

SCOTT A. THOMPSON **Executive Director**

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT Governor

February 22, 2022

Tobi Kula, Principal Arrowhead Elementary 915 W Norman St Broken Arrow, OK 74102

Re: Sample Results, Lead Testing of Drinking Water Arrowhead Elementary

Dear Principal Kula,

Please find enclosed with this letter a copy of the results from the first round of testing of drinking water for lead that was conducted at Arrowhead Elementary. Overall, 37 outlets were tested, leading to 74 total samples being sent to the lab. Two samples were drawn from each outlet, a first draw sample (indicative of lead present in the faucet or tap) and a 30-second flush sample (indicative of the presence of lead in interior plumbing lines). To help visualize where each fixture is located, I have included maps at the end of this letter.

- Forty-one (41) samples had **no** detectable level of lead.
- Twenty-nine (29) samples had detectable lead between 1 and fifteen (15) micrograms/Liter.
- Four (4) samples had detectable lead equal to or above fifteen (15) micrograms/Liter.

Room Description	Outlet Description	Lead Results: First Draw / Flush (in micrograms/Liter)
	Below	
Nurse Office	Nurse Sink	1.1 / < 1.0
Kitchen	Kitchen Faucet #1 (Back wall by clock)	2.0 / < 1.0
Kitchen	Kitchen Faucet #3 (Hand wash sink in corner area)	2.8 / < 1.0
Below (Borderline)		
Room #140 (Science Storage)	Classroom Faucet #2 (with cabinets right side of room)	6.1 / 1.6
Hallway (outside Room 112)	Water Cooler #1 (right of water coolers)	3.9 / 7.2
Hallway (outside Room 112)	Water Cooler #2 (middle of water coolers)	6.5 / 7.3
Hallway (outside Room 112)	Water Cooler #3 (left of water coolers)	8.9 / 7.2
Room #140 (Science Storage)	Classroom Faucet #1 (with cabinets left side of room)	10.5 / 2.3
Room #121	Bathroom Faucet	11.1 / 2.2

Room #140 (Science Storage)	Classroom Faucet #3 (with cabinets right side of room)	12.8 / 1.6
Room #112	Bathroom Faucet	12.9 / 2.5
Room #116	Bathroom Faucet	14.3 / 2.6
	Above	
Room #140A (Closet)	Classroom Faucet #2 (large gray sink)	15.0 / 1.2
Room #140A (Closet)	Classroom Faucet #1 (small white sink)	15.1 / 2.3
Room #125	Bathroom Faucet	29.4 / 2.2
Room #113	Classroom Faucet	43.3 / 5.6

For each fixture with lead results **equal to or over fifteen (15) micrograms/Liter of lead**, we recommend one or more of the following:

- Take the fixture out of service or make it inaccessible to students and staff.
- Determine source of lead by comparing first draw and flush sample results (the fixture or plumbing system).
- Replace fixtures with certified lead-free fixtures (NSF Standard 61) or remove the fixtures permanently if they are not needed.
- If replacing fixtures, schools should contact DEQ to discuss steps to take to ensure the water is safe to drink before returning it to use.
- Replace internal plumbing system components, if necessary, to reduce lead exposure or install National Sanitation Foundation (NSF) certified filters to remove lead and replace as recommended by the manufacturer (only as an interim measure and if absolutely necessary).

For each fixture with lead results between one (1) microgram/Liter and fifteen (15) micrograms/Liter, we recommend one or more of the following:

- Establish a required flushing schedule for each room at the start of each instructional day.
- Replace fixtures serving water with detectable lead levels above five (5) micrograms/Liter with certified lead-free fixtures (NSF Standard 61) or remove the fixtures permanently if they are not needed.
- Clean aerators regularly to remove particulates that may contain lead.
- Install a NSF certified filter to remove lead and replace it as recommended by the manufacturer.
- Permanently convert these fixtures to hand wash only stations.
- If replacing fixtures, schools should contact DEQ to discuss steps to take to ensure the water is safe to drink before returning it to use.

Once you have read over the letter and have ideas for remediation actions, please contact me and we can discuss. Once remediation action plans have been finalized, we can move forward and fix the problem outlets and re-sample.

I have enclosed a flushing protocol from the Environmental Protection Agency's "3Ts" program (found in Module 6: Taking Action). As a friendly reminder, please make sure to review Module 1: Communicating the 3Ts for guidance on how to communicate these results to stakeholders. Stakeholder communication is a federal requirement for all participating schools and childcare centers.

Sample Results, Lead Testing of Drinking Water Arrowhead Elementary February 22, 2022 Page 3 of 5

The Capacity Development Section stands ready to assist you in any way you might need. Please contact me at 405-702-8106 at any time should you have questions or need further assistance.

Sincerely,

Lisa Maslanka, Environmental Programs Specialist

Capacity Development Section

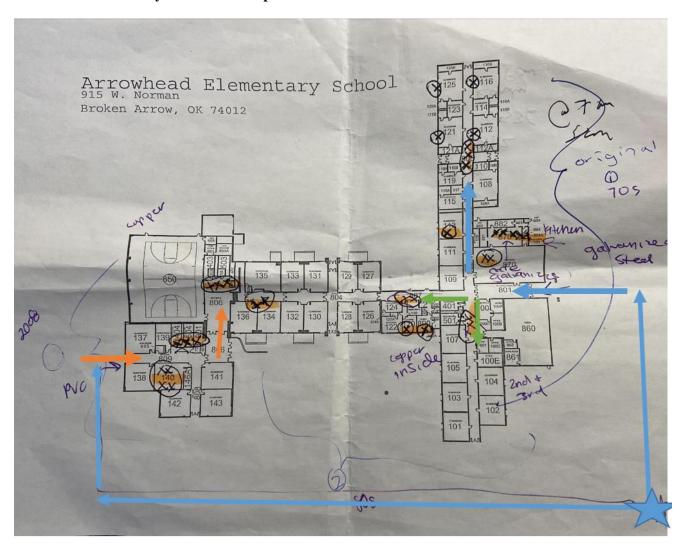
Water Quality Division

Lisa Mas lente

CT/LM/FL

Sample Results, Lead Testing of Drinking Water Arrowhead Elementary February 22, 2022 Page 4 of 5

Arrowhead Elementary Water Line Map



Sample Results, Lead Testing of Drinking Water Arrowhead Elementary February 22, 2022 Page 5 of 5

Arrowhead Elementary Lead in Drinking Water Results

