 E Quaker Rd;  
Disputanta, VA 23842

Lab Sample Number	Client Sample ID	Collection Date	Collection Location	Concentration ug/L (ppb)	Analysis Date	Narrative ID
19-04-03209-053	HE-53	04/19/2019	ROOM 150 RESOURCE ROOM D WING HALL FOUNTAIN	2.54	04/23/2019	
19-04-03209-054	HE-54	04/19/2019	KITCHEN BACK WALL SINK	3.85	04/23/2019	
19-04-03209-055	HE-55	04/19/2019	KITCHEN RIGHT WALL SINK	14.0	04/23/2019	
19-04-03209-056	HE-56	04/19/2019	CAFÉ FOUNTAIN LEFT	<1.00	04/23/2019	
19-04-03209-057	HE-57	04/19/2019	CAFÉ FOUNTAIN RIGHT	<1.00	04/23/2019	
19-04-03209-058	HE-58	04/19/2019	COPY ROOM SINK	26.7	04/24/2019	

Method: SM 3113B-2010  
Analyst: Jennalee Zlotkowski  
Accreditation #: VA 460172

Reviewed By Authorized Signatory:

*Melissa Kanode*

Missy Kanode

QA/QC Clerk

Sample Results denoted with a "less than" (<) sign contain less than the reporting limit which is 1 ppb.

The EPA Maximum Contaminant Level for Lead in Drinking Water is 15 ppb. The results herein conform to NELAC standards, where applicable, unless otherwise narrated on this report. Results represent the analysis of samples submitted by the client. Sample location, description, field parameter results, etc., were provided by the client. This report cannot be reproduced, except in full, without written approval from Environmental Hazards Services, L.L.C.

LEGEND                      ug/L= micrograms per liter                      ppb = parts per billion





# WATER

## Chain of Custody Form

Due Date:  
04/26/2019  
(Friday)  
ER

Environmental Hazards Services, LLC

7469 Whitepine Rd, Richmond, VA 23237

800-347-4010 W

Company Name: The EI Group Address: 4186 Innslake Dr  
 Phone: 804-320-9300 Email: Cbowman@ei1.com Acct No. 41  
 School Name & Address: Harrison Elementary; 12900 E Quaker Rd; Disputanta, VA 23842  
 Collected By: Chad Bowman Holly Monger PO# \_\_\_\_\_  
 Age of Property: \_\_\_\_\_ Water Source: \_\_\_\_\_ Public or \_\_\_\_\_ Well

**TURN AROUND TIME:**

No.	Client Sample ID	Sample Location	Collection Date	Collection Time	AM	PM	Analyte
1	HE-1	Room 101 Fountain	4/19/2019				Pb
2	HE-2	Room 102 Fountain	4/19/2019				Pb
3	HE-3	Fountain By Book Room and Room 102	4/19/2019				Pb
4	HE-4	Room 103 Fountain	4/19/2019				Pb
5	HE-5	Room 104 Fountain	4/19/2019				Pb
6	HE-6	Room 105 Fountain	4/19/2019				Pb
7	HE-7	Room 106 Fountain	4/19/2019				Pb
8	HE-8	Room 107 Fountain	4/19/2019				Pb
9	HE-9	Room 108 Fountain	4/19/2019				Pb
10	HE-10	Room 109 Fountain	4/19/2019				Pb
11	HE-11	Room 111 Fountain	4/19/2019				Pb
12	HE-12	Room 112 Fountain	4/19/2019				Pb
13	HE-13	Room 113 Fountain	4/19/2019				Pb
14	HE-14	Room 114 Sink	4/19/2019				Pb
15	HE-15	Room 115 Fountain	4/19/2019				Pb
16	HE-16	Room 116 Fountain	4/19/2019				Pb
17	HE-17	Room 117 Fountain	4/19/2019				Pb
18	HE-18	Room 118 Sink	4/19/2019				Pb
19	HE-19	Room 119 Sink	4/19/2019				Pb
20	HE-20	Fountain By Room 119 Tall	4/19/2019				Pb
21	HE-21	Fountain By Room 119 Short	4/19/2019				Pb
22	HE-22	Room 120 Work Room Sink	4/19/2019				Pb
23	HE-23	Room 123 Fountain	4/19/2019				Pb
24	HE-24	Room 125 Fountain	4/19/2019				Pb
25	HE-25	Room 126 Fountain	4/19/2019				Pb
26	HE-26	Room 127 Fountain	4/19/2019				Pb
27	HE-27	Room 128 Fountain	4/19/2019				Pb
28	HE-28	Room 129 Sink	4/19/2019				Pb
29	HE-29	Room 130 Fountain	4/19/2019				Pb
30	HE-30	Room 131 Sink	4/19/2019				Pb
31	HE-31	Room 133 Sink	4/20/2019				Pb
32	HE-32	Room 134 Sink	4/21/2019				Pb
33	HE-33	Room 135 Fountain	4/22/2019				Pb
34	HE-34	Room 136 Fountain	4/23/2019				Pb
35	HE-35	Room 137 Fountain	4/24/2019				Pb
36	HE-36	Room 138 Fountain	4/25/2019				Pb
37	HE-37	Room 139 Fountain	4/26/2019				Pb
38	HE-38	Room 142 Fountain	4/27/2019				Pb
39	HE-39	Room 142 Fountain	4/28/2019				Pb
40	HE-40	Room 144 Fountain	4/29/2019				Pb
41	HE-41	Room 145 Fountain	4/30/2019				Pb
42	HE-42	Room 146 Fountain	5/1/2019				Pb
43	HE-43	Room 147 Fountain	5/2/2019				Pb
44	HE-44	Room 148 Fountain	5/3/2019				Pb
45	HE-45	Room 149 Fountain	5/4/2019				Pb
46	HE-46	Room 151 Fountain	5/5/2019				Pb
47	HE-47	Clinic Sink	5/6/2019				Pb
48	HE-48	Clinic Bathroom Sink	5/7/2019				Pb
49	HE-49	C11 Sink	5/8/2019				Pb
50	HE-50	Gym Lobby Fountain 1	5/9/2019				Pb
51	HE-51	Gym Lobby Fountain 2	5/10/2019				Pb
52	HE-52	Fountain By Teachers Lounge	5/11/2019				Pb
53	HE-53	Room 150 Resource Room D Wing Hall Fountain	5/12/2019				Pb
54	HE-54	Kitchen Back Wall Sink	5/13/2019				Pb

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55	HE-55	Kitchen Right Wall Sink	5/14/2019				Pb
56	HE-56	Café Fountain Left	5/15/2019				Pb
57	HE-57	Café Fountain Right	5/16/2019				Pb
58	HE-58	Copy Room Sink	5/17/2019				Pb

Released By:	Date & Time	Signature:
Received By:	Date & Time	Signature:

KTHARRIS      K Harris      4.20.19      11:22 A