

August 14, 2024

Josh Hustad Director of Facility Operations Raytown School District 5911 Blue Ridge Boulevard Raytown, Missouri 64133

## Project: Limited Lead in Drinking Water Testing Address: 6410 Blue Ridge Boulevard, Raytown, Missouri 64133

Mr. Josh Hustad

On July 11, 2024, under the guidance of Jeff Hurst, Josh Milne, of Axiom Service Professionals (ASP), conducted lead in drinking water sampling at the above referenced address. A total of 18 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: <a href="https://www.epa.gov/dwreginfo/lead-and-copper-rule">https://www.epa.gov/dwreginfo/lead-and-copper-rule</a>

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: <u>https://www.senate.mo.gov/22info/BTS\_Web/Bill.aspx?SessionType=R&BillID=71259862</u>

- 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.

July 11,	2024	Water	Sampling	<b>Results:</b>
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Sample #	Location	Source Under Test	Test Type	Lead Result (ppb)
6410-1-FD	Blue Ridge Elementary - Between Rooms 114 & 116	Drinking Fountain	First Draw	<0.4
6410-2-FD	Blue Ridge Elementary - Near Room 119	Drinking Fountain	First Draw	<0.4
6410-3-FD	Blue Ridge Elementary - Near Room 106	Drinking Fountain	First Draw	<0.4
6410-4-FD	Blue Ridge Elementary - Near Room 211	Drinking Fountain	First Draw	<0.4
6410-5-FD	Blue Ridge Elementary - Near Room 217	Drinking Fountain	First Draw	<0.4
6410-6-FD	Blue Ridge Elementary - Across from Library	Drinking Fountain	First Draw	<0.4
6410-7-FD	Blue Ridge Elementary - Outside Gym - Left	Drinking Fountain	First Draw	<0.4

Sample #	Location	Source Under Test	Test Type	Lead Result (ppb)
6410-8-FD	Blue Ridge Elementary - Outside Gym - Right	Drinking Fountain	First Draw	<0.4
6410-9-FD	Blue Ridge Elementary - Cafeteria Hall - Left	Drinking Fountain	First Draw	<0.4
6410-10-FD	Blue Ridge Elementary - Cafeteria Hall - Right	Drinking Fountain	First Draw	<0.4
6410-11-FD	Blue Ridge Elementary - Next to Room 23	Drinking Fountain	First Draw	<0.4
6410-12-FD	Blue Ridge Elementary - Room E26	Sink Tap	First Draw	<0.4
6410-13-FD	Blue Ridge Elementary - Teacher's Lounge	Sink Tap	First Draw	5.7
6410-14-FD	Blue Ridge Elementary - Teacher's Lounge	Ice Machine	First Draw	0.5
6410-15-FD	Blue Ridge Elementary - Triple Sink	Sink Tap	First Draw	0.7
6410-16-FD	Blue Ridge Elementary - Tilt Skillet	Sink Tap	First Draw	1.8
6410-17-FD	Blue Ridge Elementary - Prep Sink	Sink Tap	First Draw	4.2
6410-18-FD	Blue Ridge Elementary - Clinic	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 followup 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,

Jeff third

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

# 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

Issuance Date: Expiration Date: License Number: 8/1/2022 8/1/2024 000801-200166567

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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Paula F. Nickelson Acting Director t of Health and Senior Services

son City, MO 65102

# Appendix B EPA Listed Lead Containing Drinking Fountains

Appendix C-Water Cooler Summary

			Water	T Coolers Wit	able C-1 h Other Lea	d Compon	ents		
EBO	CO Manufact	uring							
٠	lead. The	e bubbler wat units contain : e not available	a single, 50-	ith shipping d 50 tin-lead sol	ates from 196 Ider joint on	2 through I the bubbler	977 have a br valve. Mode	abbler valve I numbers for	containing r coolers in this
٠	The follow solder joint		pressure bul	bbler coolers j	produced from	n 1978 throu	agh 1981 con	tain one 50-5	0 tin-lead
	CP3 DP16M WTC10 DP20-50 CP3-50 CP10	DP15W DP5S DP13M-60 DP7SM DP13M DP20	DPM8 C10E DP14M DP10X DP3RH DP12N	7P PX-10 CP10-50 DP13A DP5F DP7WM	13P DP7S CP5 DP13A-50 CP3M DP14A-50/0	EP5F	DP15M DP7M DP15MW DP5M 13PL	DP3R DP7MH DP3R DP10F DP8AH	DP8A DP7WD DP14S CP3H DP13S
Hak	sey Taylor								
٠	Lead solde	r was used in	these models	s of water coo	lers manufact	tured betwee	n 1978 and th	ie last week o	of 1987:
	WMA-1 \$3/5/10D		SCWT/S BFC-4F/	CWT-A 7F/4FS/7FS		SWA-1 300/500/100		DC/DHC-1	
٠	1984 throu		18, 1987 are	e not lead-free					am November model
	HC8WT HC14FL HC4FH	HC14F HC14W HC10F	HC6W HC2FH HC16WT	HWC7D HC14WTH HCBF7HO		HC14FH HC4F HC8FH	HCSF HC4W	HC2F HC14WL HWC7	HC14WT HCBF7D

Halsey	Taylor Water Co	olers With	Lead-Lined	Tanks
The following six model number	s have one or more	e units in th	e model serie	s with lead-lined tanks:
WM8A WT8A GC10A	CR GC10A	GC5A	RWM13A	
The following models and serial	numbers contain le	ad-lined tar	dcs:	
WM14A Serial No. 843034 WT21A Serial No. 64309550	WM14A Seria WT21A Serial			WT11A Serial No. 222650 LL14A Serial No. 64346908

# Appendix C Laboratory Analytical Report



# CERTIFICATE OF ANALYSIS

#### 3HG0153

#### **AXIOM Service Professionals**

#### Project Name: 6410 Blue Ridge Blvd

Jeff Hurst PO Box 47166 Kansas City, MO 64188 Project / PO Number: 6410 Blue Ridge Blvd Received: 07/18/2024 Reported: 08/07/2024

#### Work Order Special Information

Hurst, Jeff 6410 Blue Ridge Blvd

#### **Analytical Testing Parameters**

Analytical looting	arametere										
Client Sample ID: Sample Matrix: Lab Sample ID:	6410-1-FD Drinking Water 3HG0153-01						Collected E Collection	-	Hurst, 07/11/	Jeff 2024 11:47	
		Analyses Perf	formed by	y: Microba	c Laborato	ories, Inc.	, Newton				
Determination of Tota	I Metals	F	Result	RL	Units	DF	Note	Prepa	red	Analyzed	Analyst
200.8											
Lead, total			<0.4	0.4	ppb	2		08/05/24	1620	08/06/24 2232	RVV
Client Sample ID:	6410-2-FD										
Sample Matrix: Lab Sample ID:	Drinking Water 3HG0153-02						Collected E Collection	-	Hurst, 07/11/	Jeff 2024 11:50	
		Analyses Perf	formed by	y: Microba	c Laborate	ories, Inc.	., Newton				
Determination of Tota	I Metals	F	Result	RL	Units	DF	Note	Prepa	red	Analyzed	Analyst
200.8											
Lead, total			<0.4	0.4	ppb	2		08/05/24	1620	08/06/24 2235	RVV
Client Sample ID: Sample Matrix: Lab Sample ID:	6410-3-FD Drinking Water 3HG0153-03						Collected E Collection	•	Hurst, 07/11/	Jeff 2024 11:52	
		Analyses Perf	formed by	y: Microba	c Laborato	ories, Inc.	, Newton				
Determination of Tota	I Metals	F	Result	RL	Units	DF	Note	Prepa	red	Analyzed	Analyst
200.8											
Lead, total			<0.4	0.4	ppb	2		08/05/24	1620	08/06/24 2238	RVV
Client Sample ID:	6410-4-FD										
Sample Matrix: Lab Sample ID:	Drinking Water 3HG0153-04						Collected E Collection	•	Hurst, 07/11/	Jeff 2024 11:57	
		Analyses Perf	formed by	y: Microba	c Laborato	ories, Inc.	., Newton				
Determination of Tota	I Metals	F	Result	RL	Units	DF	Note	Prepa	red	Analyzed	Analyst
200.8										-	
Lead, total			<0.4	0.4	ppb	2		08/05/24	1620	08/06/24 2241	RVV



# CERTIFICATE OF ANALYSIS

# 3HG0153

Client Sample ID:	6410-5-FD										
Sample Matrix: Lab Sample ID:	Drinking Water 3HG0153-05						Collected By Collection Da		Hurst, 07/11/2	Jeff 2024 11:59	
		Analyses Perform	ed by: Mic	robac	Laborator	ies, Inc.	, Newton				
Determination of Tota	l Metals	Resu	lt	RL	Units	DF	Note	Prepa	red	Analyzed	Analyst
200.8											
Lead, total		<0.	.4	0.4	ppb	2		08/05/24	1620	08/06/24 2244	RVV
Client Sample ID:	6410-6-FD								1.1	1	
Sample Matrix: Lab Sample ID:	Drinking Water 3HG0153-06						Collected By Collection Da		Hurst, 07/11/2	2024 12:01	
		Analyses Perform	ed by: Mic	robac	Laborator	ies, Inc.	, Newton				
Determination of Tota	l Metals	Resu	lt	RL	Units	DF	Note	Prepa	red	Analyzed	Analyst
200.8											
Lead, total		<0.	.4	0.4	ppb	2		08/05/24	1620	08/06/24 2247	RVV
Client Sample ID:	6410-7-FD										
Sample Matrix: Lab Sample ID:	Drinking Water 3HG0153-07						Collected By Collection Da		Hurst, 07/11/2	Jeff 2024 12:10	
		Analyses Perform	ed by: Mic	robac	Laborator	ies, Inc.	, Newton				
Determination of Tota	l Metals	Resu	lt	RL	Units	DF	Note	Prepa	red	Analyzed	Analyst
200.8											
Lead, total		<0.	.4	0.4	ppb	2		08/05/24	1620	08/06/24 2250	RVV
Client Sample ID:	6410-8-FD										
Sample Matrix: Lab Sample ID:	Drinking Water 3HG0153-08						Collected By Collection Da		Hurst, 07/11/2	Jeff 2024 12:11	
		Analyses Perform	ed by: Mic	robac	Laborator	ies, Inc.	., Newton				
Determination of Tota	l Metals	Resu	lt	RL	Units	DF	Note	Prepa	red	Analyzed	Analyst
200.8											
Lead, total		<0.	.4	0.4	ppb	2		08/05/24	1620	08/06/24 2253	RVV
Client Sample ID:	6410-9-FD										
Sample Matrix: Lab Sample ID:	Drinking Water 3HG0153-09						Collected By Collection Da		Hurst, 07/11/2	Jeff 2024 12:14	
		Analyses Perform	ed by: Mic	robac	Laborator	ies, Inc.	, Newton				
Determination of Tota	l Metals	Resu	lt	RL	Units	DF	Note	Prepa	red	Analyzed	Analyst
200.8		<0.									



# CERTIFICATE OF ANALYSIS

# 3HG0153

Lead, total		0.5	0.4	ppb	2	08/0	5/24 1620	08/06/24 2317	RVV
200.8		ittouit						,	
Determination of Tota	l Metals	Analyses Performed by <b>Result</b>	: Microba	c Laborato Units	ories, Inc. DF		repared	Analyzed	Analyst
Sample Matrix: Lab Sample ID:	Drinking Water 3HG0153-14		u Miersk -	o   ob		Collected By: Collection Date:	Hurst, 07/11/	Jeff /2024 12:31	
Client Sample ID:	6410-14-FD					<b>.</b>			
Lead, total		5.7	0.4	ppb	2	08/0	5/24 1620	08/06/24 2314	RVV
200.8							1	,	
Determination of Tota	l Metals	Result	RL	Units	DF		repared	Analyzed	Analyst
	0100100-10	Analyses Performed by	. Microba	c Laborato	ories Inc		57717	2027 12.23	
Client Sample ID: Sample Matrix: Lab Sample ID:	6410-13-FD Drinking Water 3HG0153-13					Collected By: Collection Date:	Hurst,	Jeff /2024 12:29	
200.8 Lead, total		<0.4	0.4	ppb	2	08/0	5/24 1620	08/06/24 2311	RVV
Determination of Tota	l Metals	Result	RL	Units	DF	Note Pr	repared	Analyzed	Analyst
		Analyses Performed by	: Microba	c Laborato	ories, Inc.	, Newton			
Client Sample ID: Sample Matrix: Lab Sample ID:	6410-12-FD Drinking Water 3HG0153-12					Collected By: Collection Date:	Hurst, 07/11/	Jeff /2024 12:23	
Lead, total		<0.4	0.4	ppb	2	08/0	5/24 1620	08/06/24 2308	RVV
Determination of Tota 200.8	IMETAIS	Result	RL	Units	DF	Note Pi	repared	Analyzed	Analyst
		Analyses Performed by						<b>A</b>	<b>A</b> = <b>b</b> 4
Client Sample ID: Sample Matrix: Lab Sample ID:	6410-11-FD Drinking Water 3HG0153-11					Collected By: Collection Date:	Hurst, 07/11/	Jeff /2024 12:18	
Lead, total		<0.4	0.4	ppb	2	08/0	5/24 1620	08/06/24 2305	RVV
Determination of Tota 200.8	I WETAIS	Result	RL	Units	DF	Note Pr	repared	Analyzed	Analyst
		Analyses Performed by							
Lab Sample ID:	3HG0153-10					Collection Date:		2024 12:16	
Client Sample ID: Sample Matrix:	6410-10-FD Drinking Water					Collected By:	Hurst,	loff	



## CERTIFICATE OF ANALYSIS

## 3HG0153

6410-15-FD Drinking Water 3HG0153-15						•			
	Analyses Performed b	y: Microba	c Laborato	ries, Inc.	., Newton				
l Metals	Result	RL	Units	DF	Note	Prepa	red	Analyzed	Analyst
	0.7	0.4	ppb	2		08/05/24	1620	08/06/24 2320	RVV
6410-16-FD									
Drinking Water 3HG0153-16						-			
	Analyses Performed b	y: Microba	c Laborato	ries, Inc.	., Newton				
l Metals	Result	RL	Units	DF	Note	Prepa	red	Analyzed	Analyst
	1.8	0.4	ppb	2		08/05/24	1620	08/06/24 2323	RVV
6410-17-FD									
Drinking Water 3HG0153-17						-	· · · · · · · · · · · · · · · · · · ·		
	Analyses Performed b	y: Microba	c Laborato	ries, Inc.	., Newton				
l Metals	Result	RL	Units	DF	Note	Prepa	red	Analyzed	Analyst
	4.2	0.4	ppb	2		08/05/24	1620	08/06/24 2326	RVV
6410-18-FD									
Drinking Water 3HG0153-18						-			
	Analyses Performed b	y: Microba	c Laborato	ries, Inc.	., Newton				
l Metals	Result	RL	Units	DF	Note	Prepa	red	Analyzed	Analyst
									RVV
	Drinking Water 3HG0153-15	Drinking Water 3HG0153-15       Analyses Performed by         I Metals       Result         0.7       0.7         6410-16-FD Drinking Water 3HG0153-16       0.7         6410-16-FD Drinking Water 3HG0153-16       Analyses Performed by         1 Metals       Result         6410-17-FD Drinking Water 3HG0153-17       1.8         6410-17-FD Drinking Water 3HG0153-17       Analyses Performed by         6410-17-FD Drinking Water 3HG0153-18       Result         6410-18-FD Drinking Water 3HG0153-18       Analyses Performed by	Drinking Water 3HG0153-15       Analyses Performed by: Microba         I Metals       Result       RL         0.7       0.4         6410-16-FD Drinking Water 3HG0153-16       Analyses Performed by: Microba         I Metals       Result       RL         6410-17-FD Drinking Water 3HG0153-17       0.4         6410-17-FD Drinking Water 3HG0153-17       0.4         6410-17-FD Drinking Water 3HG0153-17       0.4         6410-17-FD Drinking Water 3HG0153-17       0.4         6410-17-FD Drinking Water 3HG0153-17       0.4	Drinking Water 3HG0153-15       Analyses Performed by: Microbac Laborato         I Metals       Result       RL       Units         0.7       0.4       ppb         6410-16-FD Drinking Water 3HG0153-16       Analyses Performed by: Microbac Laborato         I Metals       Result       RL       Units         6410-17-FD Drinking Water 3HG0153-17       0.4       ppb         6410-17-FD Drinking Water 3HG0153-17       0.4       ppb         6410-17-FD Drinking Water 3HG0153-17       Nicrobac Laborato         1 Metals       Result       RL       Units         6410-17-FD Drinking Water 3HG0153-17       0.4       ppb         6410-17-FD Drinking Water 3HG0153-18       Analyses Performed by: Microbac Laborato       I Metals         6410-18-FD Drinking Water 3HG0153-18       Analyses Performed by: Microbac Laborato	Drinking Water 3HG0153-15       Analyses Performed by: Microbac Laboratories, Inc.         I Metals       Result       RL       Units       DF         0.7       0.4       ppb       2         6410-16-FD Drinking Water 3HG0153-16       Analyses Performed by: Microbac Laboratories, Inc         I Metals       Result       RL       Units       DF         6410-17-FD       Analyses Performed by: Microbac Laboratories, Inc       1.8       0.4       ppb       2         6410-17-FD       Drinking Water 3HG0153-17       Analyses Performed by: Microbac Laboratories, Inc         I Metals       Result       RL       Units       DF         6410-17-FD       Drinking Water 3HG0153-17       Analyses Performed by: Microbac Laboratories, Inc         I Metals       Result       RL       Units       DF         6410-18-FD       Drinking Water 3HG0153-18       Q.4       ppb       2         6410-18-FD       Drinking Water 3HG0153-18       Analyses Performed by: Microbac Laboratories, Inc	Drinking Water 3HG0153-15       Collected E Collection         Analyses Performed by: Microbac Laboratories, Inc., Newton         I Metals       Result       RL       Units       DF       Note         0.7       0.4       ppb       2       Collected E Collection         6410-16-FD Drinking Water 3HG0153-16       Analyses Performed by: Microbac Laboratories, Inc., Newton       Collected E Collection         1 Metals       Result       RL       Units       DF       Note         1.8       0.4       ppb       2       Collected E Collection         6410-17-FD Drinking Water 3HG0153-17       Analyses Performed by: Microbac Laboratories, Inc., Newton       Collected E Collection         1 Metals       Result       RL       Units       DF       Note         1.8       0.4       ppb       2       Collected E Collection       Collected E Collection         6410-17-FD Drinking Water 3HG0153-17       Analyses Performed by: Microbac Laboratories, Inc., Newton       Note       Note         6410-18-FD Drinking Water 3HG0153-18       Result       RL       Units       DF       Note         6410-18-FD       Analyses Performed by: Microbac Laboratories, Inc., Newton       Collected E Collection       Collected E         6410-18-FD       Drinking Water 3HG0153-18	Drinking Water 3HG0153-15       Collected By: Collection Date:         Analyses Performed by: Microbac Laboratories, Inc., Newton       Note       Prepa         0.7       0.4       ppb       2       08/05/24         6410-16-FD Drinking Water 3HG0153-16       Collected By: Collection Date:       Collected By: Collection Date:         I Metals       Result       RL       Units       DF       Note       Prepa         1 Metals       Result       RL       Units       DF       Note       Prepa         6410-17-FD       Drinking Water 3HG0153-17       Note       Prepa       08/05/24         6410-17-FD       Drinking Water 3HG0153-17       O.4       ppb       2       08/05/24         6410-17-FD       Drinking Water 3HG0153-17       Collected By: Collection Date:       Collected By: Collection Date:         1 Metals       Result       RL       Units       DF       Note       Prepa         6410-17-FD       Drinking Water 3HG0153-17       Q.4       ppb       2       08/05/24         6410-18-FD       Result       RL       Units       DF       Note       Prepa         6410-18-FD       Drinking Water 3HG0153-18       Q.4       ppb       2       08/05/24         6410-18-FD	Drinking Water 3HG0153-15       Collected By: Collection Date:       Hurst, 07/11/2         Analyses Performed by: Microbac Laboratories, Inc., Newton       I Metals       Result       RL       Units       DF       Note       Prepared         0.7       0.4       ppb       2       08/05/24       1620         6410-16-FD Drinking Water 3HG0153-16	Drinking Water 3HG0153-15       Collected By: Or/11/2024       Hurst, Jeff 07/11/2024       Or/11/2024       12.36         I Metals       Result       RL       Units       DF       Note       Prepared       Analyzed         0.7       0.4       ppb       2       08/05/24       1620       08/06/24       2320         6410-16-FD Drinking Water 3HG0153-16

RL:

L: Reporting Limit

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 <<u>https://www.microbac.com/standard-terms-conditions></u>.

#### **Report Comments**

**Reviewed and Approved By:** 

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Carolyn Jackson Project Manager carolyn.jackson@microbac.com 08/07/24 13:06

	ATORI	ES	1	600 E. 17th St. S Newton, IA 50208 Phone: 641-792-8451		Wate	2 Ansborougł erloo, IA 507( ne: 319-235-	)1	<u> </u>	r Ka	5 S St. nsas Ci one: 91	ity, KS	66105 7856	5	С	05 E Van Bur enterville, IA hone: 641-43	52544	
A Microbac Company PRINT OR TYPE INFO BELOW: SAMPLER: Jeff Hurst SITE NAME: Blue Ridge Elementary ADDRESS: 6410 Blue Ridge Blvd CITY/ST/ZIP: Raytown, Missouri 64133 PHONE: CLIENT SAMPLE #				PORT TO: NAME: Jeff Hurst CO. NAME: ADRESS: PO Box 4 CITY/ST/ZIP: Kansas C PHONE: 816-678-7 EMAIL: jeffh@axid	7166 ity, Miss 7894	cepros.c	ATT			cr	NAI CO. NAI ADDRE TY/ST/2 PHO	ME: _ SS: _ ZIP: _ NE: _ AIL:	Kansa 816-67 jeffh@	x 4716 s City, 78-7894 axioms	Missour 4	Wk Orde Short H Rt		ONLY HGD153 21.2
CLIENT SAMPLE #	DATE		TIME		# OF	MATRIX	GRAI	Lead								Sample (	Condition	
6410-1-FD	7/11/2024	11:47		Blue Ridge Elementary - Drinking Fountain - Between Room 114 & 116	1	Water	Composite											3160153-01
6410-2-FD	7/11/2024	11:50		Blue Ridge Elementary - Drinking Fountain - Near Room 119	1	Water	Grab	х										62
6410-3-FD	7/11/2024	11:52		Blue Ridge Elementary - Drinking Fountain - By Room 106	1	Water	Grab	х										03
6410-4-FD	7/11/2024	11:57		Blue Ridge Elementary - Drinking Fountain - Near Room 211	1	Water	Grab	x										04
6410-5-FD	7/11/2024	11:59		Blue Ridge Elementary - Drinking Fountain - Near Room 217	1	Water	Grab	x										IJ
6410-6-FD	7/11/2024	12:01		Blue Ridge Elementary - Drinking Fountain - Across From Library	1	Water	Grab	x										Db
6410-7-FD	7/11/2024	12:10		Blue Ridge Elementary - Drinking Fountain - Outside Gym - Left	1	Water	Grab	x										07
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CHAIN OF CUSTODY RECORD

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LABOR A Microba	ATORI	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 SAMPLER: Jeff	BELOW:	REPORT TO: NAME: Jeff Hurst								BILL TO:							
SITE NAME: Blue ADDRESS: 6410 CITY/ST/ZIP: Rayt	Ridge Elemen Blue Ridge B	CO. NAME: Jeil Hurst CO. NAME:							NAME:       Jeff Hurst         CO. NAME:								
PHONE:		PHONE:       816-678-7894         EMAIL:       jeffh@axiomservicepros.com							PHONE:         816-678-7894           EMAIL:         jeffn@axiomservicepros.com								
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CLIENT SAMPLE #	DATE		TIME		#	MATRIX	GRA	Lead							Sample C	ondition	Sample #
6410-8-FD	7/11/2024	12:11		Blue Ridge Elementary Drinking Fountain - Outside Gym - Right	- 1	Water	Grab	x									346019-08
6410-9-FD	7/11/2024	12:14		Blue Ridge Elementary Drinking Fountain - Cafeteria Hall - Left	- 1	Water	Grab	x									69
6410-10-FD	7/11/2024	12:16		Blue Ridge Elementary Drinking Fountain - Cafeteria Hall - Right	- 1	Water	Grab	x									10
6410-11-FD	7/11/2024	12:18		Blue Ridge Elementary Drinking Fountain - Nex to Room 23		Water	Grab	x									il
6410-12-FD	7/11/2024	12:23		Blue Ridge Elementary Sink Tap - Room E26	- 1	Water	Grab	х									17
6410-13-FD	7/11/2024	12:29		Blue Ridge Elementary Sink Tap - Teacher's Lounge Lower Level	- 1	Water	Grab	x									13
6410-14-FD	7/11/2024	12:31		Blue Ridge Elementary Ice Machine - Teacher's Lounge		Water	Grab	×									14
Relinquied by: (Signature	e)	Date:		R	eceived b	y: (Signa	ature)		Da	ate:	]			Rem	arks:		
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AXIOM Service Professionals PM: Carolyn Jackson

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Page 7 of	ton	Q	600 E. 17th St. S         3012 Ansborough Ave           Newton, IA 50208         Waterloo, IA 50701           Phone: 641-792-8451         Phone: 319-235-4440					,	🔨 Ka	85 S St. Pau ansas City, H none: 913-3	<s 66105<="" td=""><td></td><td colspan="3">205 E Van Buren St Centerville, IA 52544 Phone: 641-437-7023</td></s>		205 E Van Buren St Centerville, IA 52544 Phone: 641-437-7023			
LABŐRA				- FIONE. 041-792-04	JI <u> </u>		ne. 319-	235-4440			ione: 913-3.	21-7850		Phone: 641-437-70	23	
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PRINT OR TYPE INFO B	,		REPO	ORT TO:				·		BILL	τ <u>Ω</u> .					
SAMPLER: Jeff Hurst				NAME: Jeff H				NAME: Jeff Hurst								
SITE NAME: Blue Ridge Elementary				CO. NAME:				CO. NAME:								
ADDRESS: 6410 Blue Ridge Blvd				ADRESS: PO Bo				ADDRESS: PO Box 47166								
CITY/ST/ZIP: Raytown, Missouri 64133			CITY/ST/ZIP: Kansas City, Missouri 64188							CITY/ST/ZIP: Kansas City, Missouri 64188						
PHONE:			PHONE: 816-678-7894							PHONE: 816-678-7894						
		1	EMAIL: jeffh@axiomservicepros.com								EMAIL: jeffh@axiomservicepros.com					
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CLIENT SAMPLE #	DATE		TIME		#	MA	GR	Lead						Sample Condition	n Sample #	
6410-15-FD	7/11/2024	12:36	S	Blue Ridge Elementar Sink Tap - Triple Sink		Water	Grab	x							3+61153-15	
6410-16-FD	7/11/2024	12:39	S	Blue Ridge Elementar Sink Tap - Tilt Skillet		Water	Grab	x							16	
6410-17-FD	7/11/2024	12:40	E	3lue Ridge Elementar Sink Tap - Prep Sink	y - 1	Water	Grab	x							17	
6410-18-FD	7/11/2024	12:44	ES	Blue Ridge Elementar Sink Tap - Clinic	y - 1	Water	Grab	x							18	
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CHAIN OF CUSTODY RECORD



**AXIOM Service Professionals** PM: Carolyn Jackson

Appendix D Photo Log



7/11/2024 - 6410-3 - Blue Ridge Elementary -Near Room 106

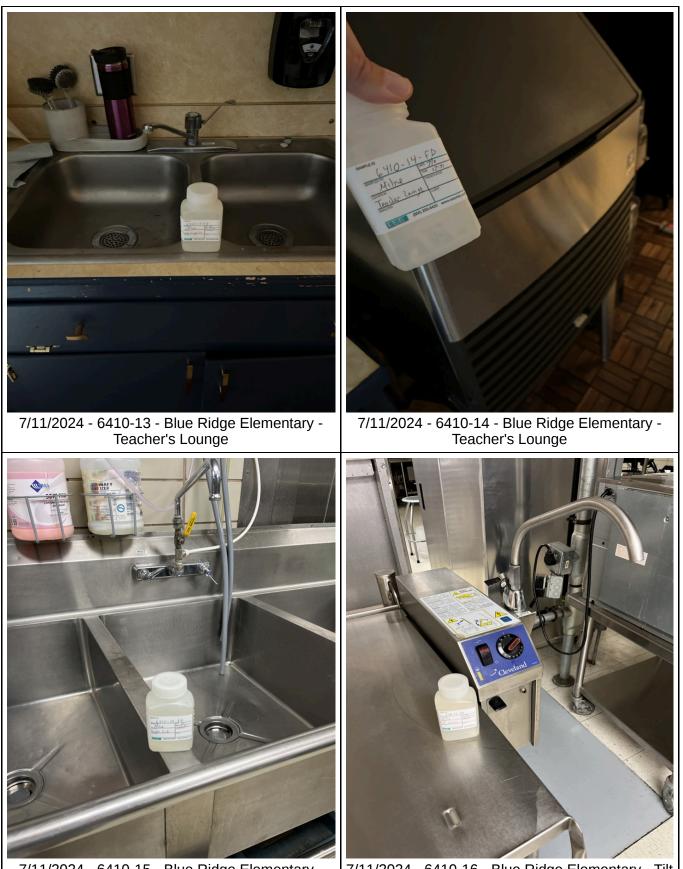
7/11/2024 - 6410-4 - Blue Ridge Elementary -Near Room 211



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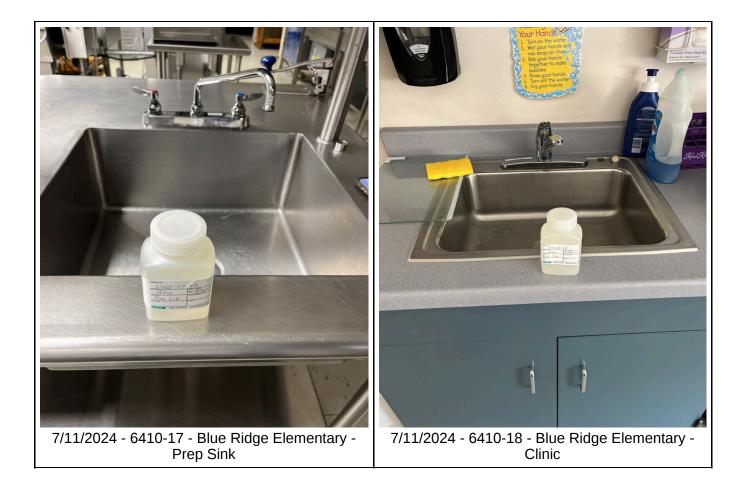


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7/11/2024 - 6410-15 - Blue Ridge Elementary -Triple Sink

7/11/2024 - 6410-16 - Blue Ridge Elementary - Tilt Skillet



# Appendix E Source Identification Diagram

# ASP was provided sample locations by Raytown School District

(Please note that no sampling location maps are included in this report as floor plans were not supplied to ASP for this sampling event.)