

BROOKS WATER SAMPLING JUNE 2022



NAOMI L. BROOKS ELEMENTARY SCHOOL

600 RUSSEL RD.
ALEXANDRIA, VIRGINIA 22301

ECS PROJECT NO. 47:11652-E

FOR: ALEXANDRIA CITY PUBLIC SCHOOLS

JULY 25, 2022





July 25, 2022

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: Brooks Water Sampling June 2022, Naomi L. Brooks Elementary School, 600 Russel Rd., 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 Naomi L. Brooks Elementary School located at 600 Russel Rd. 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. Kessler, CIH, CSP
Environmental Senior Project Manager
LKessler@ecslimited.com
703-471-8400

Christopher J. Chapman, CIH
Director of Industrial Hygiene
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717-767-4788

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1.0 PROJECT DESCRIPTION

The Naomi L. Brooks Elementary School is a one-story school building located at 600 Russel Rd. in Alexandria, Virginia. The building is currently occupied, and is used by Alexandria City Public Schools (ACPS) as a school and office facility. The site is located within Alexandria and is under the jurisdiction of the City of Alexandria, Virginia, federal Environmental Protection Agency (EPA), and Commonwealth of Virginia - Code of Regulations for drinking water.

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 periodic - proactive re-testing of select drinking water sources within the school. This was not a comprehensive sampling of all potable drinking water sources in the school.

US EPA created the Lead and Copper Rule under the Safe Drinking Water Act (SDWA). US EPA established a lead action level of 15 ppb (parts per billion) or 0.015 milligrams per liter (mg/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 (0.010 mg/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

None of the water samples collected were reported to have concentrations above the EPA lead action level of 0.015 mg/L or the VA action level of 0.01 mg/L. In total, thirteen (13) water samples were collected from the building. A table of the collected samples and the associated analytical results can be found in the appendices. Please note that the analytical results displayed in the table have been converted to mg/L (PPM) for easy reference. The reported concentrations ranged from None Detected to 0.00709 PPM. 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.

4.2 Copper in Drinking Water

None of the water samples collected were reported to have concentrations above the EPA copper action level of 1.3 mg/L (PPM). In total, thirteen (13) water samples were collected from the building. A table of the collected samples and the associated analytical results can be found in the appendices. Please note that the analytical results displayed in the table have been converted to mg/L (PPM) for easy reference. The reported concentrations ranged from 0.099 to 0.541 PPM. 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 Brooks Water Sampling June 2022, the results of laboratory analysis, and our findings and observations, ECS presents the following recommendations.

5.1 Lead 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.

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

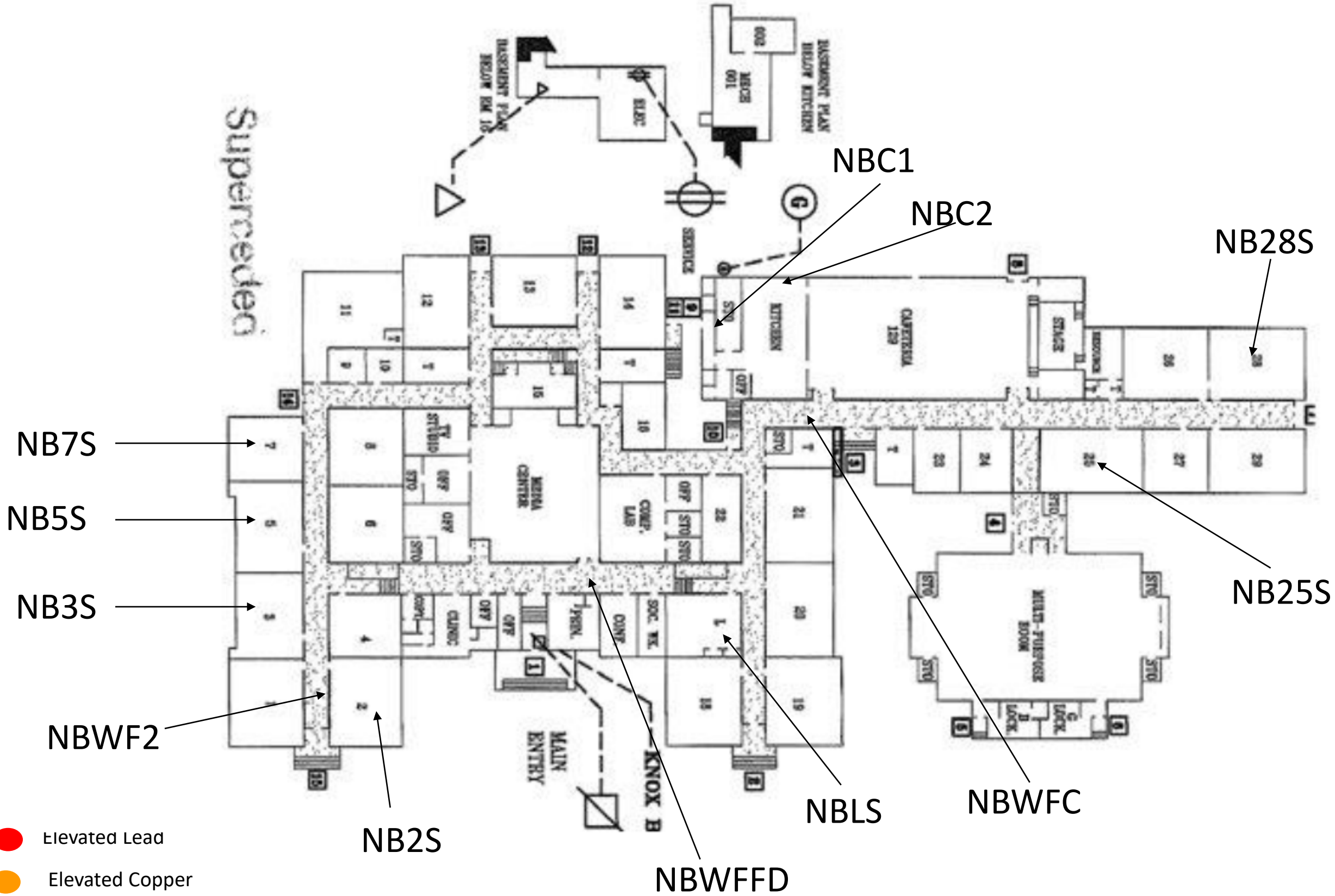
The conclusions and recommendations presented within this report are based upon a reasonable level of assessment within normal bounds and standards of professional practice for a site in this particular geographic setting. ECS is not responsible or liable for the discovery and elimination of hazards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

Superceded



Naomie Brooks Elementary
 600 Russel Rd.
 Alexandria, VA 22301



Sample Location Sketch

Scale: NTS

Project No.
 47:11652-E

Site Visit:
 6/8/22

Appendix II: Sample Table



Copper and Lead Drinking Water Results Table		
Sample Number	Copper Result (mg/L)	Lead Result (mg/L)
NBC1	0.075	<0.001
NBC2	0.078	0.002
NB28S	0.453	0.002
NB25S	0.147	<0.001
NBWFC	0.148	<0.001
NBLS	0.099	<0.001
NBWFFD	0.332	<0.001
NBCS	0.171	<0.001
NB25	0.327	<0.001
NBWF2	0.123	<0.001
NB3S	0.317	<0.001
NB5S	0.356	0.008
NB7S	0.541	<0.001

The EPA's Lead and Copper Rule set an action level of 0.015 mg/L for lead and an action level of 1.3 mg/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 0.01 mg/L of Lead (Pb).

Table Notes:

Red = Above the EPA Action Level

Orange = Above the VA Action Level

Appendix III: Laboratory Report(s)

22 June 2022

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

RE: ACPS PERIODIC WATER MONITORING-NAOMI BROOKS

Enclosed are the results of analyses for samples received by the laboratory on 06/13/22 15:41.

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 PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
 06/22/22 15:40

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
NBC1		2061311-01	Drinking Water	06/07/22 00:00	06/13/22 15:41
NBC2		2061311-02	Drinking Water	06/07/22 00:00	06/13/22 15:41
NB28S		2061311-03	Drinking Water	06/07/22 00:00	06/13/22 15:41
NB25S		2061311-04	Drinking Water	06/07/22 00:00	06/13/22 15:41
NBWFC		2061311-05	Drinking Water	06/07/22 00:00	06/13/22 15:41
NBLS		2061311-06	Drinking Water	06/07/22 00:00	06/13/22 15:41
NBWFFD		2061311-07	Drinking Water	06/07/22 00:00	06/13/22 15:41
NBCS		2061311-08	Drinking Water	06/07/22 00:00	06/13/22 15:41
NB25		2061311-09	Drinking Water	06/07/22 00:00	06/13/22 15:41
NBWF2		2061311-10	Drinking Water	06/07/22 00:00	06/13/22 15:41
NB3S		2061311-11	Drinking Water	06/07/22 00:00	06/13/22 15:41
NB5S		2061311-12	Drinking Water	06/07/22 00:00	06/13/22 15:41
NB7S		2061311-13	Drinking Water	06/07/22 00:00	06/13/22 15:41

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 PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
 06/22/22 15:40

NBC1

2061311-01 (Drinking Water)
Sample Date: 06/07/22

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	75.4		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:40	VVD
Lead	ND		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:40	VVD



Will Brewington, President

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Project: ACPS PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
 06/22/22 15:40

NBC2

2061311-02 (Drinking Water)
Sample Date: 06/07/22

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	78.2		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:42	VVD
Lead	1.50		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:42	VVD

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Will Brewington, President

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Project: ACPS PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
 06/22/22 15:40

NB28S

2061311-03 (Drinking Water)
Sample Date: 06/07/22

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	453		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:43	VVD
Lead	2.03		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:43	VVD



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Project: ACPS PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
 06/22/22 15:40

NB25S

2061311-04 (Drinking Water)
Sample Date: 06/07/22

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	147		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:45	VVD
Lead	ND		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:45	VVD



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Project: ACPS PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
 06/22/22 15:40

NBWFC

2061311-05 (Drinking Water)
Sample Date: 06/07/22

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	148		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:47	VVD
Lead	ND		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:47	VVD

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Project: ACPS PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
06/22/22 15:40

NBLS

2061311-06 (Drinking Water)
Sample Date: 06/07/22

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	99.0		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:52	VVD
Lead	ND		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:52	VVD

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Project: ACPS PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
 06/22/22 15:40

NBWFFD

2061311-07 (Drinking Water)

Sample Date: 06/07/22

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	332		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:53	VVD
Lead	ND		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:53	VVD

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Project: ACPS PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
 06/22/22 15:40

NBCS

2061311-08 (Drinking Water)
Sample Date: 06/07/22

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	171		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:55	VVD
Lead	ND		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:55	VVD

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Project: ACPS PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
 06/22/22 15:40

NB25

2061311-09 (Drinking Water)
Sample Date: 06/07/22

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	327		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:56	VVD
Lead	ND		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:56	VVD



Will Brewington, President

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Project: ACPS PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
 06/22/22 15:40

NBWF2

2061311-10 (Drinking Water)
Sample Date: 06/07/22

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	06/21/22	06/21/22 23:58	VVD
Lead	ND		ug/L	1.00	1.00	1	06/21/22	06/21/22 23:58	VVD



Will Brewington, President

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Project: ACPS PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
 06/22/22 15:40

NB3S

2061311-11 (Drinking Water)
Sample Date: 06/07/22

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	317		ug/L	1.00	1.00	1	06/21/22	06/22/22 00:06	VVD
Lead	ND		ug/L	1.00	1.00	1	06/21/22	06/22/22 00:06	VVD

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Project: ACPS PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
 06/22/22 15:40

NB5S

2061311-12 (Drinking Water)
Sample Date: 06/07/22

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	356		ug/L	1.00	1.00	1	06/14/22	06/18/22 00:27	VVD
Lead	7.90		ug/L	1.00	1.00	1	06/14/22	06/18/22 00:27	VVD

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Project: ACPS PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
 06/22/22 15:40

NB7S

2061311-13 (Drinking Water)
Sample Date: 06/07/22

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	541		ug/L	1.00	1.00	1	06/21/22	06/22/22 00:11	VVD
Lead	ND		ug/L	1.00	1.00	1	06/21/22	06/22/22 00:11	VVD



Will Brewington, President

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Project: ACPS PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
06/22/22 15:40

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 B206261 - 200.2-Digested Metals										
Blank (B206261-BLK1)					Prepared: 06/14/22 Analyzed: 06/16/22					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						
LCS (B206261-BS1)					Prepared: 06/14/22 Analyzed: 06/16/22					
Copper	10.1		1.00	ug/L	10.00		101	80-120		
Lead	9.65		1.00	ug/L	10.00		97	80-120		
Duplicate (B206261-DUP1)			Source: 2060927-01			Prepared: 06/14/22 Analyzed: 06/16/22				
Copper	139	E	1.00	ug/L		131			6	20
Lead	5.66		1.00	ug/L		5.30			6	20
Matrix Spike (B206261-MS1)			Source: 2060927-01			Prepared: 06/14/22 Analyzed: 06/16/22				
Copper	138	E, QM-4X	1.00	ug/L	10.00	131	76	80-120		
Lead	15.3		1.00	ug/L	10.00	5.30	100	80-120		
Batch B206391 - 200.8-No Digestion Metals										
Blank (B206391-BLK1)					Prepared & Analyzed: 06/21/22					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						
Blank (B206391-BLK2)					Prepared: 06/21/22 Analyzed: 06/22/22					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						
Blank (B206391-BLK3)					Prepared: 06/21/22 Analyzed: 06/22/22					
Copper	ND		1.00	ug/L						
Lead	ND		1.00	ug/L						

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Will Brewington, President

Project: ACPS PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
06/22/22 15:40

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 B206391 - 200.8-No Digestion Metals										
LCS (B206391-BS1)					Prepared & Analyzed: 06/21/22					
Copper	9.88		1.00	ug/L	10.00		99	80-120		
Lead	9.94		1.00	ug/L	10.00		99	80-120		
LCS (B206391-BS2)					Prepared: 06/21/22 Analyzed: 06/22/22					
Copper	9.94		1.00	ug/L	10.00		99	80-120		
Lead	9.93		1.00	ug/L	10.00		99	80-120		
LCS (B206391-BS3)					Prepared: 06/21/22 Analyzed: 06/22/22					
Copper	10.1		1.00	ug/L	10.00		101	80-120		
Lead	10.0		1.00	ug/L	10.00		100	80-120		
Duplicate (B206391-DUP1)					Source: 2061311-01		Prepared & Analyzed: 06/21/22			
Copper	74.7		1.00	ug/L		75.4			1	20
Lead	ND		1.00	ug/L		ND				20
Duplicate (B206391-DUP2)					Source: 2061311-11		Prepared: 06/21/22 Analyzed: 06/22/22			
Copper	321		1.00	ug/L		317			1	20
Lead	ND		1.00	ug/L		ND				20
Duplicate (B206391-DUP3)					Source: 2061414-02		Prepared: 06/21/22 Analyzed: 06/22/22			
Copper	4.17		1.00	ug/L		4.22			1	20
Lead	ND		1.00	ug/L		ND				20
Matrix Spike (B206391-MS1)					Source: 2061311-01		Prepared & Analyzed: 06/21/22			
Copper	83.0	QM-4X	1.00	ug/L	10.00	75.4	76	80-120		
Lead	10.5		1.00	ug/L	10.00	ND	105	80-120		
Matrix Spike (B206391-MS2)					Source: 2061311-11		Prepared: 06/21/22 Analyzed: 06/22/22			
Copper	321	QM-4X	1.00	ug/L	10.00	317	42	80-120		
Lead	10.0		1.00	ug/L	10.00	ND	100	80-120		

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Will Brewington, President

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

Project: ACPS PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
 06/22/22 15:40

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
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Batch B206391 - 200.8-No Digestion Metals

Matrix Spike (B206391-MS3)	Source: 2061414-02		Prepared: 06/21/22		Analyzed: 06/22/22		
Copper	13.2	1.00	ug/L	10.00	4.22	90	80-120
Lead	9.34	1.00	ug/L	10.00	ND	93	80-120



Will Brewington, President

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Project: ACPS PERIODIC WATER MONITORING-NAOMI BRC

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

Reported:
06/22/22 15:40

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 accreditation



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

Company Name: ECS Mid-Atlantic		Project Manager: Lauren Kesslak						Analysis Requested										CHAIN-OF-CUSTODY RECORD											
Project Name: ACPS Periodic Water Monitoring – Naomi Brooks		Project ID: 47: 11652-E						No. of Containers	Lead in Drinking Water	Copper in Drinking Water										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): Maria Reynozo		P.O. Number:																		Matrix Codes: NW (non-potable water), DW (drinking water)									
Field Sample ID	Date	Time	DW	Water	Soil	Other	Preservative													Field Notes	MSS Lab ID								
NBC1	6/7/22		X					X	X												2061311-01 A								
NBC2	6/7/22		X					X	X													- 0 2							
NB28S	6/7/22		X					X	X													- 0 3							
NB25S	6/7/22		X					X	X													- 0 4							
NBWFC	6/7/22		X					X	X													- 0 5							
NBLS	6/7/22		X					X	X													- 0 6							
NBWFFD	6/7/22		X					X	X													- 0 7							
NBCS	6/7/22		X					X	X													- 0 8							
NB25	6/7/22		X					X	X													- 0 9							
NBWF2	6/7/22		X					X	X													- 1 0							
NB3S	6/7/22		X					X	X													- 1 1							
NB5S	6/7/22		X					X	X													- 1 2							
NB7S	6/7/22		X					X	X													- 1 3							

Relinquished by: (Signature)		Date/Time	Received by: (Signature)		Date/Time	Received by: (Signature)	
(Printed) Maria Reynozo		6/9/2022	(Printed)			(Printed)	
Relinquished by: (Signature)		Date/Time	Received by Lab: (Signature)		Turn Around Time:		Lab Use:
<i>Maria Reynozo</i>		6/13/22	<i>[Signature]</i>		<input type="checkbox"/> Normal (7 day) <input type="checkbox"/> 5 day <input type="checkbox"/> 4 day <input type="checkbox"/> 3 day <input type="checkbox"/> Rush (2 day) <input type="checkbox"/> Next Day <input type="checkbox"/> Other: _____ <input type="checkbox"/> Specific Due Date: _____		Temp: _____°C <input type="checkbox"/> Received on Ice <input type="checkbox"/> Received same day
(Printed)		15:41	(Printed) Lorita Oster				24.0
Delivery Method:		Special Instructions/QC Requirements & Comments:			Sample Disposal:		
<input checked="" type="checkbox"/> Courier <input type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> USPS <input type="checkbox"/> Other: _____		Lead in Drinking Water Analysis for each sample on attached pages			<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by lab <input type="checkbox"/> Archive for _____ days		

Appendix IV: Logo Graphics



1 - ECS Logo Flat color 300dpi