



CERTIFICATE OF ANALYSIS

Chain of Custody: 631462
Client: Howard County Public School System
Address: 10910 Route 108
Ellicott City, MD 21042
Attention: Jeff Klenk

Job Name: Patuxent Valley Middle School
Job Location: 9151 Vollmerhausen Road, Savage,
MD 20763
Job Number: 13.041
P.O. Number: Not Provided

Date Submitted: 12/10/2021
Date Analyzed: 12/16/2021
Report Date: 12/17/2021
Date Sampled: 12/09/2021 - 12/10/2021
Person Submitting: Jeff Klenk

Summary of Drinking Water Analysis for Metals

AMA Sample Number	Client Sample Number	Date/Time	Sample Collection Information Location	Analysis Type	Sample Analyte	Reporting Limit	Final Result	Comments
631462-1	PVMS 18BW First-Draw	12/09/2021 6:40 am	Bottle Refill Dispenser/Water Refill Station, Consumption, Hallway, , Bottle Filler, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-2	PVMS 25F First-Draw	12/09/2021 6:40 am	Drinking Water Fountain - Bubbler Style, Consumption, Classroom, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-3	PVMS 30F First-Draw	12/09/2021 6:40 am	Drinking Water Fountain - Bubbler Style, Consumption, Classroom, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-4	PVMS 39F First-Draw	12/09/2021 6:40 am	Drinking Water Fountain - Bubbler Style, Consumption, Office, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-5	PVMS 1 First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Kitchen, , Sink, ,	Furnace AA	Lead	1 ug/L	8.6 ug/L	This results meets or exceeds the 5.5ppb action level as established by MDE for schools.
631462-6	PVMS 2 First-Draw	12/10/2021 5:30 am	Ice Machine, Consumption, Kitchen, , Ice Machine, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-7	PVMS 3 First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Kitchen, , Sink, ,	Furnace AA	Lead	1 ug/L	2.6 ug/L	
631462-8	PVMS 4 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Cafeteria, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-9	PVMS 5 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Cafeteria, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-10	PVMS 6 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Cafeteria, , Fountain, ,	Furnace AA	Lead	1 ug/L	1 ug/L	1.0 ug/L
631462-11	PVMS 7 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Cafeteria, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-12	PVMS 8 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Cafeteria, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-13	PVMS 9 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Cafeteria, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	



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631462-14	PVMS 10 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-15	PVMS 11 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-16	PVMS 12 First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Teachers' Lounge/Break Room, , Sink, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-17	PVMS 13 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Locker Room, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-18	PVMS 14 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Locker Room, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-19	PVMS 15 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-20	PVMS 16 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-21	PVMS 17 First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Classroom, , Sink, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-22	PVMS 18 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-23	PVMS 19 First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Classroom (Home Economics), , Sink, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-24	PVMS 20 First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Classroom (Home Economics), , Sink, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-25	PVMS 21 First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Classroom (Home Economics), , Sink, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-26	PVMS 22 First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Classroom (Home Economics), , Sink, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-27	PVMS 23 First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Classroom (Home Economics), , Sink, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	



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631462-28	PVMS 24 First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Classroom (Home Economics), , Sink, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-29	PVMS 25S First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Classroom, , Sink, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-30	PVMS 26 First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Classroom, , Sink, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-31	PVMS 27 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-32	PVMS 28 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-33	PVMS 29 First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Classroom, , Sink, ,	Furnace AA	Lead	1 ug/L	3.4 ug/L	
631462-34	PVMS 30S First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Nurse's Office/Health Room, , Sink, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-35	PVMS 31 First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Workroom, , Sink, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-36	PVMS 32 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-37	PVMS 33 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, ,	Furnace AA	Lead	1 ug/L	1.3 ug/L	
631462-38	PVMS 35 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-39	PVMS 36 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-40	PVMS 37 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-41	PVMS 38 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	



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631462-42	PVMS 39S First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Office, , Sink, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-43	PVMS40 First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Office, , Sink, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-44	PVMS 42 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-45	PVMS 43 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Hallway, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-46	PVMS 44 First-Draw	12/10/2021 5:30 am	Faucet, Cold, Consumption, Nurse's Office/Health Room, , Sink, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-47	PVMS 45 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Locker Room, , Fountain, ,	Furnace AA	Lead	1 ug/L	< 1 ug/L	
631462-48	PVMS 46 First-Draw	12/10/2021 5:30 am	Drinking Water Fountain - Cooler/Chiller Style, Consumption, Locker Room, , Fountain, ,	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)

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

Analyst(s): Suphin Chinnapad

Sample Collector: Jeff Klenk

Certification:

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

Technical Director George Land

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