

March 20, 2024

Mike Clevenger Director of Facilities Pleasant Hill School District 318 Cedar Street Pleasant Hill, Missouri 64080

**Project: Limited Lead in Drinking Water Testing** 

Address: 327 North McKissock Street, Pleasant Hill, Missouri 64080

Mr. Mike Clevenger

On February 6, 2024, Bradly Young of Axiom Service Professionals (ASP), conducted lead in drinking water sampling at the above referenced address. Inspector certification is provided in Appendix A. A total of 24 samples were collected from various potential drinking water outlets including sources used for drinking, cooking, or cleaning of cooking and eating utensils throughout the building.

#### **Drinking Water Standards**

The use of lead solder and other lead-containing materials as defined in the EPA Safe Drinking Water Act in connecting household plumbing to public water supplies was prohibited as of 1986. The act established the definition of "lead free" to be less than 8% as a weighted average across wetted surfaces of a pipe, pipe fitting, plumbing fitting, and fixture and 0.2% lead for solder and flux. In 2011, the definition of "lead free" as it applied to wetted surfaces of a pipe, pipe fitting, and plumbing fitting and fixture was reduced from 8% to 0.25% as a weighted average. Many older structures still have lead pipe or lead-soldered plumbing internally, which may substantially increase the lead content of water at the tap. Nationwide regulations controlling the lead content of drinking-water coolers in schools went into effect in 1989.

In 1991, the EPA published the Lead and Copper Rule establishing limits on the amount of lead and copper in drinking water. This regulation can be found under 40 CFR Part 141, Subpart I. Reference: https://www.epa.gov/dwreginfo/lead-and-copper-rule

The EPA has set lead in drinking water standards as outlined below.

• For lead, the maximum contaminant level goal (MCLG) is zero. This is the levels determined to be safe by toxicological and biomedical considerations, independent of feasibility. EPA's National Primary Drinking Water Regulations for Lead establish a treatment level of **0.015 mg/L** or **15 ppb** (parts per billion) in municipal drinking water systems.

The Missouri Senate Bill 681 "Get the Lead Out of School Drinking Water Act", passed in 2022, has set the standard summarized below.

Reference: https://www.senate.mo.gov/22info/BTS Web/Bill.aspx?SessionType=R&BillID=71259862

- On or before January 1, 2024, each school shall conduct an inventory of all drinking water outlets and all outlets that are used for dispensing water for cooking or for cleaning cooking and eating utensils in each of the school's buildings. A plan for testing should then be developed, prioritizing early childhood education programs and elementary schools, and made available to the public.
- The bill outlines that beginning in the 2023-2024 school year and for each subsequent school year, each school shall provide drinking water with a lead concentration below five parts per billion (**5 ppb**). Any school with greater than or equal to 5 ppb shall provide results and remediation plans to parents and staff within 7 business days of receiving results.

#### **Drinking Fountain Identification**

Drinking fountains throughout the school were visually assessed to determine if they matched those listed by the EPA to be lead-containing. The list of drinking fountains reported by the EPA to contain lead-lined holding tanks or solder joints is presented as Appendix B. Below is a list of drinking fountains within the school that match those reported by the EPA to be lead-containing.

Location	Make	Model #	Serial #
None Matching			

#### **Water Sampling Methods:**

Water samples were collected from each selected location as "first draw" and/or "flush". First draw samples typically represent worst case sample results. A flush sample is typically collected to determine if an elevation is originating beyond the fixture in the fixture supply line or beyond. Samples were deposited into a non-preserved 250-milliliter sterile Nalgene screw top bottle. Immediately following sample collection, the samples were delivered to Keystone Laboratories located at 8857 Long Street, Lenexa, Kansas 66215. Upon arrival at the laboratory, samples were preserved through addition of nitric acid

Keystone Laboratories is accredited through the Missouri Department of Natural Resources for analysis of lead in water.

Below is a summary of the water sampling results as reported in Appendix C by Keystone Laboratories. Results exceeding the applicable drinking water standards are shown in red text.

#### February 6, 2024 Water Sampling Results:

Sample #	Location	Source Under Test	Test Type	Lead Result (ppb)
327-1-FD	Elementary School - Dome - Girls Restroom	Sink Tap	First Draw	24.8
327-2-FD	Elementary School - Dome	Drinking Fountain	First Draw	0.7
327-3-FD	Elementary School - Dome - Boys Restroom	Sink Tap	First Draw	1.7
327-4-FD	Elementary School - Dome - Kitchenette	Sink Tap	First Draw	3.7
327-5-FD	Elementary School - Teacher's Lounge	Sink Tap	First Draw	0.4
327-6-FD	Elementary School - Kitchen - Handwashing Sink	Sink Tap	First Draw	0.9
327-7-FD	Elementary School - Kitchen - West Sink	Sink Tap	First Draw	<0.4

Sample #	Location	Source Under Test	Test Type	Lead Result (ppb)
327-8-FD	Elementary School - Kitchen - Three Bay Sink - Left	Sink Tap	First Draw	3.4
327-9-FD	Elementary School - Kitchen - Three Bay Sink - Right	Sink Tap	First Draw	2.1
327-10-FD	Elementary School - Kitchen - Restroom Sink	Sink Tap	First Draw	3.4
327-11-FD	Elementary School - Nurse's Office	Sink Tap	First Draw	0.5
327-12-FD	Elementary School - Nurse's Office - Restroom	Sink Tap	First Draw	<0.4
327-13-FD	Elementary School - Staff Lounge	Sink Tap	First Draw	0.6
327-14-FD	Elementary School - Across from Room 15 - Left	Drinking Fountain	First Draw	0.5
327-15-FD	Elementary School - Across from Room 15 - Right	Drinking Fountain	First Draw	<0.4
327-16-FD	Elementary School - Room 15 - Left	Sink Tap	First Draw	0.7
327-17-FD	Elementary School - Room 15 - Right	Sink Tap	First Draw	0.6
327-18-FD	Elementary School - Library	Sink Tap	First Draw	0.6
327-19-	Elementary School - Hallway Outside Library - Out of Order	Drinking Fountain	Not Tested	Not Sampled
327-20-	Elementary School - Outside Room 32 - Left - Out of Order	Drinking Fountain	Not Tested	Not Sampled
327-21-FD	Elementary School - Outside Room 32 -Right	Drinking Fountain	First Draw	<0.4
327-22-FD	Elementary School - Outside Room 38 - Left	Drinking Fountain	First Draw	<0.4
327-23-FD	Elementary School - Outside Room 38 - Right	Drinking Fountain	First Draw	<0.4
327-24-FD	Elementary School - Room 38	Sink Tap	First Draw	1.1
327-25-FD	Elementary School - Room 38 - Left Restroom	Sink Tap	First Draw	<0.4
327-26-FD	Elementary School - Room 38 - Right Restroom	Sink Tap	First Draw	<0.4

Photos of the sampling locations are provided in Appendix D. A diagram containing identifiers on the outlets tested is provided in Appendix E.

#### **Short-Term Control Measures**

- Per the State of Missouri Senate Bills Nos. 681 & 662, a remediation plan should be developed and executed.
- Take immediate steps to prevent use from the failed source(s).
- Shut-off problem outlets
- Post "Not for Drinking/Cooking" at Problem Outlets. If initial sample results from an outlet(s) exceed the remediation trigger level, but are not routinely used for human ingestion (e.g., handwashing), clear signage can be posted to notify people that the outlet is not to be used for drinking or cooking until the problem is resolved.
- Consider performing follow-up flush testing in order to attempt to identify what component within the system is the source of the elevated lead concentration. This testing will assist to pinpoint where lead is getting into drinking water (i.e., fixtures versus interior plumbing) so that appropriate corrective measures can be taken.
- Shut-off or disconnection of problem outlets can provide a permanent solution. If the outlet is frequently used, this likely is not a practical long-term solution.
- Provide point-of-use (POU) filters at problem taps. Filters need routine maintenance (e.g., cartridge filter units need to be replaced periodically) to remain effective.

#### **Permanent Control Measures**

- Per the State of Missouri Senate Bills Nos. 681 & 662, a remediation plan should be developed and executed.
- Replacement of Problem Outlets and any identified upstream plumbing components (e.g., valves, leaded solder) to permanently address the problem. EPA's revised March 2015 guidance, How to Identify Lead-Free Certification Marks for Drinking Water System & Plumbing Products, can be a useful resource selecting leadfree plumbing.
- Provide point-of-use filters (POU) at problem taps as a long-term or permanent control measure. When doing this, facilities should be sure to create maintenance schedules and identify a point of contact to be in charge of making sure they are properly maintained.
- Reconfigure Plumbing. Ongoing renovation of school or childcare buildings may provide an
  opportunity to modify the plumbing system to redirect water supplied for drinking or cooking to
  bypass sources of lead contamination. Before undertaking such an alternative, be certain that you
  have properly identified all of the sources of lead contamination in drinking water.
- Remove and replace any drinking water coolers or drinking water outlets that the United States Environmental Protection Agency has determined are not lead-free under the federal Lead Contamination Control Act of 1988, as amended; except the school shall not be required to replace those drinking water outlets or water coolers that tested in accordance with state regulations and have been determined to be dispensing drinking water with a lead concentration less than five (5) part per billion (ppb); however, such drinking water outlet or water cooler shall be subject to all testing requirements and shall not be excluded from testing under subsection 10 of the Missouri Senate Bills Nos. 681 & 662, Section 160.077.
- Consider filtration of incoming water at the point of entry (POE) to the building.

#### **Required Communication**

- Contact staff and parents via written notification within seven (7) business days after receiving the test result.
- The notification shall include at least:
- The test results and a summary that explains such results;
- A description of any remedial steps taken; and
- A description of general health effects of lead contamination and community specific resources;
   and
- Provide bottled water if there is not enough water to meet the drinking water needs of the students, teachers, and staff.
- Submit such annual testing results to the Missouri Department of Health and Senior Services (DHSS).
- Before August 1, 2024, or the first day on which students will be present in the building, whichever is later, and annually thereafter, each school shall conduct testing for lead by first-draw and follow-up flush samples of a random sampling of at least twenty-five percent (25%) of remediated drinking water outlets until all remediated sources have been tested as recommended by the 2018 version of the United States Environmental Protection Agency's "Training, Testing, and Taking Action" program. The testing shall be conducted and the results analyzed for both types of tests by an entity or entities approved by the department.
- Any measures taken to remediate any elevated lead levels identified must be recorded and documented.

#### **General Recommendations**

- Retesting of all potential cooking and drinking water sources is required five (5) years from previous testing completed.
- If the condition changes or significant alterations to existing plumbing is undertaken, consider performing additional lead in drinking water sampling.
- Ensure that the plumbing system is not used as an electrical ground.
- If equipment is added that could affect water pH, alkalinity, or hardness, consider performing lead in drinking water sampling.

Any work resulting from this report should be conducted in accordance with the EPA Safe Drinking Water Act, Missouri SB 681 & 662, HUD Lead Regulations 24 CFR 35, EPA Lead Regulations 40 CFR 745, and Consumer Product Safety Commission document #5056.

If you have any questions concerning this report, please contact me at 816-678-7894.

Sincerely,

Yell thust

Jeff Hurst Axiom Service Professionals LLC jeffh@axiomservicepros.com

#### **Limitations Drinking Water Testing**

The presence or absence of lead and copper (if collected) in drinking water applies only to the test locations on the date of the field visit and it should be understood that conditions may change due to deterioration, pH, alkalinity, hardness, use levels, or maintenance. The results noted within this report were accurate at the time of the evaluation and in no way reflect the conditions at the property before or after the date of the evaluation. No other environmental concerns or conditions were addressed during this evaluation.

## Appendix A Certifications



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## **LEAD OCCUPATION LICENSE REGISTRATION**

Issued to:

## Bradly A. Young

The person, firm or corporation whose name appears on this certificate has fulfilled the requirements for licensure as set forth in the Missouri Revised Statutes 701:300-701.338, as long as not suspended or revoked, and is hereby authorized to engage in the activity listed below.

## Lead Inspector Category of License

Issuance Date: Expiration Date:

License Number:

10/4/2023

10/4/2025

211004-300006201

PULI SUPBEMA

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Paula F. Nickelson Director

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Department of Health and Senior Services

Lead Licensing Program, PO Box 570, Jefferson City, MO 65102

## STATE OF MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES

### LEAD OCCUPATION LICENSE REGISTRATION

Issued to:

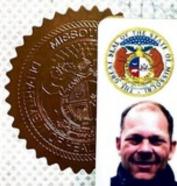
## Jeffrey A. Hurst

The person, firm or corporation whose name appears on this certificate has fulfilled the requirements for licensure as set forth in the Missouri Revised Statutes 701.300-701.338, as long as not suspended or revoked, and is hereby authorized to engage in the activity listed below.

#### Lead Risk Assessor Category of License

8/1/2022 Issuance Date: 8/1/2024 Expiration Date:

000801-200166567 License Number:



Missouri Department of Health and Senior Services

Lead Occupation License - ID Badge License Number:

000801-200166567

Lead Risk Assessor

Jeffrey Hurst

Expiration Date: 8/1/2024

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Acting Director t of Health and Senior Services

son City, MO 65102

## Appendix B EPA Listed Lead Containing Drinking Fountains

### Table C-1 Water Coolers With Other Lead Components

#### **EBCO** Manufacturing

- All pressure bubbler water coolers with shipping dates from 1962 through 1977 have a bubbler valve containing lead. The units contain a single, 50-50 tin-lead solder joint on the bubbler valve. Model numbers for coolers in this category are not available.
- The following models of pressure bubbler coolers produced from 1978 through 1981 contain one 50-50 tin-lead solder joint each.

CP3	DP15W	DPM8	7P	13P	DPM8H	DP15M	DP3R	DP8A
DP16M	DP5S	C10E	PX-10	DP7S	DP13SM	DP7M	DP7MH	DP7WD
WTC10	DP13M-60	DP14M	CP10-50	CP5	CP5M	DP15MW	DP3R	DP14S
DP20-50	DP7SM	DP10X	DP13A	DP13A-50	EP10F	DP5M	DP10F	CP3H
CP3-50	DP13M	DP3RH	DP5F	CP3M	EP5F	13PL	DP8AH	DP13S
CP3-30	DP30	DEIZN	DETUM	DPIAA-SO/		LJEL	Dionii	Driss

#### Halsey Taylor

Lead solder was used in these models of water coolers manufactured between 1978 and the last week of 1987:

WMA-1	SCWT/SCWT-A	SWA-1	DC/DHC-1
S3/5/10D	BFC-4F/7F/4FS/7FS	S300/500/100D	

 The following coolers manufactured for Haws Drinking Faucet Company (Haws) by Halsey Taylor from November 1984 through December 18, 1987 are not lead-free because they contain 2 tin-lead solder joints. The model designations for these units are as follows:

HC8WT	HC14F	· HC6W	HWC7D	HC8WTH	HC14FH	HC8W	HC2F	HC14WT
HC14FL	HC14W	HC2FH	HC14WTH	HC8FL	HC4F	HC5F	HC14WL	HCBF7D
HC4FH	HC10F	HC16WT	HCBF7HO	HC8F	HC8FH	HC4W	HWC7	

#### Table C-2 Helsey Taylor Water Coolers With Lead-Lined Tanks

The following six model numbers have one or more units in the model series with lead-lined tanks:

WM8A WT8A GC10ACR GC10A GC5A RWM13A

The following models and serial numbers contain lead-lined tanks:

WM14A Serial No. 843034 WM14A Serial No. 843006 WT11A Serial No. 222650 WT21A Serial No. 64309550 WT21A Serial No. 64309542 LL14A Serial No. 64346908

### Appendix C Laboratory Analytical Report



#### Microbac Laboratories, Inc., Lenexa

#### **CERTIFICATE OF ANALYSIS**

3HB0033

**AXIOM Service Professionals** 

3HB0033-01

Project Name: 327 North McKissock Street

Jeff Hurst PO Box 47166 Project / PO Number: 327 North McKissock Street

Kansas City, MO 64188

Received: 02/09/2024 Reported: 03/14/2024

**Analytical Testing Parameters** 

Client Sample ID: 327-1-FD
Sample Matrix: Drink Wtr

Lab Sample ID:

Collected By: Bradley Young

Collection Date: 02/06/2024 23:31

Analyses Performed by: Microbac Laboratories, Inc., Newton

Result RL Units **Determination of Total Metals** Analyst Note Prepared Analyzed 200.8 0.4 2 03/13/24 1031 Lead, total 24.8 ppb 03/13/24 1558 RVV

Client Sample ID: 327-2-FD
Sample Matrix: Drink Wtr
Lab Sample ID: 3HB0033-02

Collected By: Bradley Young

**Collection Date:** 02/06/2024 23:31

Analyses Performed by: Microbac Laboratories, Inc., Newton

RL DF **Determination of Total Metals** Result Units Note Prepared Analyzed Analyst 200.8 2 03/13/24 1601 Lead, total 0.4 03/13/24 1031 RVV 0.7 ppb

Client Sample ID: 327-3-FD

Sample Matrix:Drink WtrCollected By:Bradley YoungLab Sample ID:3HB0033-03Collection Date:02/06/2024 23:31

Analyses Performed by: Microbac Laboratories, Inc., Newton

**Determination of Total Metals** Result RL Units DF Note Prepared Analyzed Analyst 200.8 2 Lead, total 1.7 0.4 ppb 03/13/24 1031 03/13/24 1604 RVV

Client Sample ID: 327-4-FD
Sample Matrix: Drink Wtr

Sample Matrix:Drink WtrCollected By:Bradley YoungLab Sample ID:3HB0033-04Collection Date:02/06/2024 23:32

Analyses Performed by: Microbac Laboratories, Inc., Newton

**Determination of Total Metals** Result RL Units Note Prepared Analyzed Analyst 200.8 Lead, total 2 3.7 0.4 ppb 03/13/24 1031 03/13/24 1607 **RVV** 



### Microbac Laboratories, Inc., Lenexa

### CERTIFICATE OF ANALYSIS

Client Sample ID:	327-5-FD		
Sample Matrix:	Drink Wtr	Collected By:	Bradley Young
Lab Sample ID:	3HB0033-05	Collection Date:	02/06/2024 23:34

Analyses Performed by: Microbac Laboratories, Inc., Newton								
<b>Determination of Total Metals</b>	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
200.8								
Lead, total	0.4	0.4	ppb	2		03/13/24 1031	03/13/24 1610	RVV

Client Sample ID:	327-6-FD		
Sample Matrix:	Drink Wtr	Collected By:	Bradley Young
Lab Sample ID:	3HB0033-06	Collection Date:	02/06/2024 23:36

Analyses Performed by: Microbac Laboratories, Inc., Newton								
Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
200.8								
Lead, total	0.9	0.4	ppb	2		03/13/24 1031	03/13/24 1613	RVV

Client Sample ID:	327-7-FD		
Sample Matrix:	Drink Wtr	Collected By:	Bradley Young
Lab Sample ID:	3HB0033-07	Collection Date:	02/06/2024 23:36

Analyses Performed by: Microbac Laboratories, Inc., Newton								
<b>Determination of Total Metals</b>	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
200.8								
Lead, total	<0.4	0.4	ppb	2		03/13/24 1031	03/13/24 1616	RVV

Client Sample ID:	327-8-FD		
Sample Matrix:	Drink Wtr	Collected By:	Bradley Young
Lab Sample ID:	3HB0033-08	Collection Date:	02/06/2024 23:37

Analyses Performed by: Microbac Laboratories, Inc., Newton							
Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
3.4	0.4	ppb	2		03/13/24 1031	03/13/24 1619	RVV
	Result	Result RL	Result RL Units	Result RL Units DF	Result RL Units DF Note	Result RL Units DF Note Prepared	Result RL Units DF Note Prepared Analyzed

Client Sample ID:	327-9-FD		
Sample Matrix:	Drink Wtr	Collected By:	Bradley Young
Lab Sample ID:	3HB0033-09	Collection Date:	02/06/2024 23:37

Analyses Performed by: Microbac Laboratories, Inc., Newton								
Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
200.8								
Lead, total	2.1	0.4	ppb	2		03/13/24 1031	03/13/24 1621	RVV



## Microbac Laboratories, Inc., Lenexa CERTIFICATE OF ANALYSIS

- 1	Lab Sample ID:	3HB0033-10	Collection Date:	02/06/2024 23:39	
	Sample Matrix:	Drink Wtr	Collected By:	Bradley Young	
	Client Sample ID:	327-10-FD			

Analyses Performed by: Microbac Laboratories, Inc., Newton									
Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst	
200.8									
Lead, total	3.4	0.4	ppb	2		03/13/24 1031	03/13/24 1636	RVV	

Client Sample ID:	327-11-FD		
Sample Matrix:	Drink Wtr	Collected By:	Bradley Young
Lab Sample ID:	3HB0033-11	Collection Date:	02/06/2024 23:41

Analyses Performed by: Microbac Laboratories, Inc., Newton								
Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
200.8								
Lead, total	0.5	0.4	ppb	2		03/13/24 1031	03/13/24 1645	RVV

Client Sample ID:	327-12-FD		
Sample Matrix:	Drink Wtr	Collected By:	Bradley Young
Lab Sample ID:	3HB0033-12	Collection Date:	02/06/2024 23:41

Analyses Performed by: Microbac Laboratories, Inc., Newton									
Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst	
200.8									
Lead, total	<0.4	0.4	ppb	2		03/13/24 1031	03/13/24 1648	RVV	

Client Sample ID:	327-13-FD		
Sample Matrix:	Drink Wtr	Collected By:	Bradley Young
Lab Sample ID:	3HB0033-13	Collection Date:	02/06/2024 23:42

Analyses Performed by: Microbac Laboratories, Inc., Newton								
Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
200.8								
Lead, total	0.6	0.4	ppb	2		03/13/24 1031	03/13/24 1651	RVV

Client Sample ID:	327-14-FD		
Sample Matrix:	Drink Wtr	Collected By:	Bradley Young
Lab Sample ID:	3HB0033-14	Collection Date:	02/06/2024 23:45

Analyses Performed by: Microbac Laboratories, Inc., Newton								
<b>Determination of Total Metals</b>	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
200.8								
Lead, total	0.5	0.4	ppb	2		03/13/24 1031	03/13/24 1654	RVV



## Microbac Laboratories, Inc., Lenexa CERTIFICATE OF ANALYSIS

Client Sample ID:	327-15-FD		
Sample Matrix:	Drink Wtr	Collected By:	Bradley Young
Lab Sample ID:	3HB0033-15	Collection Date:	02/06/2024 23:45

A	nalyses Performed by	: Microba	c Laborato	ries, Inc.,	Newton				
l Metals	Result	RL	Units	DF	Note	Prepa	red	Analyzed	Analyst
	<0.4	0.4	ppb	2		03/13/24	1031	03/13/24 1657	RVV
327-16-FD									
Drink Wtr 3HB0033-16					-			, 0	
	327-16-FD Drink Wtr	Result <0.4  327-16-FD Drink Wtr	Result RL <0.4 0.4  327-16-FD Drink Wtr	Result RL Units  <0.4 0.4 ppb  327-16-FD Drink Wtr	Netals   Result   RL   Units   DF	<0.4 0.4 ppb 2  327-16-FD Drink Wtr Collected By	Metals   Result   RL   Units   DF   Note   Prepared	Metals   Result   RL   Units   DF   Note   Prepared	Metals   Result   RL   Units   DF   Note   Prepared   Analyzed

Analyses Performed by: Microbac Laboratories, Inc., Newton										
Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst		
200.8										
Lead, total	0.7	0.4	ppb	2		03/13/24 1031	03/13/24 1706	RVV		
Client Sample ID: 327-17-FD										

Lab Sample ID:	3HB0033-17	Collection Date:	02/06/2024 23:46	
Sample Matrix:	Drink Wtr	Collected By:	Bradley Young	
Cilent Sample ID:	327-17-FD			

Analyses Performed by: Microbac Laboratories, Inc., Newton								
<b>Determination of Total Metals</b>	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
200.8								
Lead, total	0.6	0.4	ppb	2		03/13/24 1031	03/13/24 1709	RVV

Client Sample ID:	327-18-FD		
Sample Matrix:	Drink Wtr	Collected By:	Bradley Young
Lab Sample ID:	3HB0033-18	Collection Date:	02/06/2024 23:47

Lab Sample ID:	3HB0033-18					Collection D	ate: 02	706/2024 23:47	
		Analyses Performed by	: Microba	c Laborato	ries, Inc.,	, Newton			
Determination of Tota	al Metals	Result	RL	Units	DF	Note	Prepared	l Analyzed	Analyst
200.8									
Lead, total		0.6	0.4	ppb	2		03/13/24 10	31 03/13/24 1712	RVV
Client Sample ID:	327-21-FD								
Sample Matrix: Lab Sample ID:	Drink Wtr 3HB0033-19					Collected By		adley Young //06/2024 23:49	

Analyses Performed by: Microbac Laboratories, Inc., Newton								
Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
200.8								
Lead, total	<0.4	0.4	ppb	2		03/13/24 1031	03/13/24 1715	RVV



## Microbac Laboratories, Inc., Lenexa CERTIFICATE OF ANALYSIS

Client Sample ID:	327-22-FD		
Sample Matrix:	Drink Wtr	Collected By:	Bradley Young
Lab Sample ID:	3HB0033-20	Collection Date:	02/06/2024 23:51

Analyses Performed by: Microbac Laboratories, Inc., Newton								
Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
200.8								
Lead, total	<0.4	0.4	ppb	2		03/13/24 1031	03/13/24 1718	RVV

Client Sample ID:	327-23-FD		
Sample Matrix:	Drink Wtr	Collected By:	Bradley Young
Lab Sample ID:	3HB0033-21	Collection Date:	02/06/2024 23:51

Analyses Performed by: Microbac Laboratories, Inc., Newton										
Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst		
200.8										
Lead, total	<0.4	0.4	ppb	2		03/13/24 1031	03/13/24 1721	RVV		

Client Sample ID:	327-24-FD		
Sample Matrix:	Drink Wtr	Collected By:	<b>Bradley Young</b>
Lab Sample ID:	3HB0033-22	Collection Date:	02/06/2024 23:51

Analyses Performed by: Microbac Laboratories, Inc., Newton									
Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst	
200.8									
Lead, total	1.1	0.4	ppb	2		03/13/24 1031	03/13/24 1724	RVV	

Client Sample ID:	327-25-FD		
Sample Matrix:	Drink Wtr	Collected By:	Bradley Young
Lab Sample ID:	3HB0033-23	Collection Date:	02/06/2024 23:51

Analyses Performed by: Microbac Laboratories, Inc., Newton										
Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst		
200.8										
Lead, total	<0.4	0.4	ppb	2		03/13/24 1031	03/13/24 1727	RVV		

		Analyses Performed by: Microbac Laboratories, Inc., Newton		
Lab Sample ID:	3HB0033-24	Collection Date:	02/06/2024 23:52	
Sample Matrix:	Drink Wtr	Collected By:	Bradley Young	
Client Sample ID:	327-26-FD			

Analyses I chomica by Microbac Eaboratories, me., Newton									
Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst	
200.8									
Lead, total	<0.4	0.4	ppb	2		03/13/24 1031	03/13/24 1730	RVV	



# Microbac Laboratories, Inc., Lenexa CERTIFICATE OF ANALYSIS 3HB0033

**Definitions** 

RL: Reporting Limit

**Report Comments** 

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included. The services were provided under and subject to Microbac's standard terms and conditions which can be located and reviewed at <a href="https://www.microbac.com/standard-terms-conditions">https://www.microbac.com/standard-terms-conditions</a>.

Reviewed and Approved By:

Carolyn Jackson Project Manager

carolyn.jackson@microbac.com 03/14/24 12:20

Page 7 of 10	
LABORATO	RIES
A Microbac Con	npany

600 E. 17th St. S Newton, IA 50208 Phone: 641-792-8451 3012 Ansborough Ave Waterloo, IA 50701 Phone: 319-235-4440

835 S St. Paul X Kansas City, KS 66105 Phone: 913-321-7856

205 E Van Buren St Centerville, IA 52544 Phone: 641-437-7023

PRINT OR TYPE INFO BELOW:	REPORT TO:		BILL TO:	
SAMPLER: Bradly Young	NAME:	Jeff Hurst		Jeff Hurst
SITE NAME:	CO. NAME:		CO. NAME:	***************************************
ADDRESS: 327 North McKissock Street	ADRESS:	PO Box 47166	ADDRESS:	PO Box 47166
CITY/ST/ZIP: Pleasant Hill, Missouri 64080	CITY/ST/ZIP:	Kansas City, Missouri 64188	CITY/ST/ZIP:	Kansas City, Missouri 64188
PHONE:	PHONE:	816-678-7894	PHONE:	816-678-7894
	EMAIL:	jeffh@axiomservicepros.com	EMAIL:	jeffh@axiomservicepros.com

								ANALY	SES RE	QUIRE	)	 LA	B USE	ONLY
												Wk Order #:	3HB	0033
				CONTAINERS		SITE						Short Hold:		
				TAIL		MPC						Rush:		
	m	Ш			MATRIX	3RAB/COMPOSITE	~					Temp:	οС	13.4°C
CLIENT SAMPLE #	DATE	TIME		# OF	MA	GR/	Lead					Sample Con	dition	Sample #
327-1-FD	2/6/2024	23:31	Elementary School - Sink Tap - Dome-Girls Bathroom	1	Wt	Grab	×							01
327-2-FD	2/6/2024	23:31	Elementary School - Drinking Fountain - Dome	1	Wt	Grab	x							02
327-3-FD	2/6/2024	23:31	Elementary School - Sink Tap - Dome-Boys Bathroom	1	Wt	Grab	х							03
327-4-FD	2/6/2024	23:32	Elementary School - Sink Tap - Dome-Kitchenette		Wt	Grab	х							04
327-5-FD	2/6/2024	23:34	Elementary School - Sink Tap - Teachers Lounge	1	Wt	Grab	Х							05
327-6-FD	2/6/2024	23:36	Elementary School - Sink Tap - Kitchen- Handwashing Sink	1	Wt	Grab	х							06
327-7-FD	2/6/2024	23:36	Elementary School - Sink Tap - Kitchen-West Sink	1	Wt	Grab	Х							٥٦

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Relinquied by: (Signature)	Date:	Received by: (Signature)	Date:	
	Time;	Vit Ba	2/9/24 Time:	3 H B 0 AXIOM Service F PM: Carolyn



Service Professionals PM: Carolyn Jackson

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835 S St. Paul Kansas City, KS 66105 Phone: 913-321-7856 205 E Van Buren St Centerville, IA 52544 Phone: 641-437-7023

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SAMPLER:	Bradly Young	NAME:	Jeff Hurst	NAME:	Jeff Hurst
SITE NAME:		CO. NAME:		CO. NAME:	
ADDRESS:	327 North McKissock Street	ADRESS:	PO Box 47166	ADDRESS:	PO Box 47166
CITY/ST/ZIP:	Pleasant Hill, Missouri 64080	CITY/ST/ZIP:	Kansas City, Missouri 64188	CITY/ST/ZIP:	Kansas City, Missouri 64188
PHONE:		PHONE:	816-678-7894	PHONE:	816-678-7894
		EMAIL:	jeffh@axiomservicepros.com	EMAIL:	jeffh@axiomservicepros.com

					I	ANALYSES REQUIRED LAB USE ONLY										
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				VERS		SITE								Short Hold:		
			No.	NTAIN		JMPC								Rush:		
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CLIENT SAMPLE#	DATE	TIME		0#	ΑĀ	GR/	Lead							Sample Con	dition	Sample #
327-8-FD	2/6/2024	23:37	Elementary School - Sink Tap - Kitchen-3 Bay Sink-Left	1	Wt	Grab	х									80
327-9-FD	2/6/2024	23:37	Elementary School - Sink Tap - Kitchen-3 Bay Sink-Right	1	Wt	Grab	х									09
327-10-FD	2/6/2024	23:39	Elementary School - Sink Tap - Kitchen-Bathroom Sink	1	Wt	Grab	х									lo
327-11-FD	2/6/2024	23:41	Elementary School - Sink Tap - Nurse Office	1	Wt	Grab	Х									11
327-12-FD	2/6/2024	23:41	Elementary School - Sink Tap - Nurse Office- Bathroom	1	Wt	Grab	x									12
327-13-FD	2/6/2024	23:42	Elementary School - Sink Tap - Staff Lounge	1	Wt	Grab	х									3
327-14-FD	2/6/2024	23:45	Elementary School - Drinking Fountain - Across from Room 15- Left	1	Wt	Grab	х									4

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						PM: Carolyn Jackson

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Time:

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205 E Van Buren St Centerville, IA 52544 Phone: 641-437-7023

**AXIOM Service Professionals** PM: Carolyn Jackson

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PRINT OR TYPE IN SAMPLER: SITE NAME:	FO BELOW:			Jeff Hurst						BILL T	NAME	: Jeff	Hurst					
<del></del>	327 North McKisso	ock Street	CO. NAME: ADRESS:	PO Box 4	7166						CO. NAME: ADDRESS: PO Box 47166							
CITVISTIZID:	Pleasant Hill, Miss 64080		CITY/ST/ZIP: Kansas City, Missouri 64188							CITY/ST/ZIP: Kansas City, Missouri 64188								
PHONE:	64060	-		PHONE: 816-678-7894							PHONE: 816-678-7894							
-				jeffh@axi		icepros.	com								cepros.com			
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CLIENT SAMPLE	# DATE		TIME		# O	MATRIX	GRA	Lead							Sample (	ondi	tion	Sample #
327-15-FD	2/6/2024	23:45	Elementary So Drinking Foun Across from R Right	tain -	1	Wt	Grab	х										15
327-16-FD	2/6/2024	23:46	Elementary So Tap - Room 19	chool - Sink 5-Left	1	Wt	Grab	х					7					lle
327-17-FD	2/6/2024	23:46	Elementary So Tap - Room 1	chool - Sink	1	Wt	Grab	х								··········		17
327-18-FD	2/6/2024	23:47	Elementary So Tap - Library		1	Wt	Grab	х										18
327-21-FD	2/6/2024	23:49	Elementary So Drinking Foun Outside Room	tain -	1	Wt	Grab	х										19
327-22-FD	2/6/2024	23:51	Elementary Se Drinking Foun Outside Room	tain -	1	Wt	Grab	x										20
327-23-FD	2/6/2024	23:51	Elementary So Drinking Foun Outside Room	tain -	1	Wt	Grab	×										21
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Page 10 of 10	
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A Microbac Compa	$n_V$

600 E. 17th St. S Newton, IA 50208 Phone: 641-792-8451 3012 Ansborough Ave Waterloo, IA 50701 Phone: 319-235-4440 835 S St. Paul Kansas City, KS 66105 Phone: 913-321-7856 205 E Van Buren St Centerville, IA 52544 Phone: 641-437-7023

PRINT OR TYPE INFO E	ELOW:		REPORT TO:	<del></del>		<del></del>											
	SAMPLER: NAME: Jeff Hurst						BILLT	BILL TO: NAME: Jeff Hurst									
SITE NAME:			CO. NAME:	CONTINUE			•			1 ,	NAN CO. NAN		en Hurst			·	
ADDRESS: 3271	North McKisso	ck Street	ADRESS:	PO Box 4	7166						ADDRESS: PO Box 47166						
CITY/ST/ZIP: Pleas	sant Hill, Misso 0	ouri	CITY/ST/ZIP:	CITY/ST/ZIP: Kansas City, Missouri 64188						7	CITY/ST/ZIP: Kansas City, Missouri 64188						
PHONE:			PHONE:	816-678-7	894					1	PHONE: 816-678-7894						
	EMAIL: jeffh@axiomservicepros.com							1	EMA				icepros.com	······································			
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CLIENT SAMPLE #	à				#	ΣŽ	GR	Lead							Sample Cond	lition	Sample #
327-24-FD	2/6/2024	23:51	Elementary Sc Tap - Room 38		1	Wt	Grab	х									22
327-25-FD	2/6/2024	23:51	Elementary Sc Tap - Room 38 Bathroom	hool - Sink -Left	1	Wt	Grab	х									23
327-26-FD	2/6/2024	23:52	Elementary Sc Tap - Room 38 Bathroom	hool - Sink -Right	1	Wt	Grab	x									24
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**AXIOM Service Professionals** 

PM: Carolyn Jackson

### Appendix D Photo Log



2/6/2024 - 327-1 - Elementary School - Dome - Girls Restroom



2/6/2024 - 327-2 - Elementary School - Dome



2/6/2024 - 327-3 - Elementary School - Dome - BoysRestroom



2/6/2024 - 327-4 - Elementary School - Dome - Kitchenette



2/6/2024 - 327-5 - Elementary School - Teacher's Lounge



2/6/2024 - 327-6 - Elementary School - Kitchen -Handwashing Sink



2/6/2024 - 327-7 - Elementary School - Kitchen - West Sink



2/6/2024 - 327-8 - Elementary School - Kitchen - Three Bay Sink - Left



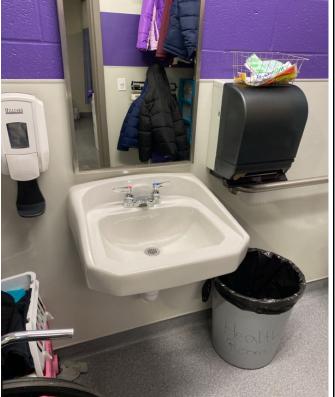
2/6/2024 - 327-9 - Elementary School - Kitchen -Three Bay Sink - Right



2/6/2024 - 327-10 - Elementary School - Kitchen - Restroom Sink



2/6/2024 - 327-11 - Elementary School - Nurse's Office



2/6/2024 - 327-12 - Elementary School - Nurse's Office - Restroom



2/6/2024 - 327-13 - Elementary School - Staff Lounge



2/6/2024 - 327-14 - Elementary School - Across from Room 15 - Left



2/6/2024 - 327-15 - Elementary School - Across from Room 15 - Right



2/6/2024 - 327-16 - Elementary School - Room 15 - Left



2/6/2024 - 327-17 - Elementary School - Room 15 - Right



2/6/2024 - 327-18 - Elementary School - Library



2/6/2024 - 327-19 - Elementary School - Hallway Outside Library - Out of Order



2/6/2024 - 327-20 - Elementary School - Outside Room 32 - Left - Out of Order



2/6/2024 - 327-21 - Elementary School - Outside Room 32 -Right



2/6/2024 - 327-22 - Elementary School - Outside Room 38 - Left



2/6/2024 - 327-23 - Elementary School - Outside Room 38 - Right



2/6/2024 - 327-24 - Elementary School - Room 38



2/6/2024 - 327-25 - Elementary School - Room 38 - Left Restroom



2/6/2024 - 327-26 - Elementary School - Room 38 - Right Restroom

### Appendix E Source Identification Diagram

ASP was provided sample locations by Pleasant Hill School District

#### PLEASANT HILL ELEMENTARY

