

April 15, 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



**RE: Lead Drinking Water Sampling
Prince George Public Schools
South Elementary School
Project No.: ENRI190002.00**

Dear Ms. Munford:

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

- South Elementary School 13400 Prince George Drive, Disputanta, VA 23842

This survey was performed by Mr. William Stout, an EI Industrial Hygienist, on March 28, 2019. The purpose of this assessment was to determine if drinking water for the above school contained lead in excess of the regulated levels.

During the assessment, one (1) sample was collected from each cold-water supply fixture used for drinking or cooking. Each sample was sealed in its own plastic jar and delivered by Mr. Stout 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 three samples taken from the drinking tap in Classrooms 105, 209 and 211 at South 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 thirty-three (33) water samples were collected at first draw throughout the school.

Sample Results

The water sampling was conducted by Mr. William Stout of the EI Group on March 28, 2019 prior to the beginning of the school day. 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.

**Table 1: Lead Drinking Water Sampling Results
South Elementary School
Survey Date: March 28, 2019**

Sample No.	Sample Location	Result (ppb)	Exceedance
1	Room 112- Sink	10.3	NO
2	Room 113- Sink	9.46	NO
3	Room 111- Sink	12.5	NO
4	Room 110- Sink	11.2	NO
5	Room 109- Sink	14.4	NO
6	Room 107- Sink	14.8	NO
7	Room 106- Sink	7.25	NO
8	Room 105- Sink	27.8	Yes
9	Room 200- Sink	8.38	NO
10	Room 200- Sink	1.96	NO
11	Room 206- Sink	11.3	NO
12	Room 208- Sink	11.3	NO
13	Room 210- Sink	5.86	NO
14	Room 212- Sink	9.47	NO
15	Room 213- Sink	7.63	NO
16	Room 211- Sink	17.1	Yes
17	Room 209- Sink	16.7	Yes
18	Room 207- Sink	8.74	NO
19	Room 303- Sink	10.1	NO
20	Room 305- Sink	5.18	NO
21	Room 306- Sink	14.7	NO
22	Room 308- Sink	10.5	NO
23	Room 307- Sink	6.58	NO
24	Room 309- Sink	4.28	NO
25	Room 310- Sink	8.42	NO
26	Room 312- Sink	6.00	NO
27	Room 311- Sink	7.19	NO
28	Kitchen- Sink	<1.00	NO
29	Cafeteria Water Fountain	4.24	NO
30	Cafeteria Water Fountain	2.79	NO
31	Kindergarten Hall Water Fountain	4.61	NO
32	5 th Grade Hall Water Fountain	<1.00	NO
33	5 th Grade Hall Water Fountain	<1.00	NO

ug/L = ppb
ug/L = micrograms per liter
ppb = Parts Per Billion
EPA – Maximum Contaminant Level for Lead in Drinking Water – 15 ppb
BOLD = Exceedance of EPA Limit

Recommendations

Based on the high lead level found at the sink in Classrooms 105, 209 and 211, EI recommends follow-up flush sampling in order to pinpoint the source (fixtures, or interior plumbing) of the drinking 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



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

Report Number: 19-03-03823

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

Received Date: 03/28/2019
 Reported Date: 04/01/2019
 Sampled By: W. Stout
 Tech Certification #:

Project/Test Address: South Elementary School

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
19-03-03823-001	1	03/28/2019	ROOM 112	10.3	04/01/2019	
19-03-03823-002	2	03/28/2019	ROOM 113	9.46	04/01/2019	
19-03-03823-003	3	03/28/2019	ROOM 111	12.5	04/01/2019	
19-03-03823-004	4	03/28/2019	ROOM 110	11.2	04/01/2019	
19-03-03823-005	5	03/28/2019	ROOM 109	14.4	04/01/2019	
19-03-03823-006	6	03/28/2019	ROOM 107	14.8	04/01/2019	
19-03-03823-007	7	03/28/2019	ROOM 106	7.25	04/01/2019	
19-03-03823-008	8	03/28/2019	ROOM 105	27.8	04/01/2019	
19-03-03823-009	9	03/28/2019	ROOM 200	8.38	04/01/2019	
19-03-03823-010	10	03/28/2019	ROOM 200	1.96	04/01/2019	
19-03-03823-011	11	03/28/2019	ROOM 206	11.3	04/01/2019	
19-03-03823-012	12	03/28/2019	ROOM 208	11.3	04/01/2019	
19-03-03823-013	13	03/28/2019	ROOM 210	5.86	04/01/2019	

Environmental Hazards Services, L.L.C

Client Number: 48-1920
 Project/Test Address: South Elementary School

Report Number: 19-03-03823

Lab Sample Number	Client Sample ID	Collection Date	Collection Location	Concentration ug/L (ppb)	Analysis Date	Narrative ID
19-03-03823-014	14	03/28/2019	ROOM 212	9.47	04/01/2019	
19-03-03823-015	15	03/28/2019	ROOM 213	7.63	04/01/2019	
19-03-03823-016	16	03/28/2019	ROOM 211	17.1	04/01/2019	
19-03-03823-017	17	03/28/2019	ROOM 209	16.7	04/01/2019	
19-03-03823-018	18	03/28/2019	ROOM 207	8.74	04/01/2019	
19-03-03823-019	19	03/28/2019	ROOM 303	10.1	04/01/2019	
19-03-03823-020	20	03/28/2019	ROOM 305	5.18	04/01/2019	
19-03-03823-021	21	03/28/2019	ROOM 306	14.7	04/01/2019	
19-03-03823-022	22	03/28/2019	ROOM 308	10.5	04/01/2019	
19-03-03823-023	23	03/28/2019	ROOM 307	6.58	04/01/2019	
19-03-03823-024	24	03/28/2019	ROOM 309	4.28	04/01/2019	
19-03-03823-025	25	03/28/2019	ROOM 310	8.42	04/01/2019	
19-03-03823-026	26	03/28/2019	ROOM 312	6.00	04/01/2019	
19-03-03823-027	27	03/28/2019	ROOM 311	7.19	04/01/2019	
19-03-03823-028	28	03/28/2019	KITCHEN	<1.00	04/01/2019	
19-03-03823-029	29	03/28/2019	CAFÉ WATER FOUNTAIN	4.24	04/01/2019	
19-03-03823-030	30	03/28/2019	CAFÉ WATER FOUNTAIN	2.79	04/01/2019	
19-03-03823-031	31	03/28/2019	KINDERGARTEN HALL FOUNTAIN	4.61	04/01/2019	
19-03-03823-032	32	03/28/2019	5TH GRADE HALL FOUNTAIN	<1.00	04/01/2019	
19-03-03823-033	33	03/28/2019	5TH GRADE HALL FOUNTAIN	<1.00	04/01/2019	

Environmental Hazards Services, L.L.C

Client Number: 48-1920

Report Number: 19-03-03823

Project/Test Address: South Elementary School

Lab Sample Number	Client Sample ID	Collection Date	Collection Location	Concentration ug/L (ppb)	Analysis Date	Narrative ID
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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



EHS Laboratories
ENVIRONMENTAL HAZARDS SERVICES, LLC

ONLINE CLIENT PORTAL AVAILABLE FOR ANALYSIS RESULTS AT: www.leadlab.com

Water Chain-of-Custody Form

SHIP TO: 7469 Whitepine Rd. Richmond, VA 23237

Phone: (800) 347-4010 FAX: (804) 275-4907

Account #: 00-1001

~ For Lab Use Only ~

Client Name: EI Group
Address: 4186 Inslake Drive
City/State/Zip: Glen Allen, VA
Phone: _____ Email: cbowman@ei1.com Fax: _____

Project Name / Collection Address: South Elementary School

Project #: _____ Sampled By: W. Stout

City/State/Zip: _____ (Required)

License # (If Required): _____

Water Source: (Check One) Public Well
Well Tag # (If Applicable): _____

No.	Client Sample ID	Collection Location (Ex: Kitchen Sink)	Collection Date	Collection Time	Metals			LAB USE
					Lead	Copper	Other	
1	11	Room 206	3-28-19	AM/PM	X			
2	12	Room 208		AM/PM				
3	13	Room 210		AM/PM				
4	14	Room 212		AM/PM				
5	15	Room 213		AM/PM				
6	16	Room 211		AM/PM				
7	17	Room 209		AM/PM				
8	18	Room 207		AM/PM				
9	19	Room 303		AM/PM				
10	20	Room 305		AM/PM				

Released by: W. Stout Signature: W.S. Stout Date/Time: 9:50 AM / 3-28-19

Released by: E. Grubbe Signature: [Signature] Date/Time: 3:29-PM / 3/28/19

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EHS Laboratories
ENVIRONMENTAL HAZARDS SERVICES, LLC

Water Chain-of-Custody Form
SHIP TO: 7469 Whitepine Rd. Richmond, VA 23237
Phone: (800) 347-4010 FAX: (804) 275-4907
ONLINE CLIENT PORTAL AVAILABLE FOR ANALYSIS RESULTS AT: www.leadlab.com

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15883

Account #: 00-1001

Client Name: ET Group
Address: 4186 Inslake Drive
City/State/Zip: Glen Allen, VA
Phone: _____ Email: cbowman@Eit.com Fax: _____

Project Name / Collection Address: South Elementary School
City/State/Zip: _____
Project #: _____ Sampled By: W. Stoft License # (if Required): _____

Water Source: (Check One) Public Well Well Tag # (if Applicable): _____

No.	Client Sample ID	Collection Location (Ex: Kitchen Sink)	Collection Date	Collection Time	Metals			LAB USE
					Lead	Copper	Other	
1	21	Room 306	3-28-19	AM/PM	X			
2	22	Room 308	}	AM/PM				
3	23	Room 307		AM/PM				
4	24	Room 309		AM/PM				
5	25	Room 310		AM/PM				
6	26	Room 312		AM/PM				
7	27	Room 311		AM/PM				
8	28	Kitchen		AM/PM				
9	29	Cafe - Water fountain		AM/PM				
10	30	Cafe - Water fountain		AM/PM				

Released by: W. Stoft Signature: [Signature] Date/Time: 9:50 Am / 3-28-19
Signature: [Signature] Date/Time: 3:00 3-28-19 CV



EHS Laboratories
ENVIRONMENTAL HAZARDS SERVICES, LLC

Water Chain-of-Custody Form
SHIP TO: 7469 Whitepine Rd. Richmond, VA 23237
Phone: (800) 347-4010 FAX: (804) 275-4907
ONLINE CLIENT PORTAL AVAILABLE FOR ANALYSIS RESULTS AT: www.leadlab.com

~ For Lab Use Only ~

630035

Client Name: EI Group

Account #: 00-1001

Address: 4186 Inslake Drive

City/State/Zip: Glen Allen, VA

Phone: _____ Email: ebowman@ei1.com Fax: _____

Project Name / Collection Address: South Elementary School

City/State/Zip: _____
(Required)

Project #: _____ Sampled By: W. Stoft License # (If Required): _____

Water Source: (Check One) Public Well Well Tag # (If Applicable): _____
(Required)

No.	Client Sample ID	Collection Location (Ex: Kitchen Sink)	Collection Date	Collection Time	Metals			LAB USE
					Lead	Copper	Other	
1	31	Kindergarten Hall - fountain	3-28-19	AM/PM	X			
2	32	5th Grade Hall - fountain		AM/PM				
3	33	5th Grade Hall - fountain		AM/PM				
4				AM/PM				
5				AM/PM				
6				AM/PM				
7				AM/PM				
8				AM/PM				
9				AM/PM				
10				AM/PM				

Released by: W. Stoft

Signature: W. Stoft

Date/Time: 9:50 AM / 3-28-19

Released by: E. Glorde

Signature: E. Glorde

Date/Time: 3:28 PM / 3/28/19