# ROWING FACILITY LEAD IN DRINKING WATER SAMPLING AUGUST 2024

ROWING FACILITY

1 MADISON STREET
ALEXANDRIA, VIRGINIA 22301

ECS PROJECT NO. 47:11652-E

FOR: ALEXANDRIA CITY PUBLIC SCHOOLS

OCTOBER 7, 2024

October 7, 2024

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: Rowing Facility Lead in Drinking Water Sampling August 2024, Rowing Facility, 1 Madison Street, Alexandria, Virginia

Dear Mr. Contreras:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide Alexandria City Public Schools with the results of the lead in drinking water sampling performed at the Rowing Facility located at 1 Madison Street 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
Senior Project Manager
LKesslak@ecslimited.com
703-471-8400

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

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## TABLE OF APPENDICES

## 1.0 PROJECT DESCRIPTION

The Rowing Facility is a two-story mixed-use building located at 1 Madison Street in Alexandria, Virginia. The building is currently occupied, and is used by Alexandria City Public Schools as a recreational facility. The site is located within the City of Alexandria and is under the jurisdiction of 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 to perform 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 EPA Safe Drinking Water Act (SDWA). US EPA established a lead action level of 15 ppb (parts per billion) or 15 micrograms per liter (µg/L) and an action level of 1300 µg/L for copper.

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 µg/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 lead and copper rule (LCR). The results of this water sampling event were 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 and were flushed by APS at the time they were taken out of service. For this sampling event, 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. Only four (4) samples were collected from the Rowing Facility as only four accessible potable water sources were present at the time of the sampling event within the building.

## 4.0 RESULTS

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

### 4.1 Lead in Drinking Water

The samples collected did not exceed the Commonwealth of Virginia action level of 10 µg/L. In total, four (4) 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 µg/L (PPB) for easy reference. 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 samples collected were reported to have concentrations above the EPA and VA action level of 1300 µg/L. In total, four (4) 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 µg/L (PPB) for easy reference. 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 Rowing Facility Lead in Drinking Water Sampling August 2024, 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.

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- 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.

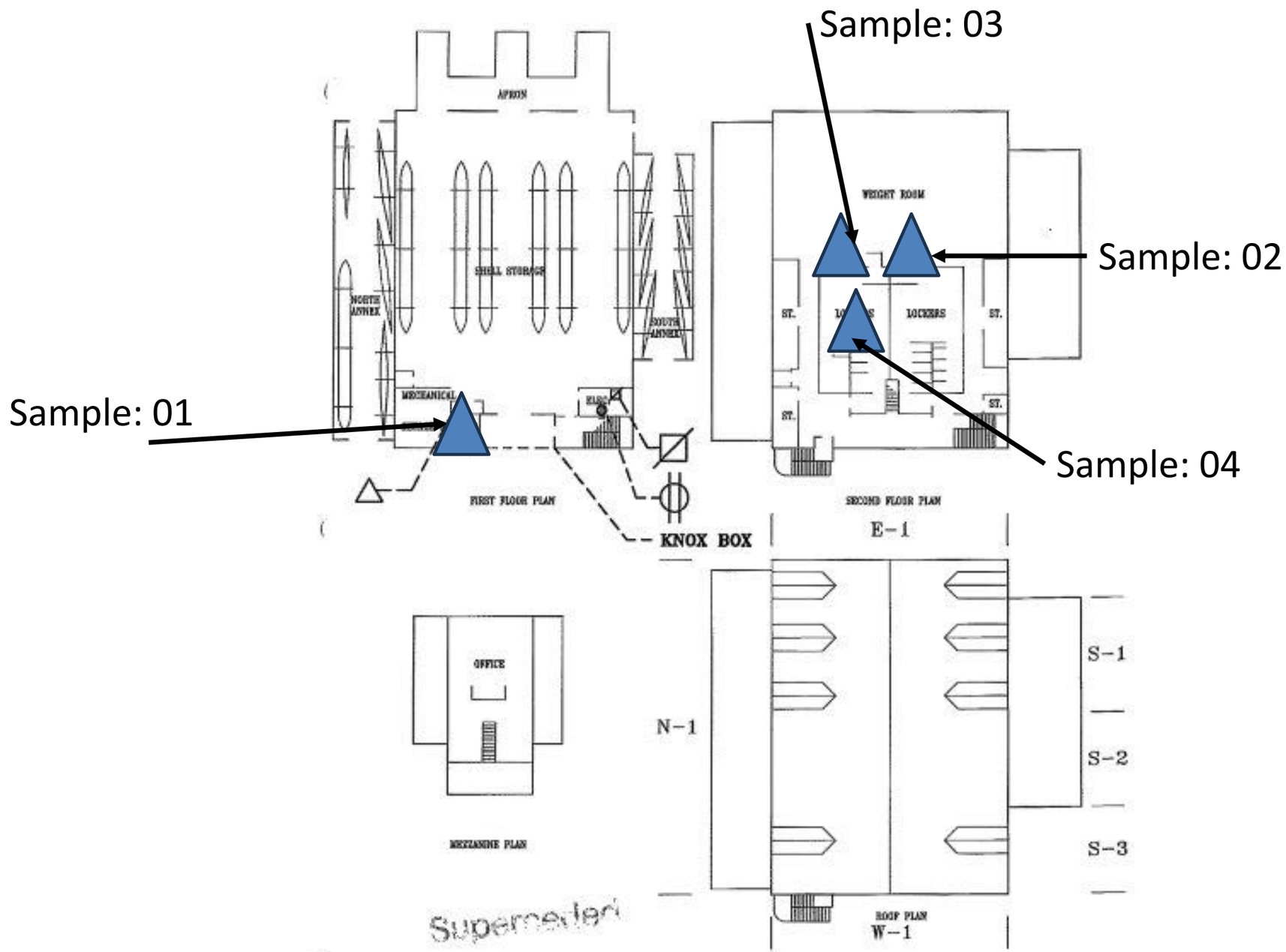
## 6.0 LIMITATIONS

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




Sample Locations

, Dee Campbell Rowing Center
1 Madison St,
Alexandria, VA 22301

**Water Sample Location Sketch**

Scale: NTS

Project No.
47:11652-E

Site Visit:
8/1/24

# Appendix II: Sample Table

| Copper and Lead Drinking Water Results Table | | |
|---|---|---|
| **Sample Number** | **Copper Result (µg/L)** | **Lead Result (µg/L)** |
| 4081527-01 | 112 | ND |
| 4081527-02 | 328 | ND |
| 4081527-03 | 393 | ND |
| 4081527-04 | 161 | 1.43 |
| The EPA's Lead and Copper Rule set an action level of 15 µg/L for lead and an action level of 1300 µg/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 µg/L of Lead (Pb). | | |

Table Notes:
Red = Above the EPA Action Level
Orange = Exceeds VA Action Level for Lead ND= None 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**

26 August 2024

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

Enclosed are the results of analyses for samples received by the laboratory on 08/15/24 14:30.

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- Rowing Facility

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

**Reported:**
08/26/24 11:11

| Client Sample ID | Alternate Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|---|
| 1 | | 4081527-01 | Drinking Water | 08/01/24 05:30 | 08/15/24 14:30 |
| 2 | | 4081527-02 | Drinking Water | 08/01/24 05:32 | 08/15/24 14:30 |
| 3 | | 4081527-03 | Drinking Water | 08/01/24 05:36 | 08/15/24 14:30 |
| 4 | | 4081527-04 | Drinking Water | 08/01/24 05:40 | 08/15/24 14:30 |

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.*

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**

## Project: ACPS- Rowing Facility

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

**Reported:**
08/26/24 11:11

**1**

**4081527-01 (Drinking Water)**
**Sampled on: 08/01/24 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** | **112** | | ug/L | 1.00 | 1.00 | 1 | 08/21/24 | 08/21/24 13:03 | AWH |
| Lead | ND | | ug/L | 1.00 | 1.00 | 1 | 08/21/24 | 08/21/24 13:03 | 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

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**Baltimore MD 21227**
**410-247-7600**
**www.mdspectral.com**
**MD DW LabID 153**

**Project: ACPS- Rowing Facility**

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

**Reported:**
08/26/24 11:11

**2**

**4081527-02 (Drinking Water)**
**Sampled on: 08/01/24 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** | **328** | | ug/L | 1.00 | 1.00 | 1 | 08/21/24 | 08/21/24 13:05 | AWH |
| Lead | ND | | ug/L | 1.00 | 1.00 | 1 | 08/21/24 | 08/21/24 13:05 | AWH |

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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- Rowing Facility**

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

**Reported:**
08/26/24 11:11

**3**

**4081527-03 (Drinking Water)**
**Sampled on: 08/01/24 05:36**

| 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** | **393** | | ug/L | 1.00 | 1.00 | 1 | 08/21/24 | 08/21/24 13:08 | AWH |
| Lead | ND | | ug/L | 1.00 | 1.00 | 1 | 08/21/24 | 08/21/24 13:08 | AWH |

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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- Rowing Facility**

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

**Reported:**
08/26/24 11:11

**4**

**4081527-04 (Drinking Water)**
**Sampled on: 08/01/24 05:40**

| 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** | **161** | | ug/L | 1.00 | 1.00 | 1 | 08/21/24 | 08/21/24 13:10 | AWH |
| **Lead** | **1.43** | | ug/L | 1.00 | 1.00 | 1 | 08/21/24 | 08/21/24 13:10 | AWH |

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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- Rowing Facility

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

**Reported:**
08/26/24 11:11

### 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 B408566 - 200.8-No Digestion Metals** | | | | | | | | | | |
| **Blank (B408566-BLK1)** | | | | | Prepared & Analyzed: 08/21/24 | | | | | |
| Copper | ND | | 1.00 | ug/L | | | | | | |
| Lead | ND | | 1.00 | ug/L | | | | | | |
| **Blank (B408566-BLK2)** | | | | | Prepared & Analyzed: 08/21/24 | | | | | |
| Copper | ND | | 1.00 | ug/L | | | | | | |
| Lead | ND | | 1.00 | ug/L | | | | | | |
| **LCS (B408566-BS1)** | | | | | Prepared & Analyzed: 08/21/24 | | | | | |
| Copper | 9.27 | | 1.00 | ug/L | 10.00 | | 93 | 85-115 | | |
| Lead | 9.24 | | 1.00 | ug/L | 10.00 | | 92 | 85-115 | | |
| **LCS (B408566-BS2)** | | | | | Prepared & Analyzed: 08/21/24 | | | | | |
| Copper | 8.88 | | 1.00 | ug/L | 10.00 | | 89 | 85-115 | | |
| Lead | 8.95 | | 1.00 | ug/L | 10.00 | | 90 | 85-115 | | |
| **Duplicate (B408566-DUP1)** | | **Source: 4081527-01** | | | Prepared & Analyzed: 08/21/24 | | | | | |
| Copper | 103 | | 1.00 | ug/L | | 112 | | | 9 | 20 |
| Lead | ND | | 1.00 | ug/L | | ND | | | | 20 |
| **Duplicate (B408566-DUP2)** | | **Source: 4081529-01** | | | Prepared & Analyzed: 08/21/24 | | | | | |
| Copper | 330 | | 1.00 | ug/L | | 342 | | | 4 | 20 |
| Lead | ND | | 1.00 | ug/L | | ND | | | | 20 |
| **Matrix Spike (B408566-MS1)** | | **Source: 4081527-01** | | | Prepared & Analyzed: 08/21/24 | | | | | |
| Copper | 111 | QM-4X | 1.00 | ug/L | 10.00 | 112 | NR | 70-130 | | |
| Lead | 10.1 | | 1.00 | ug/L | 10.00 | ND | 101 | 70-130 | | |
| **Matrix Spike (B408566-MS2)** | | **Source: 4081529-01** | | | Prepared & Analyzed: 08/21/24 | | | | | |
| Copper | 337 | QM-4X | 1.00 | ug/L | 10.00 | 342 | NR | 70-130 | | |
| Lead | 9.29 | | 1.00 | ug/L | 10.00 | ND | 93 | 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- Rowing Facility**

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

**Reported:**
08/26/24 11:11

## 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. |
| 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:Lauren Kesslak |
|---|---|
| Project Name:47:1165-E ACPS Various Schools Testing 2023-2024- Rowing Facility | Project ID: 47:1165-E Rowing Facility |
| Sampler(s):Zach Harrell | P.O. Number:47:1165-E |
| State of Origin:VA | |

**Analysis Requested**

**CHAIN-OF-CUSTODY RECORD**

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

Matrix Codes: NPW - non-potable water; DW - drinking water

| Field Sample ID: | Date | Time | DW | NPW | Soil | Other | Grab | Composite | # of containers | eservati | Field Notes | MSS Lab ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8/1/2024 | 5:30 | | | | | | | | | 1st Floor Bubbler | 4081527-01 |
| 2 | 8/1/2024 | 5:32 | | | | | | | | | 2nd Floor Girls Bottle Fill | -02 |
| 3 | 8/1/2024 | 5:36 | | | | | | | | | 2nd Floor Boys Bottle Fill | -03 |
| 4 | 8/1/2024 | 5:40 | | | | | | | | | 2nd Floor Boys Sink | -04 |

| Relinquished by: *(Signature)* | Date /Time | Relinquished by: *(Signature)* |
|---|---|---|
| *(Printed)* | | *(Printed)* |
| Relinquished by: *(Signature)* | Date /Time | Received by lab: *(Signature)* |
| *(Printed)* | 8/15/24 14:30 | *(Printed)* Rachel Horner |

Please indicate if any of the following certifications are required:
- ☐ Virginia VELAP
- ☐ Pennsylvania NEL
- ☐ 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: 23.0 °C
- ☐ Received on Ice
- ☐ Received Same Day
- ☑ T-41 ☐ T-45

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

Special Instructions / QC Requirements & Comments: