JAMES K POLK WATER SAMPLING 2023

JAMES K POLK ELEMENTARY SCHOOL

5000 POLK AVENUE
ALEXANDRIA, VIRGINIA 22304

ECS PROJECT NO. 47:11652-E

FOR: ALEXANDRIA CITY PUBLIC SCHOOLS

OCTOBER 2, 2023

October 2, 2023

Mr. John Contreras
Alexandria City Public Schools
1340 Braddock Place
Alexandria, Virginia 22314
john.contreras@acps.k12.va.us

ECS Project No. 47:11652-E

Reference: James K Polk Water Sampling 2023, James K Polk Elementary School, 5000 Polk Avenue, Alexandria, Virginia

Dear Mr. Contreras:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide Alexandria City Public Schools with the results of the water sampling performed at James K Polk Elementary School located at 5000 Polk Avenue in Alexandria, Virginia. This report summarizes our observations, analytical results, findings, and recommendations related to the work performed. The work described in this report was performed by ECS in general accordance with the Scope of Services described in ECS Proposal Number 47:16189-EP and the terms and conditions of the agreement authorizing those services.

ECS appreciates this opportunity to provide Alexandria City Public Schools with our services. If we can be of further assistance to you, please do not hesitate to contact us.

Sincerely,

ECS Mid-Atlantic, LLC

Lauren E. Kesslak, CIH, CSP
Environmental Senior Project Manager
LKesslak@ecslimited.com
703-471-8400

Christopher J. Chapman, CIH
Director of Industrial Hygiene
cchapman@ecslimited.com
703-471-8400

TABLE OF CONTENTS

PAGE

TABLE OF APPENDICES

1.0 PROJECT DESCRIPTION

The James K Polk Elementary School is a single-story school building located on 5000 Polk Avenue in Alexandria, Virginia. The building is currently occupied, and is used by the Alexandria City Public Schools (ACPS) as an elementary school and office facility. The site is located within the City of Alexandria and is under the jurisdiction of the federal Environmental Protection Agency (EPA) and Commonwealth of Virginia Code of Regulations for drinking water in schools.

The site receives water from Virginia American Water, which is classified as a public drinking water system by the EPA under the Safe Drinking Water Act (SDWA). Because the site is connected to a public water system, the site is not independently regulated as a water supplier by the EPA.

2.0 PURPOSE

The purpose of this water sampling event was provide proactive - periodic re-testing of select drinking water sources within the school. This was not a comprehensive retesting of all drinking water sources in the school.

The EPA created the Lead and Copper Rule under the SDWA. US EPA established a lead action level of 15 ppb (parts per billion) or 15 micrograms per liter (ug/L), and a copper action level of 1300 parts per billion (1300 ug/L).

The Code of Virginia § 22.1-135.1 currently requires Virginia school boards to develop and implement a plan to test, and if necessary, remediate potable water sources identified by the US EPA as a high priority. Each local school board shall submit testing plans and laboratory results to the Department of Health. If potable water sources are detected at or above 10 parts per billion (10 ug/L), the school board shall notify parents of such results.

The US EPA's *3Ts for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance (EPA 815-B-18-007*) was created to provide recommendations on how to address lead in drinking water in schools and child care facilities. The procedures and response actions outlined in the EPA's 3Ts document are recommendations not requirements. The EPA's 3Ts guidance document does not set action levels for lead in drinking water but it does reference the action levels created for public water systems in the EPA's LCR. The results of this water sampling event will be compared to the action levels set in the EPA's LCR.

3.0 METHODOLOGY

ECS performed the authorized Scope of Services in general accordance with our proposal, standard industry practice(s) and methods specified by regulation(s) for sampling drinking water.

3.1 Lead and Copper in Drinking Water

Sample protocols were performed following the guidance of the US EPA document, *3Ts for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance (EPA 815-B-18-007*). For each facility, water samples were collected from priority drinking water sources that were previously sampled and shown to have elevated levels of lead within the water.

ECS coordinated the water sampling with ACPS officials, and it is ECS's understanding that all of the water sources sampled were not in use at least eight hours prior to sampling. ACPS personnel granted ECS access to the building. ECS attempted to sample 20% of the accessible potable water sources within the building, with a minimum of five samples per building and a minimum of two samples per floor. During sampling, initial draw samples were collected. The samples were collected in 250 mL bottles with a nitric acid preservative. These water bottles were provided to ECS by Maryland Spectral Services, Inc. The water samples were provided with unique identification labels which include the school initials, a sequential number identifier, and sample location identifier.

The collected samples were sealed and transported by courier to Maryland Spectral Services located in Baltimore, Maryland under chain of custody protocol for analysis per EPA Methodology for lead in drinking water.

Please note that efforts were made to collect samples from selected outlets in accordance with the methodology described above. Some areas within the building were locked. ECS was not able to sample outlets in the locked areas.

4.0 RESULTS

The following is a summary of laboratory results, findings and observations.

4.1 Lead in Drinking Water

All but one of the samples collected were under the Commonwealth of Virginia action level of 10 ug/L. The sample collected from the 2nd floor bathroom sink contained 19.5 ug/L (parts per billion). In total, twenty four (24) water samples were collected from the building. A table of the collected samples and the associated analytical results can be found in the appendices. A copy of the laboratory analytical results and chain of custody are attached to this report. A sketch identifying the approximate location of each water sample can also be found in the appendices.

ECS performed re-sampling on September 14, 2023 in the 2nd floor bathroom sink. The sample result of the re-sampling was below the Virginia action level.

4.2 Copper in Drinking Water

None of the water samples collected were reported to have concentrations above the EPA action level of 1300 ug/L. In total, twenty four (24) water samples were collected from the building. A table of the collected samples and the associated analytical results can be found in the appendices. A copy of the laboratory analytical results and chain of custody are attached to this report. A sketch identifying the approximate location of each water sample can also be found in the appendices.

5.0 RECOMMENDATIONS AND REGULATORY REQUIREMENTS

Based on our understanding of the purpose of the James K Polk Water Sampling 2023, the results of laboratory analysis, and our findings and observations, ECS presents the following recommendations.

5.1 Lead in Drinking Water

The water sample collected from the 2nd floor bathroom sink was reported to be above the lead action level. The other water samples collected were reported below the action level and Virginia's notifiable level. The EPA's 3Ts document recommends choosing one of several short-term or permanent control measures. The following are the recommended short-term and permanent control measure options:

Short-Term Control Options:

- Mark the sink as hand wash only
- Provide Filters at Problem Taps - Point-of-use (POU) units are commercial available, can be relatively inexpensive, and quickly installed. The effectiveness of POUs can vary. POUs should be tested and certified against the NSF/ANSI Standard 53 (for lead removal) prior to installation. If POUs are installed, they should be incorporated into a routine maintenance plan;
- Flush Taps Prior to Use - Flushing individual outlets or all outlets may be used as a short term option; and,
- Provide Bottled Water - This control option is expensive and ECS does not recommend its use because of the relatively small number of elevated outlets.

Permanent Control Measures:

- Replacement of Problem Outlets - This option is recommended as a cost effective permanent control measure if there are only a few elevated outlets;
- Pipe Replacement;
- Provide Filters at Problem Taps: and,
- Reconfigure Plumbing.

After the implementation of a control option, ECS recommends follow-up sampling of the elevated outlets to evaluate effectiveness of the control option.

In addition to the remediation efforts for the elevated outlets, ECS recommends period follow-up screening be performed for the building. The EPA does not specify a specific time frame for which follow-up testing for schools needs to be performed. The EPA suggest that schools and child care facilities make testing a part of their routine building operations and states that annual monitoring provides information on changing concentrations and the effectiveness of remediation or treatment options.

No specific time frame is given in which follow-up testing for the schools needs to be performed. As good practice, ECS recommends performing follow-up periodic testing every three years. If additional guidelines or regulations are enacted at a state or federal level, the frequency of testing should be modified to reflect these changes.

In the US EPA 3Ts document, routine control measures are recommended as general good practice for over-all drinking water safety. The routine control measures that should be conducted to prevent exposure to elevated levels of lead, include the following:

- Clean debris from all accessible screens frequently. If you discovered sediments in faucet screens, have the sediments tested for lead and continue to clean your screens frequently, even if the analysis finds no lead.
- Use only cold water for food and beverage preparation. Hot water will dissolve lead more quickly than cold water and is likely to contain increased lead levels. If hot water is needed, it should be taken from the cold water tap and heated on a stove or in a microwave oven.
- Instruct the users (students and staff) to run the water before drinking or staff could run the water before students arrive, so they are drinking water that has not been in contact with the faucet interior since faucets are often a major source of lead in drinking water.
- Placard bathroom sinks with notices that water should not be consumed. You should use pictures if there are small children using bathrooms.
- US EPA recommends public notification of the findings of this sample event to the public and school staff. EPA has described different procedures for dissemination of this information which are described in Section III.6 of the 3 Ts document. The school should review the different methods described and choose the most appropriate method for the school.

5.2 Copper in Drinking Water

The sample results were below the action level, and no further testing or remediation is indicated at this time.

No specific time frame is given in which follow-up testing for the schools needs to be performed. As good practice, ECS recommends performing follow-up periodic testing every three years. If additional guidelines or regulations are enacted at a state or federal level, the frequency of testing should be modified to reflect these changes.

In the US EPA 3Ts document, routine control measures are recommended as general good practice for over-all drinking water safety. The routine control measures that should be conducted to prevent exposure to elevated levels of lead, include the following:

- Clean debris from all accessible screens frequently. If you discovered sediments in faucet screens, have the sediments tested for lead and continue to clean your screens frequently, even if the analysis finds no lead.
- Use only cold water for food and beverage preparation. Hot water will dissolve lead more quickly than cold water and is likely to contain increased lead levels. If hot water is needed, it should be taken from the cold water tap and heated on a stove or in a microwave oven.
- Instruct the users (students and staff) to run the water before drinking or staff could run the water before students arrive, so they are drinking water that has not been in contact with the faucet interior since faucets are often a major source of lead in drinking water.
- Placard bathroom sinks with notices that water should not be consumed. You should use pictures if there are small children using bathrooms.
- US EPA recommends public notification of the findings of this sample event to the public and school staff. EPA has described different procedures for dissemination of this information which are described in Section III.6 of the 3 Ts document. The school should review the different methods described and choose the most appropriate method for the school.

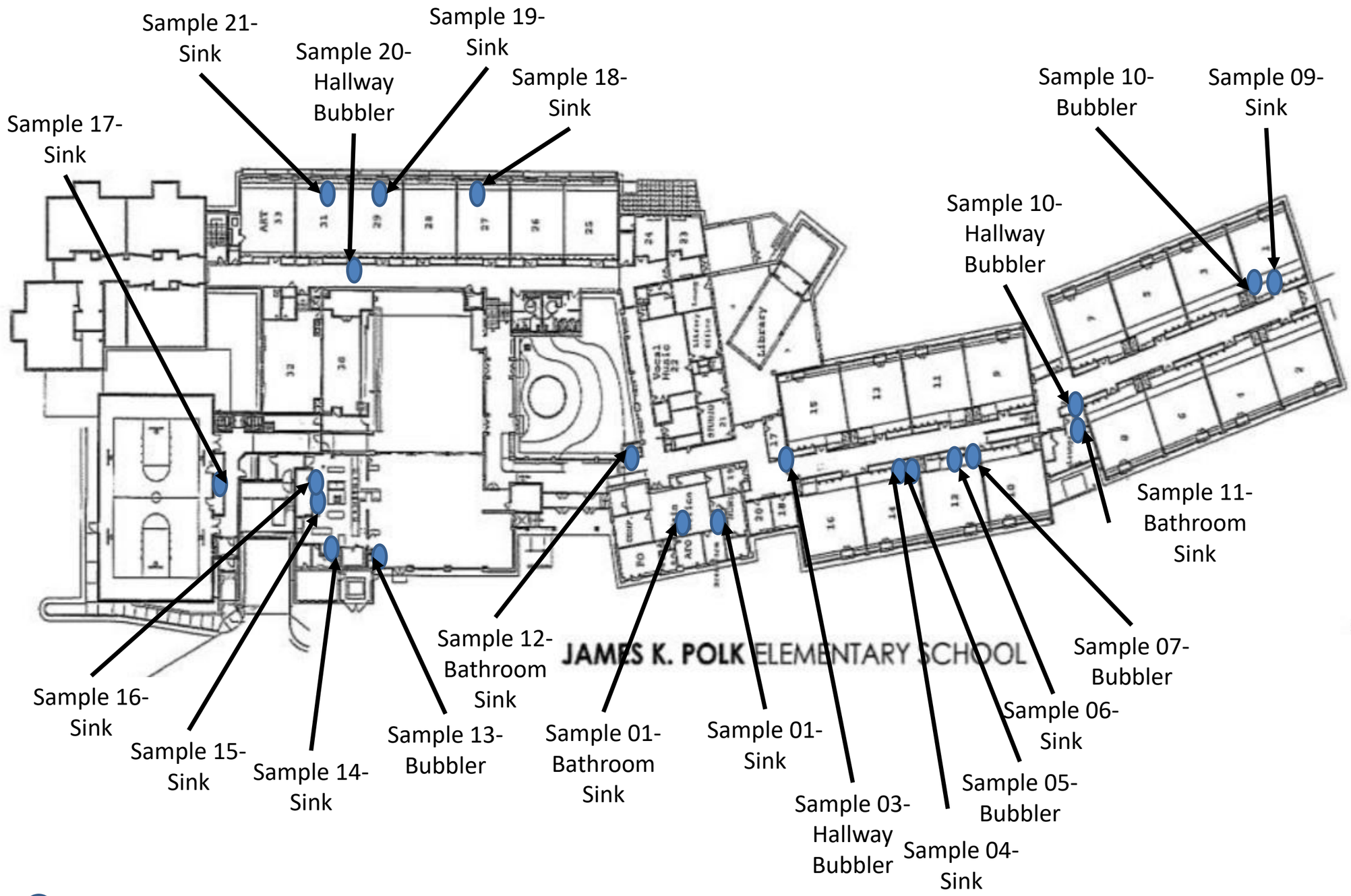
6.0 LIMITATIONS

The conclusions and recommendations presented within this report are based upon a reasonable level of assessment within normal bounds and standards of professional practice for a site in this particular geographic setting. ECS is not responsible or liable for the discovery and elimination of hazards that may potentially cause damage, accidents, or injuries.

The observations, conclusions, and recommendations pertaining to environmental conditions at the subject site are necessarily limited to conditions observed, and/or materials reviewed at the time this study was undertaken. No warranty, expressed or implied, is made with regard to the conclusions and recommendations presented within this report. This report is provided for the exclusive use of the client. This report is not intended to be used or relied upon in connection with other projects or by other unidentified third parties without the written consent of ECS and the client.

Our recommendations are in part based on federal, state, and local regulations and guidelines. ECS does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state, or federal public agencies, any conditions at the site that may present a potential danger to public health, safety, or the environment. Under this scope of services, ECS assumes no responsibility regarding any response actions initiated as a result of these findings. General compliance with regulations and response actions are the sole responsibility of the Client and should be conducted in accordance with local, state, and/or federal requirements.

Appendix I: Drawings



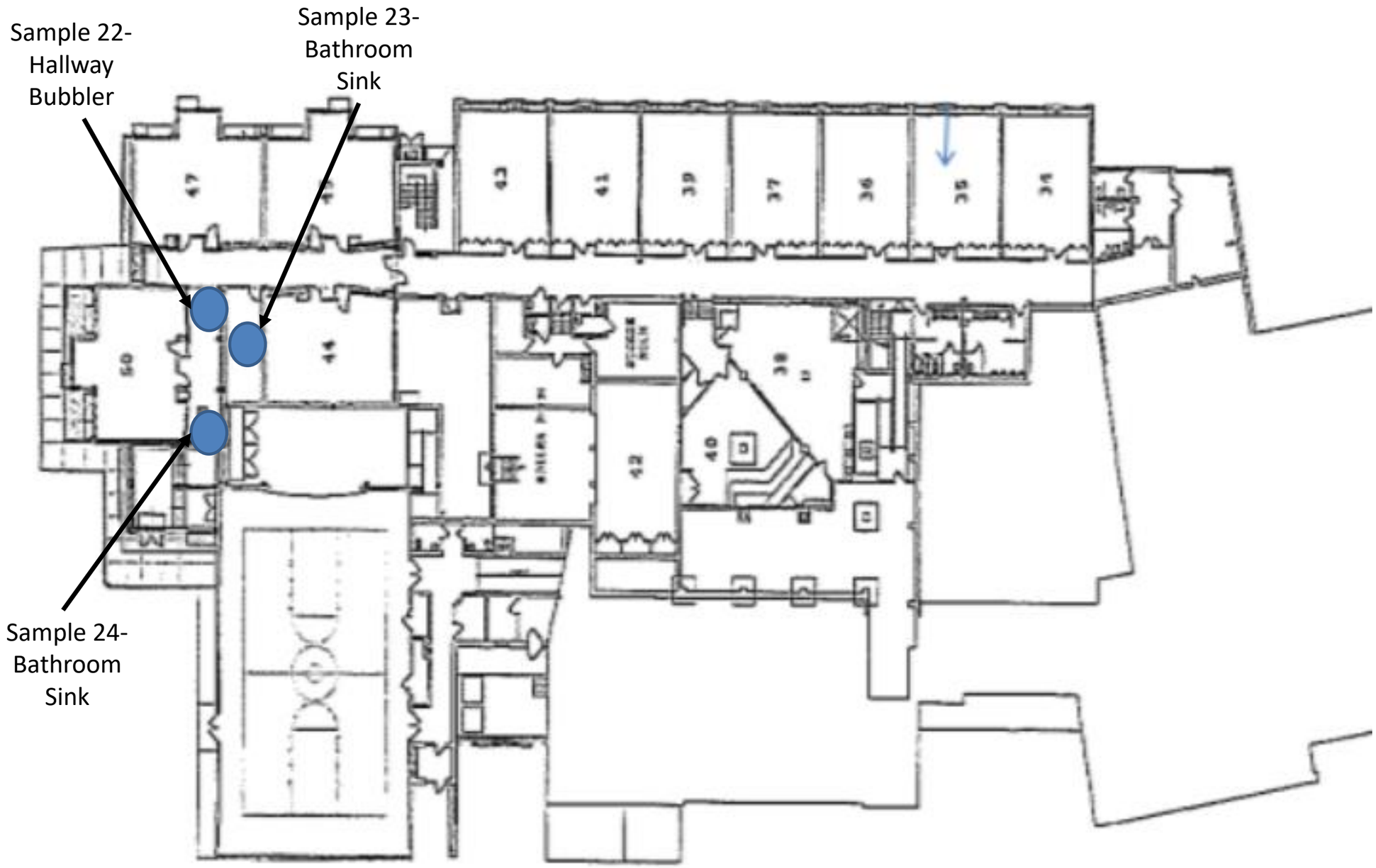
ACPS James K. Polk Elementary School
5000 Polk Ave.
Alexandria, VA 22304

Water Sampling Map- Level 1

Scale: NTS

Project No. 47:11652-E

Site Visit: 6/22/23



Sample Location

ACPS James K. Polk Elementary School
5000 Polk Ave.
Alexandria, VA 22304

Water Sampling Map- Level 2

Scale: NTS

Project No. 47:11652-E

Site Visit: 6/22/23

Appendix II: Sample Table

James Polk
Alexandria City Public Schools
ECS Project No. 47:11652-E
Site Visit: 06/22/2023

Copper and Lead Drinking Water Results Table		
Sample Number	**Copper Result (ug/L)**	**Lead Result (ug/L)**
1	114.000	ND
2	118.000	ND
3	390.000	ND
4	180.000	3.910
5	204.000	7.040
6	260.000	9.340
7	177.000	1.070
8	178.000	1.660
9	80.100	1.380
10	319.000	ND
11	187.000	2.710
12	48.400	ND
13	508.000	ND
14	123.000	1.040
15	55.100	ND
16	121.000	ND
17	428.000	ND
18	179.000	1.150
19	158.000	2.100

Table Notes:
Red = Above the EPA Action Level
Orange = Exceeds VA Action Level for Lead
ND = Not Detected

James Polk
Alexandria City Public Schools
ECS Project No. 47:11652-E
Site Visit: 06/22/2023

Sample Number	Copper Result (ug/L)	Lead Result (ug/L)
20	246.000	ND
21	155.000	ND
22	244.000	ND
23	302.000	2.020
24	1170.000	19.500

The EPA's Lead and Copper Rule set an action level of 15 ug/L for lead and an action level of 1300 ug/L for copper. Note these levels are related to public water systems (PWSs). The Code of Virginia requires school boards notify parents if testing results exceed 10 ug/L of Lead (Pb).

Table Notes:
Red = Above the EPA Action Level
Orange = Exceeds VA Action Level for Lead
ND = Not Detected

Appendix III: Laboratory Report(s)

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

04 August 2023

Lauren Kesslak
ECS-Chantilly
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151
RE: ACPS-JP

Enclosed are the results of analyses for samples received by the laboratory on 07/28/23 15:50.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01		3072836-01	Drinking Water	06/22/23 05:02	07/28/23 15:50
02		3072836-02	Drinking Water	06/22/23 05:03	07/28/23 15:50
03		3072836-03	Drinking Water	06/22/23 05:07	07/28/23 15:50
04		3072836-04	Drinking Water	06/22/23 05:09	07/28/23 15:50
05		3072836-05	Drinking Water	06/22/23 05:10	07/28/23 15:50
06		3072836-06	Drinking Water	06/22/23 05:12	07/28/23 15:50
07		3072836-07	Drinking Water	06/22/23 05:13	07/28/23 15:50
08		3072836-08	Drinking Water	06/22/23 05:16	07/28/23 15:50
09		3072836-09	Drinking Water	06/22/23 05:17	07/28/23 15:50
10		3072836-10	Drinking Water	06/22/23 05:19	07/28/23 15:50
11		3072836-11	Drinking Water	06/22/23 05:21	07/28/23 15:50
12		3072836-12	Drinking Water	06/22/23 05:24	07/28/23 15:50
13		3072836-13	Drinking Water	06/22/23 05:27	07/28/23 15:50
14		3072836-14	Drinking Water	06/22/23 05:30	07/28/23 15:50
15		3072836-15	Drinking Water	06/22/23 05:31	07/28/23 15:50
16		3072836-16	Drinking Water	06/22/23 05:32	07/28/23 15:50
17		3072836-17	Drinking Water	06/22/23 05:33	07/28/23 15:50
18		3072836-18	Drinking Water	06/22/23 05:37	07/28/23 15:50
19		3072836-19	Drinking Water	06/22/23 05:39	07/28/23 15:50
20		3072836-20	Drinking Water	06/22/23 05:41	07/28/23 15:50
21		3072836-21	Drinking Water	06/22/23 05:43	07/28/23 15:50
22		3072836-22	Drinking Water	06/22/23 05:52	07/28/23 15:50
23		3072836-23	Drinking Water	06/22/23 05:53	07/28/23 15:50
24		3072836-24	Drinking Water	06/22/23 05:54	07/28/23 15:50

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

01

3072836-01 (Drinking Water)
Sampled on: 06/22/23 05:02

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**114**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:17	VVD
Lead	ND		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:17	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

02

3072836-02 (Drinking Water)
Sampled on: 06/22/23 05:03

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**118**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:19	VVD
Lead	ND		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:19	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

03

3072836-03 (Drinking Water)
Sampled on: 06/22/23 05:07

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**390**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:20	VVD
Lead	ND		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:20	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

04

3072836-04 (Drinking Water)
Sampled on: 06/22/23 05:09

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**180**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:22	VVD
Lead	**3.91**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:22	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

05

3072836-05 (Drinking Water)
Sampled on: 06/22/23 05:10

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**204**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:23	VVD
Lead	**7.04**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:23	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

06

3072836-06 (Drinking Water)
Sampled on: 06/22/23 05:12

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**260**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:25	VVD
Lead	**9.34**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:25	VVD

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

07

3072836-07 (Drinking Water)
Sampled on: 06/22/23 05:13

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**177**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:38	VVD
Lead	**1.07**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:38	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

08

3072836-08 (Drinking Water)
Sampled on: 06/22/23 05:16

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**178**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:40	VVD
Lead	**1.66**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:40	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

09

3072836-09 (Drinking Water)
Sampled on: 06/22/23 05:17

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**80.1**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:42	VVD
Lead	**1.38**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:42	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

10

3072836-10 (Drinking Water)
Sampled on: 06/22/23 05:19

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**319**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:43	VVD
Lead	ND		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:43	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

11

3072836-11 (Drinking Water)
Sampled on: 06/22/23 05:21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**187**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:45	VVD
Lead	**2.71**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:45	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

12

3072836-12 (Drinking Water)
Sampled on: 06/22/23 05:24

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**48.4**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:47	VVD
Lead	ND		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:47	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

13

3072836-13 (Drinking Water)
Sampled on: 06/22/23 05:27

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**508**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:52	VVD
Lead	ND		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:52	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

14

3072836-14 (Drinking Water)
Sampled on: 06/22/23 05:30

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**123**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:53	VVD
Lead	**1.04**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:53	VVD

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

15

3072836-15 (Drinking Water)
Sampled on: 06/22/23 05:31

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**55.1**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:55	VVD
Lead	ND		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:55	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

16

3072836-16 (Drinking Water)
Sampled on: 06/22/23 05:32

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**121**		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:56	VVD
Lead	ND		ug/L	1.00	1.00	1	08/03/23	08/03/23 21:56	VVD

Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

17

3072836-17 (Drinking Water)
Sampled on: 06/22/23 05:33

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**428**		ug/L	1.00	1.00	1	08/03/23	08/03/23 22:05	VVD
Lead	ND		ug/L	1.00	1.00	1	08/03/23	08/03/23 22:05	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

18

3072836-18 (Drinking Water)
Sampled on: 06/22/23 05:37

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**179**		ug/L	1.00	1.00	1	08/03/23	08/03/23 22:06	VVD
Lead	**1.15**		ug/L	1.00	1.00	1	08/03/23	08/03/23 22:06	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

19

3072836-19 (Drinking Water)
Sampled on: 06/22/23 05:39

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**158**		ug/L	1.00	1.00	1	08/03/23	08/03/23 22:11	VVD
Lead	**2.10**		ug/L	1.00	1.00	1	08/03/23	08/03/23 22:11	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

20

3072836-20 (Drinking Water)
Sampled on: 06/22/23 05:41

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**246**		ug/L	1.00	1.00	1	08/03/23	08/03/23 22:13	VVD
Lead	ND		ug/L	1.00	1.00	1	08/03/23	08/03/23 22:13	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

21

3072836-21 (Drinking Water)
Sampled on: 06/22/23 05:43

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**155**		ug/L	1.00	1.00	1	08/03/23	08/03/23 22:15	VVD
Lead	ND		ug/L	1.00	1.00	1	08/03/23	08/03/23 22:15	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

22

3072836-22 (Drinking Water)
Sampled on: 06/22/23 05:52

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**244**		ug/L	1.00	1.00	1	08/03/23	08/03/23 22:16	VVD
Lead	ND		ug/L	1.00	1.00	1	08/03/23	08/03/23 22:16	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

23

3072836-23 (Drinking Water)
Sampled on: 06/22/23 05:53

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Copper	**302**		ug/L	1.00	1.00	1	08/03/23	08/03/23 22:18	VVD
Lead	**2.02**		ug/L	1.00	1.00	1	08/03/23	08/03/23 22:18	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

24

3072836-24 (Drinking Water)
Sampled on: 06/22/23 05:54

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.2-Digested Metals									
Copper	**1170**		ug/L	100	100	100	08/01/23	08/04/23 14:03	VVD
Lead	**19.5**		ug/L	1.00	1.00	1	08/01/23	08/04/23 02:01	VVD

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

Total Metals Analysis by EPA 200.8DW - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B308035 - 200.2-Digested Metals										
Blank (B308035-BLK1)					Prepared: 08/01/23 Analyzed: 08/04/23					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						
LCS (B308035-BS1)					Prepared: 08/01/23 Analyzed: 08/04/23					
Copper	10.5		1.00	ug/L	10.00		105	85-115		
Lead	9.65		1.00	ug/L	10.00		96	85-115		
Duplicate (B308035-DUP1)		**Source: 3072836-24**			Prepared: 08/01/23 Analyzed: 08/04/23					
Copper	1110	E	1.00	ug/L		1170			6	20
Lead	19.3		1.00	ug/L		19.5			0.8	20
Matrix Spike (B308035-MS1)		**Source: 3072836-24**			Prepared: 08/01/23 Analyzed: 08/04/23					
Copper	1120	E, QM-4X	1.00	ug/L	10.00	1170	NR	70-130		
Lead	29.1		1.00	ug/L	10.00	19.5	97	70-130		
Batch B308091 - 200.8-No Digestion Metals										
Blank (B308091-BLK1)					Prepared & Analyzed: 08/03/23					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						
Blank (B308091-BLK2)					Prepared & Analyzed: 08/03/23					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						
Blank (B308091-BLK3)					Prepared & Analyzed: 08/03/23					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

Total Metals Analysis by EPA 200.8DW - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B308091 - 200.8-No Digestion Metals										
Blank (B308091-BLK4)					Prepared & Analyzed: 08/03/23					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						
Blank (B308091-BLK5)					Prepared & Analyzed: 08/03/23					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						
Blank (B308091-BLK6)					Prepared & Analyzed: 08/03/23					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						
Blank (B308091-BLK7)					Prepared & Analyzed: 08/03/23					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						
Blank (B308091-BLK8)					Prepared & Analyzed: 08/03/23					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						
Blank (B308091-BLK9)					Prepared & Analyzed: 08/03/23					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						
Blank (B308091-BLKA)					Prepared & Analyzed: 08/03/23					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						
Blank (B308091-BLKB)					Prepared & Analyzed: 08/03/23					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						

Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

Total Metals Analysis by EPA 200.8DW - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B308091 - 200.8-No Digestion Metals										
Blank (B308091-BLKC)					Prepared: 08/03/23 Analyzed: 08/04/23					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						
Blank (B308091-BLKD)					Prepared: 08/03/23 Analyzed: 08/04/23					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						
Blank (B308091-BLKE)					Prepared: 08/03/23 Analyzed: 08/04/23					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						
Blank (B308091-BLKF)					Prepared: 08/03/23 Analyzed: 08/04/23					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						
LCS (B308091-BS1)					Prepared & Analyzed: 08/03/23					
Copper	10.4		1.00	ug/L	10.00		104	85-115		
Lead	9.73		1.00	ug/L	10.00		97	85-115		
LCS (B308091-BS2)					Prepared & Analyzed: 08/03/23					
Copper	10.5		1.00	ug/L	10.00		105	85-115		
Lead	10.1		1.00	ug/L	10.00		101	85-115		
LCS (B308091-BS3)					Prepared & Analyzed: 08/03/23					
Copper	11.2		1.00	ug/L	10.00		112	85-115		
Lead	10.6		1.00	ug/L	10.00		106	85-115		
LCS (B308091-BS4)					Prepared & Analyzed: 08/03/23					
Copper	10.5		1.00	ug/L	10.00		105	85-115		
Lead	9.93		1.00	ug/L	10.00		99	85-115		

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

Total Metals Analysis by EPA 200.8DW - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B308091 - 200.8-No Digestion Metals										
LCS (B308091-BS5)					Prepared & Analyzed: 08/03/23					
Copper	10.6		1.00	ug/L	10.00		106	85-115		
Lead	10.8		1.00	ug/L	10.00		108	85-115		
LCS (B308091-BS6)					Prepared & Analyzed: 08/03/23					
Copper	10.5		1.00	ug/L	10.00		105	85-115		
Lead	9.90		1.00	ug/L	10.00		99	85-115		
LCS (B308091-BS7)					Prepared & Analyzed: 08/03/23					
Copper	10.7		1.00	ug/L	10.00		107	85-115		
Lead	10.0		1.00	ug/L	10.00		100	85-115		
LCS (B308091-BS8)					Prepared & Analyzed: 08/03/23					
Copper	10.4		1.00	ug/L	10.00		104	85-115		
Lead	9.76		1.00	ug/L	10.00		98	85-115		
LCS (B308091-BS9)					Prepared & Analyzed: 08/03/23					
Copper	10.7		1.00	ug/L	10.00		107	85-115		
Lead	10.1		1.00	ug/L	10.00		101	85-115		
LCS (B308091-BSA)					Prepared & Analyzed: 08/03/23					
Copper	10.7		1.00	ug/L	10.00		107	85-115		
Lead	9.90		1.00	ug/L	10.00		99	85-115		
LCS (B308091-BSB)					Prepared & Analyzed: 08/03/23					
Copper	11.0		1.00	ug/L	10.00		110	85-115		
Lead	10.2		1.00	ug/L	10.00		102	85-115		
LCS (B308091-BSC)					Prepared: 08/03/23 Analyzed: 08/04/23					
Copper	10.5		1.00	ug/L	10.00		105	85-115		
Lead	9.85		1.00	ug/L	10.00		98	85-115		

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

Total Metals Analysis by EPA 200.8DW - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B308091 - 200.8-No Digestion Metals										
LCS (B308091-BSD)					Prepared: 08/03/23 Analyzed: 08/04/23					
Copper	10.6		1.00	ug/L	10.00		106	85-115		
Lead	9.95		1.00	ug/L	10.00		100	85-115		
LCS (B308091-BSE)					Prepared: 08/03/23 Analyzed: 08/04/23					
Copper	10.6		1.00	ug/L	10.00		106	85-115		
Lead	9.93		1.00	ug/L	10.00		99	85-115		
LCS (B308091-BSF)					Prepared: 08/03/23 Analyzed: 08/04/23					
Copper	10.9		1.00	ug/L	10.00		109	85-115		
Lead	10.1		1.00	ug/L	10.00		101	85-115		
Duplicate (B308091-DUP1)		**Source: 3072617-01**			Prepared & Analyzed: 08/03/23					
Copper	35.5		1.00	ug/L		35.7			0.4	20
Lead	ND		1.00	ug/L		ND				20
Duplicate (B308091-DUP2)		**Source: 3072831-11**			Prepared & Analyzed: 08/03/23					
Copper	104		1.00	ug/L		104			0.2	20
Lead	ND		1.00	ug/L		ND				20
Duplicate (B308091-DUP3)		**Source: 3072831-20**			Prepared & Analyzed: 08/03/23					
Copper	179		1.00	ug/L		181			0.9	20
Lead	ND		1.00	ug/L		ND				20
Duplicate (B308091-DUP4)		**Source: 3072832-10**			Prepared & Analyzed: 08/03/23					
Copper	554		1.00	ug/L		554			0.0001	20
Lead	2.23		1.00	ug/L		2.01			10	20
Duplicate (B308091-DUP5)		**Source: 3072832-20**			Prepared & Analyzed: 08/03/23					
Copper	379		1.00	ug/L		383			0.9	20
Lead	ND		1.00	ug/L		ND				20

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

Total Metals Analysis by EPA 200.8DW - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B308091 - 200.8-No Digestion Metals										
Duplicate (B308091-DUP6)		**Source: 3072833-10**			Prepared & Analyzed: 08/03/23					
Copper	190		1.00	ug/L		193			2	20
Lead	19.8		1.00	ug/L		19.8			0.4	20
Duplicate (B308091-DUP7)		**Source: 3072833-20**			Prepared & Analyzed: 08/03/23					
Copper	214		1.00	ug/L		212			1	20
Lead	ND		1.00	ug/L		ND				20
Duplicate (B308091-DUP8)		**Source: 3072834-10**			Prepared & Analyzed: 08/03/23					
Copper	235		1.00	ug/L		233			1	20
Lead	ND		1.00	ug/L		ND				20
Duplicate (B308091-DUP9)		**Source: 3072834-20**			Prepared & Analyzed: 08/03/23					
Copper	242		1.00	ug/L		240			0.9	20
Lead	3.04		1.00	ug/L		3.01			1	20
Duplicate (B308091-DUPA)		**Source: 3072835-10**			Prepared & Analyzed: 08/03/23					
Copper	157		1.00	ug/L		156			0.4	20
Lead	ND		1.00	ug/L		ND				20
Duplicate (B308091-DUPB)		**Source: 3072835-20**			Prepared & Analyzed: 08/03/23					
Copper	366		1.00	ug/L		370			0.9	20
Lead	ND		1.00	ug/L		ND				20
Duplicate (B308091-DUPC)		**Source: 3072836-10**			Prepared: 08/03/23 Analyzed: 08/04/23					
Copper	323		1.00	ug/L		319			1	20
Lead	ND		1.00	ug/L		ND				20
Duplicate (B308091-DUPD)		**Source: 3072836-20**			Prepared: 08/03/23 Analyzed: 08/04/23					
Copper	247		1.00	ug/L		246			0.6	20
Lead	ND		1.00	ug/L		ND				20

Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

Total Metals Analysis by EPA 200.8DW - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B308091 - 200.8-No Digestion Metals										
Duplicate (B308091-DUPE)		**Source: 3080108-01**			Prepared: 08/03/23 Analyzed: 08/04/23					
Copper	451		1.00	ug/L		451			0.05	20
Lead	ND		1.00	ug/L		ND				20
Duplicate (B308091-DUPF)		**Source: 3080108-05**			Prepared: 08/03/23 Analyzed: 08/04/23					
Copper	5.50		1.00	ug/L		5.52			0.4	20
Lead	ND		1.00	ug/L		ND				20
Matrix Spike (B308091-MS1)		**Source: 3072617-01**			Prepared & Analyzed: 08/03/23					
Copper	44.7		1.00	ug/L	10.00	35.7	90	70-130		
Lead	11.3		1.00	ug/L	10.00	ND	113	70-130		
Matrix Spike (B308091-MS2)		**Source: 3072831-11**			Prepared & Analyzed: 08/03/23					
Copper	113		1.00	ug/L	10.00	104	87	70-130		
Lead	10.4		1.00	ug/L	10.00	ND	104	70-130		
Matrix Spike (B308091-MS3)		**Source: 3072831-20**			Prepared & Analyzed: 08/03/23					
Copper	200	QM-4X	1.00	ug/L	10.00	181	189	70-130		
Lead	10.4		1.00	ug/L	10.00	ND	104	70-130		
Matrix Spike (B308091-MS4)		**Source: 3072832-10**			Prepared & Analyzed: 08/03/23					
Copper	545	QM-4X	1.00	ug/L	10.00	554	NR	70-130		
Lead	12.1		1.00	ug/L	10.00	2.01	101	70-130		
Matrix Spike (B308091-MS5)		**Source: 3072832-20**			Prepared & Analyzed: 08/03/23					
Copper	382	QM-4X	1.00	ug/L	10.00	383	NR	70-130		
Lead	10.3		1.00	ug/L	10.00	ND	103	70-130		
Matrix Spike (B308091-MS6)		**Source: 3072833-10**			Prepared & Analyzed: 08/03/23					
Copper	195	QM-4X	1.00	ug/L	10.00	193	23	70-130		
Lead	29.9		1.00	ug/L	10.00	19.8	101	70-130		

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

Total Metals Analysis by EPA 200.8DW - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B308091 - 200.8-No Digestion Metals										
Matrix Spike (B308091-MS7)		**Source: 3072833-20**			Prepared & Analyzed: 08/03/23					
Copper	219	QM-4X	1.00	ug/L	10.00	212	67	70-130		
Lead	10.5		1.00	ug/L	10.00	ND	105	70-130		
Matrix Spike (B308091-MS8)		**Source: 3072834-10**			Prepared & Analyzed: 08/03/23					
Copper	240		1.00	ug/L	10.00	233	74	70-130		
Lead	10.1		1.00	ug/L	10.00	ND	101	70-130		
Matrix Spike (B308091-MS9)		**Source: 3072834-20**			Prepared & Analyzed: 08/03/23					
Copper	247		1.00	ug/L	10.00	240	78	70-130		
Lead	13.9		1.00	ug/L	10.00	3.01	109	70-130		
Matrix Spike (B308091-MSA)		**Source: 3072835-10**			Prepared & Analyzed: 08/03/23					
Copper	164		1.00	ug/L	10.00	156	74	70-130		
Lead	11.2		1.00	ug/L	10.00	ND	112	70-130		
Matrix Spike (B308091-MSB)		**Source: 3072835-20**			Prepared & Analyzed: 08/03/23					
Copper	370	QM-4X	1.00	ug/L	10.00	370	5	70-130		
Lead	10.9		1.00	ug/L	10.00	ND	109	70-130		
Matrix Spike (B308091-MSC)		**Source: 3072836-10**			Prepared: 08/03/23 Analyzed: 08/04/23					
Copper	324	QM-4X	1.00	ug/L	10.00	319	51	70-130		
Lead	11.0		1.00	ug/L	10.00	ND	110	70-130		
Matrix Spike (B308091-MSD)		**Source: 3072836-20**			Prepared: 08/03/23 Analyzed: 08/04/23					
Copper	252	QM-4X	1.00	ug/L	10.00	246	64	70-130		
Lead	10.7		1.00	ug/L	10.00	ND	107	70-130		
Matrix Spike (B308091-MSE)		**Source: 3080108-01**			Prepared: 08/03/23 Analyzed: 08/04/23					
Copper	453	QM-4X	1.00	ug/L	10.00	451	25	70-130		
Lead	12.2		1.00	ug/L	10.00	ND	122	70-130		

Will Brewington, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

Total Metals Analysis by EPA 200.8DW - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B308091 - 200.8-No Digestion Metals										
Matrix Spike (B308091-MSF)		**Source: 3080108-05**		Prepared: 08/03/23 Analyzed: 08/04/23						
Copper	15.6		1.00	ug/L	10.00	5.52	101	70-130		
Lead	10.5		1.00	ug/L	10.00	ND	105	70-130		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: ACPS-JP

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
08/04/23 16:57

Notes and Definitions

QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate (CLP E-flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

Will Brewington, President

Company Name: ECS Mid Atlantic LLC.	Project Manager:	Analysis Requested	**CHAIN-OF-CUSTODY RECORD**
Project Name: ACPS Drinking Water Periodic Monitoring	Project ID: 417:11652-E / James K Polk ACPS		Maryland Spectral Services, Inc. 1500 Caton Center Drive, Suite G Baltimore, MD 21227 410-247-7600 * Fax 410-247-7602 reporting@mdspectral.com
Sampler(s): Zach Harrell	P.O. Number:		
State of Origin: VA			Matrix Codes: NPW - non-potable water DW - drinking water

Field Sample ID:	Date	Time	DW	NPW	Soil	Other	Grab	Composite	# of containers	Lead Copper	Preservative	Field Notes	MSS Lab ID
01	6-22-23	5:02										19-Clinic Sink	3072836-01 A
02	"	:03										19-Main office Bathroom SINK	-02
03	"	:07										Drinking Bubbler outside 18	-03
04	"	:09										14 sink	-04
05	"	:10										14 Bubbler	-05
06	"	:12										12 sink	-06
07	"	:13										12 Bubbler	-07
08	"	:16										1 Sink	-08
09	"	:17										1 Bubbler	-09
10	"	:19										Hallway Bubbler outside 8	-10

Relinquished by: *(Signature)*	Date /Time	Relinquished by: *(Signature)*	Please indicate if any of the following certifications are required: ☐ Virginia VELAP ☐ Pennsylvania NELAP ☐ West Virginia DEP ☐ MD Drinking Water ☐ VA Drinking Water ☐ Other _____
(Printed) Zach Harrell		*(Printed)*	
Relinquished by: *(Signature)*	Date /Time 7-28-23	Received by lab: *(Signature)*	Turn Around Time: ☐ Normal (7 day) ☐ 5 day ☐ 4 day ☐ 3 day ☐ Rush (2 day) ☐ Next Day ☐ Other: _____ ☐ Specific Due Date: _____
(Printed)	15:50	*(Printed)* Lori Foster	Delivery Method: ☑ Courier ☐ Client ☐ UPS ☐ Fed Ex ☐ USPS ☐ Other _____
Special Instructions / QC Requirements & Comments:			Lab Use: Temp: 23.6 °C ☐ Received on Ice ☐ Received Same Day Sample Disposal: ☐ Return to Client ☐ Disposal by lab ☐ Archive for __ days

Company Name: EES Mid-Atlantic LLC.	Project Manager:	Analysis Requested	**CHAIN-OF-CUSTODY RECORD**
Project Name: KCPS Drinking Water Periodic Monitoring	Project ID: 47:11652-E1 ACPS Summer K. PDR		Maryland Spectral Services, Inc. 1500 Caton Center Drive, Suite G Baltimore, MD 21227 410-247-7600 * Fax 410-247-7602 reporting@mdspectral.com
Sampler(s): Zach Harrell	P.O. Number:		
State of Origin: VA			Matrix Codes: NPW - non-potable water DW - drinking water

Field Sample ID:	Date	Time	DW	NPW	Soil	Other	Grab	Composite	# of containers	Lead	Copper	Preservative	Field Notes	MSS Lab ID
11	6/20/13	5:21											Lounge Bathroom Sink by Door-12	3072836-11
12	6/20/13	5:24											Staff Bathroom sink by main office	-12
13		1:27											Cafeteria Bubbler	-13
14		:30											Kitchen Left Handsink	-14
15		:31											kitchen Left main sink	-15
16		:32											Kitchen Right main sink	-16
17		:35											Gym Bubbler	-17
18		:37											27 Sink	-18
19		:34											29 Sink	-19
20	↓	↓ :41								↓	↓		Hallway Bubbler outside 27a	-20

Relinquished by: *(Signature)* Zach Harrell	Date /Time	Relinquished by: *(Signature)*	Please indicate if any of the following certifications are required: ☐ Virginia VELAP ☐ Pennsylvania NELAP ☐ West Virginia DEP ☐ MD Drinking Water ☐ VA Drinking Water ☐ Other _____
(Printed) Zach Harrell		*(Printed)*	
Relinquished by: *(Signature)*	Date /Time	Received by lab: *(Signature)*	Turn Around Time: ☐ Normal (7 day) ☐ 5 day ☐ 4 day ☐ 3 day ☐ Rush (2 day) ☐ Next Day ☐ Other: _____ ☐ Specific Due Date: _____
(Printed)		*(Printed)*	Delivery Method: ☐ Courier ☐ Client ☐ UPS ☐ Fed Ex ☐ USPS ☐ Other _____
Special Instructions / QC Requirements & Comments:			Lab Use: Temp: _____ °C ☐ Received on Ice ☐ Received Same Day Sample Disposal: ☐ Return to Client ☐ Disposal by lab ☐ Archive for __ days

Company Name: ECS Mid-Atlantic LLC.	Project Manager:	Analysis Requested	CHAIN-OF-CUSTODY RECORD
Project Name: ACPS Drinking Water Profile Monitoring	Project ID: 47:11652-C / ACPS James K. Polk		Maryland Spectral Services, Inc. 1500 Caton Center Drive, Suite G Baltimore, MD 21227 410-247-7600 * Fax 410-247-7602 reporting@mdspectral.com
Sampler(s): Zach Harrell	P.O. Number:		
State of Origin: VA			Matrix Codes: NPW - non-potable water DW - drinking water

Field Sample ID:	Date	Time	DW	NPW	Soil	Other	Grab	Composite	# of containers	Lead	Copper	Preservative	Field Notes	MSS Lab ID
21	6/22/23	5:43											31 Sink	3072836-21
22		:52											Hallway Bubbler outside 52	-22
23		:53											Child Bathroom Sink outside 52	-23
24		:54											Staff Bathroom Sink outside 52	-24

Relinquished by: (Signature)	Date /Time	Relinquished by: (Signature)
(Printed) Zach Harrell		(Printed)
Relinquished by: (Signature)	Date /Time	Received by lab: (Signature)
(Printed)		(Printed)

Special Instructions / QC Requirements & Comments:

Please indicate if any of the following certifications are required:
- ☐ Virginia VELAP
- ☐ Pennsylvania NELAP
- ☐ West Virginia DEP
- ☐ MD Drinking Water
- ☐ VA Drinking Water
- ☐ Other _____

Turn Around Time:
- ☐ Normal (7 day)
- ☐ 5 day
- ☐ 4 day
- ☐ 3 day
- ☐ Rush (2 day)
- ☐ Next Day
- ☐ Other: _____
- ☐ Specific Due Date: _____

Delivery Method:
- ☐ Courier
- ☐ Client
- ☐ UPS
- ☐ Fed Ex
- ☐ USPS
- ☐ Other _____

Lab Use:
Temp: _____ °C
- ☐ Received on Ice
- ☐ Received Same Day

Sample Disposal:
- ☐ Return to Client
- ☐ Disposal by lab
- ☐ Archive for __ days

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

21 September 2023

Lauren Kesslak
ECS-Chantilly
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151

RE: ACPS LEAD WATER SAMPLING JAMES POLK

Enclosed are the results of analyses for samples received by the laboratory on 09/15/23 14:40.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: ACPS LEAD WATER SAMPLING JAMES POLK

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
09/21/23 14:33

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01-52		3091517-01	Drinking Water	09/14/23 05:17	09/15/23 14:40

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: ACPS LEAD WATER SAMPLING JAMES POLK

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
09/21/23 14:33

01-52

3091517-01 (Drinking Water)
Sampled on: 09/14/23 05:17

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Total Metals Analysis by EPA 200.8DW Prepared by 200.8-No Digestion Metals									
Lead	**1.11**		ug/L	1.00	1.00	1	09/20/23	09/20/23 13:55	AWH

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: **ACPS LEAD WATER SAMPLING JAMES POLK**

Project Number: 47:11652-E
Project Manager: Lauren Kesslak

Reported:
09/21/23 14:33

Notes and Definitions

RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

If this report contains any samples analyzed for gasoline range organics (GRO) by EPA Method 8015C and no trip blank was shipped, stored, and received with the sample(s) as required by Section 3.1 of the EPA Method, the sample analysis contained in this report cannot exclude the possibility that any reportable GRO measurement was due to environmental contamination of the sample during shipping or storage.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

CHAIN-OF-CUSTODY RECORD

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410-247-7600 • Fax 410-247-7602
labman@mdspectral.com

Matrix Codes: NW (nonpotable water)
PW (potable water)

Company Name:	Project Manager:
ECS (Va)	Lauren Kresslak
Project Name: ACPS Lead Water Sampling James Polk	Project ID: 11652-E
Sampler(s): William Sargent	P.O. Number:

Field Sample ID	Date	Time	Water PW	Soil	Other	No. of Containers	Lead	Preservative: 1+1 HCL, H_2SO_4, Methanol, $Na_2S_2O_3$, $NaHCO_3$	Field pH, Residual Chlorine, QC Request, Trip Blank, Field Blank	MSS Lab ID
01-52	9/14	5:17 AM	X			1	X	HNO_3		3091517-01

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
(Printed) William Sargent	9/15 12:00 PM	(Printed)	(Printed)		(Printed)
Relinquished by: (Signature)	Date/Time	Received by Lab: (Signature)			
(Printed)	9-15-23 14:40	(Printed) Lori Foster			

Turn Around Time:

- ☐ Normal (7 day)
- ☒ 5 day
- ☐ 4 day
- ☐ 3 day
- ☐ Rush (2 day)
- ☐ Next Day
- ☐ Other: _____
- ☐ Specific Due Date: _____

Lab Use:

Temp: 23.5 °C

- ☐ Received on Ice
- ☐ Received same day
- ☐ Preservation Appropriate

Delivery Method:

- ☒ Courier
- ☐ Client
- ☐ UPS
- ☐ FedEx
- ☐ USPS
- ☐ Other: _____

Special Instructions/QC Requirements & Comments:

Sample Disposal:

- ☐ Return to Client
- ☐ Disposal by lab
- ☐ Archive for _____ days