



# CERTIFICATE OF ANALYSIS

**Chain of Custody:** 645051  
**Client:** Howard County Public School System  
**Address:** 10910 Route 108  
Ellicott City, MD 21042  
**Attention:** Jeff Klenk

**Job Name:** River Hill High School  
**Job Location:** 12101 Clarksville Pike, Clarksville, MD  
21029  
**Job Number:** 13.053  
**P.O. Number:** Not Provided

**Date Submitted:** 03/30/2023  
**Date Analyzed:** 04/14/2023  
**Report Date:** 04/17/2023  
**Date Sampled:** 03/21/2023 & 3/22 and 29, 2023  
**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					
645051-1	RHHS 1 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Staff Workroom, , Sink, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	2.8 ug/L	
645051-2	RHHS 2 First-Draw	03/21/2023 5:20 am	Bottle Filler/Drinking Fountain Combo Unit - Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	1.3 ug/L	
645051-3	RHHS 2BW First-Draw	03/22/2023 6:12 am	Bottle Filler/Drinking Fountain Combo Unit - Bottle Filler, Consumption, Hallway, , Bottler Filler, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-4	RHHS 3 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Teachers' Lounge/Break Room, , Sink, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	2.2 ug/L	
645051-5	RHHS 4 Flush	03/22/2023 6:12 am	Faucet, Cold, Consumption, Kitchen, , Sink, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-6	RHHS 5 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Kitchen, , Sink, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	3.5 ug/L	
645051-7	RHHS 6 Flush	03/22/2023 6:12 am	Commercial Kitchen Kettle, Cold (i.e., faucet leading into kettle), Consumption, Kitchen, , Kettle, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-8	RHHS 7 First-Draw	03/21/2023 5:20 am	Ice Machine (Stand Alone), Consumption, Kitchen, , Ice Maker, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-9	RHHS 8 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Kitchen, , Sink, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	0.66 ug/L	
645051-10	RHHS 9 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-11	RHHS 10 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-12	RHHS 11 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-13	RHHS 15 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-14	RHHS 16 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Teachers' Lounge/Break Room, , Sink, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	2.1 ug/L	



# CERTIFICATE OF ANALYSIS

**Chain of Custody:** 645051  
**Client:** Howard County Public School System  
**Address:** 10910 Route 108  
Ellicott City, MD 21042  
**Attention:** Jeff Klenk

**Job Name:** River Hill High School  
**Job Location:** 12101 Clarksville Pike, Clarksville, MD  
21029  
**Job Number:** 13.053  
**P.O. Number:** Not Provided

**Date Submitted:** 03/30/2023  
**Date Analyzed:** 04/14/2023  
**Report Date:** 04/17/2023  
**Date Sampled:** 03/21/2023  
**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					
645051-15	RHHS 17F First-Draw	03/21/2023 5:20 am	Combination Sink - Fountain - Bubbler Style (Non-Refrigerated), Consumption, Classroom, , Fountain, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	6.4 ug/L	6.4 ug/L. This result exceeds the Maryland action level of 5.5 ppb for lead in drinking water.
645051-16	RHHS 18 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-17	RHHS 19 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-18	RHHS 21 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Media Center, , Sink, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	5.8 ug/L	5.8 ug/L. This result exceeds the Maryland action level of 5.5 ppb for lead in drinking water.
645051-19	RHHS 22 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-20	RHHS 23 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-21	RHHS 25 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Nurse's Office/Health Room, , Sink, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	2.9 ug/L	
645051-22	RHHS 26 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Teachers' Lounge/Break Room, , Sink, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	4.2 ug/L	
645051-23	RHHS 27 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	



# CERTIFICATE OF ANALYSIS

**Chain of Custody:** 645051  
**Client:** Howard County Public School System  
**Address:** 10910 Route 108  
Ellicott City, MD 21042  
**Attention:** Jeff Klenk

**Job Name:** River Hill High School  
**Job Location:** 12101 Clarksville Pike, Clarksville, MD  
21029  
**Job Number:** 13.053  
**P.O. Number:** Not Provided

**Date Submitted:** 03/30/2023  
**Date Analyzed:** 04/14/2023  
**Report Date:** 04/17/2023  
**Date Sampled:** 03/21/2023  
**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					
645051-24	RHHS 28 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-25	RHHS 29 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Classroom, , Fountain, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	0.69 ug/L	
645051-26	RHHS 30 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Classroom, , Fountain, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-27	RHHS 31 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Teachers' Lounge/Break Room, , Sink, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	3 ug/L	3.0 ug/L
645051-28	RHHS 34 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Concessions, , Sink, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-29	RHHS 35 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, 1st Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-30	RHHS 36 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Locker Room, , Fountain, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-31	RHHS 37 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Locker Room, , Fountain, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	0.8 ug/L	0.81 ug/L
645051-32	RHHS 38 First-Draw	03/21/2023 5:20 am	Ice Machine (Stand Alone), Consumption, Weight/Training/Fitness Room, , Ice Maker, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-33	RHHS 39 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-34	RHHS 40 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-35	RHHS 41 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-36	RHHS 43 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Teachers' Lounge/Break Room, , Sink, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	0.96 ug/L	
645051-37	RHHS 44 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	



# CERTIFICATE OF ANALYSIS

**Chain of Custody:** 645051  
**Client:** Howard County Public School System  
**Address:** 10910 Route 108  
Ellicott City, MD 21042  
**Attention:** Jeff Klenk

**Job Name:** River Hill High School  
**Job Location:** 12101 Clarksville Pike, Clarksville, MD  
21029  
**Job Number:** 13.053  
**P.O. Number:** Not Provided

**Date Submitted:** 03/30/2023  
**Date Analyzed:** 04/14/2023  
**Report Date:** 04/17/2023  
**Date Sampled:** 03/21/2023  
**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					
645051-38	RHHS 45 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	36 ug/L	36.0 ug/L. This result exceeds the Maryland action level of 5.5 ppb for lead in drinking water.
645051-39	RHHS 49 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Classroom (Home Economics), , Sink, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	0.94 ug/L	
645051-40	RHHS 50 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Classroom (Home Economics), , Sink, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	1.1 ug/L	
645051-41	RHHS 51 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Classroom (Home Economics), , Sink, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-42	RHHS 52 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Classroom (Home Economics), , Sink, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	3.9 ug/L	
645051-43	RHHS 53 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Classroom (Home Economics), , Sink, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-44	RHHS 54 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Classroom (Home Economics), , Sink, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	2 ug/L	2.0 ug/L
645051-45	RHHS 55 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Classroom (Home Economics), , Sink, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	1.4 ug/L	
645051-46	RHHS 56 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Classroom (Home Economics), , Sink, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	2 ug/L	2.0 ug/L
645051-47	RHHS 58 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-48	RHHS 59 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Teachers' Lounge/Break Room, , Sink, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	0.58 ug/L	



# CERTIFICATE OF ANALYSIS

**Chain of Custody:** 645051  
**Client:** Howard County Public School System  
**Address:** 10910 Route 108  
Ellicott City, MD 21042  
**Attention:** Jeff Klenk

**Job Name:** River Hill High School  
**Job Location:** 12101 Clarksville Pike, Clarksville, MD  
21029  
**Job Number:** 13.053  
**P.O. Number:** Not Provided

**Date Submitted:** 03/30/2023  
**Date Analyzed:** 04/14/2023  
**Report Date:** 04/17/2023  
**Date Sampled:** 03/21/2023  
**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					
645051-49	RHHS 60 First-Draw	03/21/2023 5:20 am	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated), Consumption, Hallway, , Fountain, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	0.61 ug/L	
645051-50	RHHS 61 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Concessions, , Sink, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	0.99 ug/L	
645051-51	RHHS 62L First-Draw	03/22/2023 6:12 am	Spigot (with threadings for hose connection), Consumption, Outdoors, , Hose Bib, Stadium,	ICP	Lead	0.5 ug/L	2.1 ug/L	
645051-52	RHHS 62R First-Draw	03/22/2023 6:12 am	Spigot (with threadings for hose connection), Consumption, Outdoors, , Hose Bib, Stadium,	ICP	Lead	0.5 ug/L	3.8 ug/L	
645051-53	RHHS 63 First-Draw	03/29/2023 6:50 am	Spigot (with threadings for hose connection), Consumption, Outdoors, , Hose Bib, Main Bldg,	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
645051-54	RHHS 64 First-Draw	03/21/2023 5:20 am	Spigot (with threadings for hose connection), Consumption, Storage Room/Area, , Hose Bib, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	3.7 ug/L	
645051-55	RHHS 66 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Teachers' Lounge/Break Room, , Sink, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	1.1 ug/L	
645051-56	RHHS 67 First-Draw	03/21/2023 5:20 am	Faucet, Cold, Consumption, Classroom, , Sink, Main Bldg, Ground Floor	ICP	Lead	0.5 ug/L	3.7 ug/L	



# CERTIFICATE OF ANALYSIS

**Chain of Custody:** 645051  
**Client:** Howard County Public School System  
**Address:** 10910 Route 108  
 Ellicott City, MD 21042  
**Attention:** Jeff Klenk

**Job Name:** River Hill High School  
**Job Location:** 12101 Clarksville Pike, Clarksville, MD  
 21029  
**Job Number:** 13.053  
**P.O. Number:** Not Provided

**Date Submitted:** 03/30/2023  
**Date Analyzed:** 04/14/2023  
**Report Date:** 04/17/2023  
**Date Sampled:** 03/21/2023  
**Person Submitting:** Jeff Klenk

## Summary of Drinking Water Analysis for Metals

AMA Sample Number	Client Sample Number	Date/Time	Location	Sample Collection Information	Analysis Type	Sample Analyte	Reporting Limit	Final Result	Comments
-------------------	----------------------	-----------	----------	-------------------------------	---------------	----------------	-----------------	--------------	----------

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

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

**Analyst(s):** Jean-Paul Littleton

**Sample Collector:** Jeff Klenk & Aruna Bandaranayake  
**Certification:**

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

**Technical Director** Jean-Paul Littleton

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.