

CERTIFICATE OF ANALYSIS

Chain of Custody: 630808
Client: Howard County Public School System
Address: 10910 Route 108
Ellicott City, MD 21042
Attention: Jeff Klenk

Job Name: Bryant Woods Elementary School
Job Location: 5450 Blue Heron Lane, Columbia, MD
21044
Job Number: 13.079
P.O. Number: Not Provided

Date Submitted: 11/12/2021
Date Analyzed: 11/19/2021
Report Date: 11/19/2021
Date Sampled: 11/02/2021 - 11/03/2021
Person Submitting: Jeff Klenk

Summary of Drinking Water Analysis for Metals

| AMA Sample Number | Client Sample Number | Sample Collection Information | | Analysis Type | Sample Analyte | Reporting Limit | Final Result | Comments |
|-------------------|-------------------------|-------------------------------|---|---------------|----------------|-----------------|--------------|--|
| | | Date/Time | Location | | | | | |
| 630808-1 | 1: BWES 2 First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-2 | 2: BWES 4 First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-3 | 3: BWES 5 First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-4 | 4: BWES 6F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-5 | 5: BWES 7F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | 6 ug/L | 6.1 ug/L. This results meets or exceeds the 5.5ppb action level as established by MDE for schools. |
| 630808-6 | 6: BWES 8F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-7 | 7: BWES 9F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-8 | 8: BWES 10F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-9 | 9: BWES 11F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-10 | 10: BWES 12F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-11 | 11: BWES 13F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-12 | 12: BWES 14F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-13 | 13: BWES 15F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |



CERTIFICATE OF ANALYSIS

Chain of Custody: 630808
Client: Howard County Public School System
Address: 10910 Route 108
Ellicott City, MD 21042
Attention: Jeff Klenk

Job Name: Bryant Woods Elementary School
Job Location: 5450 Blue Heron Lane, Columbia, MD
21044
Job Number: 13.079
P.O. Number: Not Provided

Date Submitted: 11/12/2021
Date Analyzed: 11/19/2021
Report Date: 11/19/2021
Date Sampled: 11/02/2021 - 11/03/2021
Person Submitting: Jeff Klenk

Summary of Drinking Water Analysis for Metals

| AMA Sample Number | Client Sample Number | Sample Collection Information | | Analysis Type | Sample Analyte | Reporting Limit | Final Result | Comments |
|-------------------|-------------------------|-------------------------------|---|---------------|----------------|-----------------|--------------|----------|
| | | Date/Time | Location | | | | | |
| 630808-14 | 14: BWES 16 First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-15 | 15: BWES 17 First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-16 | 16: BWES 18 First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-17 | 17: BWES 19 First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-18 | 18: BWES 20F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-19 | 19: BWES 21F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-20 | 20: BWES 24F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-21 | 21: BWES 25F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-22 | 22: BWES 26F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-23 | 23: BWES 27 First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-24 | 24: BWES 28 First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-25 | 25: BWES 29F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-26 | 26: BWES 30F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-27 | 27: BWES 31F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubblers, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |



CERTIFICATE OF ANALYSIS

Chain of Custody: 630808
Client: Howard County Public School System
Address: 10910 Route 108
Ellicott City, MD 21042
Attention: Jeff Klenk

Job Name: Bryant Woods Elementary School
Job Location: 5450 Blue Heron Lane, Columbia, MD
21044
Job Number: 13.079
P.O. Number: Not Provided

Date Submitted: 11/12/2021
Date Analyzed: 11/19/2021
Report Date: 11/19/2021
Date Sampled: 11/02/2021 - 11/03/2021
Person Submitting: Jeff Klenk

Summary of Drinking Water Analysis for Metals

| AMA Sample Number | Client Sample Number | Sample Collection Information | | Analysis Type | Sample Analyte | Reporting Limit | Final Result | Comments |
|-------------------|-------------------------|-------------------------------|---|---------------|----------------|-----------------|--------------|----------|
| | | Date/Time | Location | | | | | |
| 630808-28 | 28: BWES 32F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubbler, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-29 | 29: BWES 34F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubbler, | Furnace AA | Lead | 1 ug/L | 1.6 ug/L | |
| 630808-30 | 30: BWES 35 First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-31 | 31: BWES 36 First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-32 | 32: BWES 37F First Draw | 11/02/2021 5:07 am | Drinking Water Fountain - Bubblers Style, Consumption, Classroom, , Bubbler, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-33 | 33: BWES 1 First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Kitchen, , Sink, | Furnace AA | Lead | 1 ug/L | 1.2 ug/L | |
| 630808-34 | 34: BWES 2BW First Draw | 11/03/2021 5:30 am | Bottle Refill Dispenser/Water Refill Station, Consumption, Hallway, , Fill Station, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-35 | 35: BWES 3 First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Teachers' Lounge/Break Room, , Sink, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-36 | 36: BWES 6S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | 2 ug/L | 2.0 ug/L |
| 630808-37 | 37: BWES 7S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-38 | 38: BWES 8S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-39 | 39: BWES 9S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-40 | 40: BWES 10S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-41 | 41: BWES 11S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |



CERTIFICATE OF ANALYSIS

Chain of Custody: 630808
Client: Howard County Public School System
Address: 10910 Route 108
Ellicott City, MD 21042
Attention: Jeff Klenk

Job Name: Bryant Woods Elementary School
Job Location: 5450 Blue Heron Lane, Columbia, MD
21044
Job Number: 13.079
P.O. Number: Not Provided

Date Submitted: 11/12/2021
Date Analyzed: 11/19/2021
Report Date: 11/19/2021
Date Sampled: 11/02/2021 - 11/03/2021
Person Submitting: Jeff Klenk

Summary of Drinking Water Analysis for Metals

| AMA Sample Number | Client Sample Number | Sample Collection Information | | Analysis Type | Sample Analyte | Reporting Limit | Final Result | Comments |
|-------------------|-------------------------|-------------------------------|--|---------------|----------------|-----------------|--------------|----------|
| | | Date/Time | Location | | | | | |
| 630808-42 | 42: BWES 12S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-43 | 43: BWES 13S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-44 | 44: BWES 14S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-45 | 45: BWES 15S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-46 | 46: BWES 20S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-47 | 47: BWES 21S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-48 | 48: BWES 24S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | 2.1 ug/L | |
| 630808-49 | 49: BWES 25S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | 1.8 ug/L | |
| 630808-50 | 50: BWES 26S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | 1.3 ug/L | |
| 630808-51 | 51: BWES 29S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-52 | 52: BWES 30S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-53 | 53: BWES 31S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-54 | 54: BWES 32S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | 1.9 ug/L | |
| 630808-55 | 55: BWES 33 First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Nurse's Office/Health Room, , Sink, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |



CERTIFICATE OF ANALYSIS

Chain of Custody: 630808
Client: Howard County Public School System
Address: 10910 Route 108
Ellicott City, MD 21042
Attention: Jeff Klenk

Job Name: Bryant Woods Elementary School
Job Location: 5450 Blue Heron Lane, Columbia, MD
21044
Job Number: 13.079
P.O. Number: Not Provided

Date Submitted: 11/12/2021
Date Analyzed: 11/19/2021
Report Date: 11/19/2021
Date Sampled: 11/02/2021 - 11/03/2021
Person Submitting: Jeff Klenk

Summary of Drinking Water Analysis for Metals

| AMA Sample Number | Client Sample Number | Sample Collection Information | | Analysis Type | Sample Analyte | Reporting Limit | Final Result | Comments |
|-------------------|--------------------------|-------------------------------|---|---------------|----------------|-----------------|--------------|----------|
| | | Date/Time | Location | | | | | |
| 630808-56 | 56: BWES 34S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | 2.1 ug/L | |
| 630808-57 | 57: BWES 35BW First Draw | 11/03/2021 5:30 am | Bottle Refill Dispenser/Water Refill Station, Consumption, Hallway, , Fill Station, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |
| 630808-58 | 58: BWES 37S First Draw | 11/03/2021 5:30 am | Faucet, Cold, Consumption, Classroom, , Sink, | Furnace AA | Lead | 1 ug/L | < 1 ug/L | |

Analysis Methods: Flame AA: APHA SM3111B (1999, 22nd Ed.), Furnace AA: APHA SM3113B (2010, 22nd Ed.), ICP: EPA 200.8 (Rev. 5.4)

Sample Collector: Jeff Klenk
Certification:

mg/L = Parts Per Million (ppm), N/A = Not Applicable, µg/L = Parts Per Billion, N/P = Not Provided

All results are to be considered preliminary and subject to change unless signed by the Technical Director or Deputy.

Analyst(s): Nida McGarvey

Technical Director George Land

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these Laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, locations, and collection protocols are based upon the information provided by the persons submitting them and, unless collected by personnel of these Laboratories, we expressly disclaim any knowledge and liability for the accuracy and completeness of this information. Residual sample material will be discarded in accordance with the appropriate regulatory guidelines, unless otherwise requested by the client. This report must not be used to claim, and does not imply product certification, approval, or endorsement by NY ELAP, AIHA-LAP, or any agency of the Federal Government. All rights reserved. AMA Analytical Services, Inc.