

Lead in Drinking Water – Public and Nonpublic Schools

Updated in response to legislation effective as of June 1, 2021

IMPORTANT NOTICE: ELEVATED LEAD WATER SAMPLE RESULT(S) **Quarterfield Elementary School**

ELEVATED LEAD WATER SAMPLE RESULT(S)

All Maryland public and nonpublic schools are required to sample all drinking water outlets for the presence of lead pursuant to the Code of Maryland Regulations. On October 22, 2021, twenty-eight (28) lead water samples were collected from Quarterfield Elementary School. Of these lead water samples, zero (0) had levels of lead exceeding the State's revised action level of 5 parts per billion (ppb) (*formerly 20 ppb; 5 ppb effective June 1, 2021*) for lead in drinking water in school buildings.

ACTION LEVEL (AL)

Effective June 1, 2021, the State's AL for lead in drinking water samples collected from outlets in school buildings has been lowered to 5 ppb. The AL is the concentration of lead which, if exceeded, triggers required remediation of drinking water outlets.

HEALTH EFFECTS OF LEAD

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Lead is stored in the bones and it can be released later in life. During pregnancy, the fetus receives lead from the mother's bones, which may affect brain development. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults.

SOURCES OF HUMAN EXPOSURE TO LEAD

There are many different sources of human exposure to lead. These sources include: lead-based paint, lead-contaminated dust or soil, some plumbing materials, certain types of pottery, pewter, brass fixtures, food, and cosmetics, exposure in the workplace and exposure from certain hobbies, brass faucets, fittings, and valves. According to the Environmental Protection Agency (EPA), 10 to 20 percent of a person's potential exposure to lead may come from drinking water, while for an infant consuming formula mixed with lead-containing water this may increase to 40 to 60 percent.

IMMEDIATE ACTIONS TAKEN

No actions needed.

NEXT STEPS

None

TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER:

1. Run your water to flush out lead: If water hasn't been used for several hours, run water for 15 to 30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking.
2. Use cold water for cooking and preparing baby formula: Lead from the plumbing dissolves more easily into hot water.

Please note that boiling the water will not reduce lead levels.

ADDITIONAL INFORMATION

For additional information, please contact the Environmental, Health and Safety Office at 443-770-5950. For additional information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at www.epa.gov/lead. If you are concerned about exposure; contact your local health department or healthcare provider to find out how you can get your child tested for lead.



AACPS - Operations Division
9034 Ft. Smallwood Road

Pasadena, MD 21122
Attention: Chris Williams; Brian Wells

Monday, November 29, 2021

Certificate of Analysis
FINAL

Project Information:

Report for Lab No: 60233.
Quarterfield ES
Sampling by regulation to Maryland House Bill 270 - Lead in Drinking Water
P.O. Number: PO 21B21062901659
Sampling by Martel personnel on October 22, 2021.

References and Important Notes:

SM="Standard Methods for the Examination of Water and Wastewater", American Public Health Association, American Water Works Association, and Water Environment Federation. Year in method code is approved date.
40CFR141=U.S. "Code of Federal Regulations", Title 40, Protection of the Environment, Part 141, National Primary Drinking Water Regulations.

Notices:

Chain of Custody Form(s) are attached and are an integral part of this report.
This report will be retained for at least five years and will be disposed of without notice.
Measurement uncertainty for each listed test is available upon request.
The results presented herein relate only to the samples or items tested.
All samples tested were in acceptable condition, unless otherwise noted.



Certificate of Analysis

MARTEL NO.	CLIENT SAMPLE IDENTIFICATION	Sample Date/Time
60233 1	Cafeteria Cafe Fountain -Left [DF--C]	10/22/2021 05:08
Compound	Test Value Test Unit Method Detection Limit	Analysis Date/Time/Initial
Lead	<2 ug/l EPA .200.8 2	11/24/2021 14:58 BJ
60233 2	Cafeteria Cafe Fountain -Right [DF--C]	10/22/2021 05:08
Compound	Test Value Test Unit Method Detection Limit	Analysis Date/Time/Initial
Lead	3.30 ug/l EPA .200.8 2	11/24/2021 15:05 BJ
60233 4	Kitchen Kitchen Dual Sink [KS--C]	10/22/2021 05:10
Compound	Test Value Test Unit Method Detection Limit	Analysis Date/Time/Initial
Lead	<2 ug/l EPA .200.8 2	11/24/2021 15:12 BJ
60233 5	Kitchen Tri-Sink -Left [KS--C]	10/22/2021 05:10
Compound	Test Value Test Unit Method Detection Limit	Analysis Date/Time/Initial
Lead	<2 ug/l EPA .200.8 2	11/24/2021 15:15 BJ
60233 6	Kitchen Tri-Sink -Right [KS--C]	10/22/2021 05:10
Compound	Test Value Test Unit Method Detection Limit	Analysis Date/Time/Initial
Lead	<2 ug/l EPA .200.8 2	11/24/2021 15:17 BJ
60233 19	Classroom 117 [CF--C]	10/22/2021 05:18
Compound	Test Value Test Unit Method Detection Limit	Analysis Date/Time/Initial
Lead	3.29 ug/l EPA .200.8 2	11/24/2021 15:20 BJ
60233 21	Classroom 116 [CF--C]	10/22/2021 05:19
Compound	Test Value Test Unit Method Detection Limit	Analysis Date/Time/Initial
Lead	4.05 ug/l EPA .200.8 2	11/24/2021 15:22 BJ
60233 23	Classroom 115 [CF--C]	10/22/2021 05:19
Compound	Test Value Test Unit Method Detection Limit	Analysis Date/Time/Initial
Lead	<2 ug/l EPA .200.8 2	11/24/2021 15:25 BJ



Certificate of Analysis

MARTEL NO. 60233 25 CLIENT SAMPLE IDENTIFICATION Classroom 114 [CF--C] Sample Date/Time 10/22/2021 05:23

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	<2	ug/l	EPA .200.8	2	11/24/2021 15:27 BJ

MARTEL NO. 60233 27 CLIENT SAMPLE IDENTIFICATION Classroom 113 [CF--C] Sample Date/Time 10/22/2021 05:00

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	removed		EPA .200.8	2	//

MARTEL NO. 60233 34 CLIENT SAMPLE IDENTIFICATION Classroom 124 [CF--C] Sample Date/Time 10/22/2021 05:24

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	<2	ug/l	EPA .200.8	2	11/24/2021 15:32 BJ

MARTEL NO. 60233 38 CLIENT SAMPLE IDENTIFICATION Classroom 122 [CF--C] Sample Date/Time 10/22/2021 05:21

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	2.25	ug/l	EPA .200.8	2	11/24/2021 15:42 BJ

MARTEL NO. 60233 40 CLIENT SAMPLE IDENTIFICATION Classroom 121 [CF--C] Sample Date/Time 10/22/2021 05:21

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	<2	ug/l	EPA .200.8	2	11/24/2021 15:47 BJ

MARTEL NO. 60233 42 CLIENT SAMPLE IDENTIFICATION Classroom 120 [CF--C] Sample Date/Time 10/22/2021 05:00

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	removed		EPA .200.8	2	//

MARTEL NO. 60233 43 CLIENT SAMPLE IDENTIFICATION Hallway Hall Fountain (across from 119) [DF--C] Sample Date/Time 10/22/2021 05:13

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	3.41	ug/l	EPA .200.8	2	11/24/2021 15:51 BJ

MARTEL NO. 60233 45 CLIENT SAMPLE IDENTIFICATION Classroom 119 [CF--C] Sample Date/Time 10/22/2021 05:17

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	<2	ug/l	EPA .200.8	2	11/24/2021 15:54 BJ



MARTEL NO. 60233 48 CLIENT SAMPLE IDENTIFICATION Hallway Hall Fountain (across from Cafe) [DF--C] Sample Date/Time 10/22/2021 05:12

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	<2	ug/l	EPA .200.8	2	11/24/2021 15:56 BJ

MARTEL NO. 60233 52 CLIENT SAMPLE IDENTIFICATION Hallway Hall Fountain (across from 106) [DF--C] Sample Date/Time 10/22/2021 05:28

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	<2	ug/l	EPA .200.8	2	11/24/2021 15:59 BJ

MARTEL NO. 60233 57 CLIENT SAMPLE IDENTIFICATION Classroom 112 [CF--C] Sample Date/Time 10/22/2021 05:00

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	removed		EPA .200.8	2	//

MARTEL NO. 60233 59 CLIENT SAMPLE IDENTIFICATION Classroom 111 [CF--C] Sample Date/Time 10/22/2021 05:33

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	<2	ug/l	EPA .200.8	2	11/24/2021 16:04 BJ

MARTEL NO. 60233 61 CLIENT SAMPLE IDENTIFICATION Classroom 110 [CF--C] Sample Date/Time 10/22/2021 05:36

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	2.04	ug/l	EPA .200.8	2	11/24/2021 16:06 BJ

MARTEL NO. 60233 63 CLIENT SAMPLE IDENTIFICATION Classroom 109 [CF--C] Sample Date/Time 10/22/2021 05:34

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	<2	ug/l	EPA .200.8	2	11/24/2021 16:14 BJ

MARTEL NO. 60233 65 CLIENT SAMPLE IDENTIFICATION Classroom 108 [CF--C] Sample Date/Time 10/22/2021 05:32

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	<2	ug/l	EPA .200.8	2	11/24/2021 16:21 BJ

MARTEL NO. 60233 67 CLIENT SAMPLE IDENTIFICATION Classroom 107 [CF--C] Sample Date/Time 10/22/2021 05:30

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	<2	ug/l	EPA .200.8	2	11/24/2021 16:23 BJ



MARTEL NO. 60233 69 CLIENT SAMPLE IDENTIFICATION Classroom 106 [CF--C] Sample Date/Time 10/22/2021 05:29

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	<2	ug/l	EPA .200.8	2	11/24/2021 16:26 BJ

MARTEL NO. 60233 71 CLIENT SAMPLE IDENTIFICATION Classroom 105 [CF--C] Sample Date/Time 10/22/2021 05:39

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	<2	ug/l	EPA .200.8	2	11/24/2021 16:28 BJ

MARTEL NO. 60233 74 CLIENT SAMPLE IDENTIFICATION Classroom 104 [CF--C] Sample Date/Time 10/22/2021 05:40

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	<2	ug/l	EPA .200.8	2	11/24/2021 16:31 BJ

MARTEL NO. 60233 77 CLIENT SAMPLE IDENTIFICATION Classroom 103 [CF--C] Sample Date/Time 10/22/2021 05:41

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	2.25	ug/l	EPA .200.8	2	11/24/2021 16:33 BJ

MARTEL NO. 60233 80 CLIENT SAMPLE IDENTIFICATION Classroom 102 [CF--C] Sample Date/Time 10/22/2021 05:41

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	3.03	ug/l	EPA .200.8	2	11/24/2021 16:36 BJ

MARTEL NO. 60233 83 CLIENT SAMPLE IDENTIFICATION Classroom 101 [CF--C] Sample Date/Time 10/22/2021 05:39

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	<2	ug/l	EPA .200.8	2	11/24/2021 16:38 BJ

MARTEL NO. 60233 85 CLIENT SAMPLE IDENTIFICATION Nurses Office Health Room [NO--C] Sample Date/Time 10/22/2021 05:27

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Lead	<2	ug/l	EPA .200.8	2	11/24/2021 16:41 BJ

MARTEL Chain of Custody Record

Martel Laboratories JDS Inc., 1025 Cromwell Bridge Rd., Baltimore, MD 21286, (410) 825-7790, FAX (410) 821-1054, email: martel@martellabs.com

Anne Arundel County Public Schools Drinking Water Lead Testing

Bottle Type: 250 ml plastic, preserved with HNO3 Analysis: Lead (EPA 200.8)

Start Date/Time: 10/22/21 5:08 End Date/Time: 10/22/21 5:41

Sampler/Relinquished By: [Signature] Received at Martel by: [Signature] Date/Time: 10/22/21 0900

Quarterfield ES (31 first draw)
7967 Quarterfield Rd, Severn, MD 21144

**ALL OUTLET WERE FLUSHED THE NIGHT BEFORE
SAMPLING BETWEEN THE HOURS OF 8PM AND 9PM**

Martel NO:

60233

Martel #	Sample #	Room #	Fixture Type <small>(Sink, Bubbler, Water Fountain, Gooseneck, Ice Machine, Hose Bibb, etc.)</small>	Outlet Key Codes	Fixtures Types Key	Consumption <small>C or NC?</small>	Time/notes
1	1	Cafeteria	Cafe Fountain -Left	DF	Drinking Water Fountain- Cooler/Chiller Style	C	5:08
2	2	Cafeteria	Cafe Fountain -Right	DF	Drinking Water Fountain- Cooler/Chiller Style	C	↓
3	4	Kitchen	Kitchen Dual Sink	KS	Faucet, Cold	C	5:10
4	5	Kitchen	Tri-Sink -Left	KS	Faucet, Cold	C	↓
5	6	Kitchen	Tri-Sink -Right	KS	Faucet, Cold	C	↓
6	19	Classroom	117	CF	Drinking Water Fountain-Bubbler Style	C	5:18
7	21	Classroom	116	CF	Drinking Water Fountain-Bubbler Style	C	5:19
8	23	Classroom	115	CF	Drinking Water Fountain-Bubbler Style	C	↓
9	25	Classroom	114	CF	Drinking Water Fountain-Bubbler Style	C	5:23
10	27	Classroom	113	CF	Drinking Water Fountain-Bubbler Style	C	REMOVED
11	34	Classroom	124	CF	Drinking Water Fountain-Bubbler Style	C	5:24
12	38	Classroom	122	CF	Drinking Water Fountain-Bubbler Style	C	5:21
13	40	Classroom	121	CF	Drinking Water Fountain-Bubbler Style	C	↓
14	42	Classroom	120	CF	Drinking Water Fountain-Bubbler Style	C	REMOVED
15	43	Hallway	Hall Fountain (across from 119)	DF	Drinking Water Fountain- Cooler/Chiller Style	C	5:13
16	45	Classroom	119	CF	Drinking Water Fountain-Bubbler Style	C	5:17
17	48	Hallway	Hall Fountain (across from Cafe)	DF	Drinking Water Fountain- Cooler/Chiller Style	C	5:12
18	52	Hallway	Hall Fountain (across from 106)	DF	Drinking Water Fountain- Cooler/Chiller Style	C	5:28
19	57	Classroom	112	CF	Drinking Water Fountain-Bubbler Style	C	REMOVED
20	59	Classroom	111	CF	Drinking Water Fountain-Bubbler Style	C	5:33
21	61	Classroom	110	CF	Drinking Water Fountain-Bubbler Style	C	5:36
22	63	Classroom	109	CF	Drinking Water Fountain-Bubbler Style	C	5:34
23	65	Classroom	108	CF	Drinking Water Fountain-Bubbler Style	C	5:32

P06

Quarterfield ES (31 first draw)
7967 Quarterfield Rd, Severn, MD 21144

24	67	Classroom	107	CF	Drinking Water Fountain-Bubbler Style	C	S:30
25	69	Classroom	106	CF	Drinking Water Fountain-Bubbler Style	C	S:29
26	71	Classroom	105	CF	Drinking Water Fountain-Bubbler Style	C	S:39
27	74	Classroom	104	CF	Drinking Water Fountain-Bubbler Style	C	S:40
28	77	Classroom	103	CF	Drinking Water Fountain-Bubbler Style	C	S:41
29	80	Classroom	102	CF	Drinking Water Fountain-Bubbler Style	C	↓
30	83	Classroom	101	CF	Drinking Water Fountain-Bubbler Style	C	S:39
31	85	Nurses Office	Health Room	NO	Faucet, Cold	C	S:27