campaign for lead free water

DC Water Lead-in-Water Sampling Results 2019 & 2020

Yanna Lambrinidou, PhD

June 2021

Lead and Copper Rule (LCR) Compliance Sampling

Address:



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

3900 Donaldson Place, NW Washington, DC 20016

LEAD AND COPPER MONITORING PROGRAM

Thank you for participating in the Lead and Copper Compliance Monitoring Program administered by the District of Columbia Water and Sewer Authority (DC Water). Your participation helps us monitor the quality of drinking water in the District. Your test results are submitted to the Environmental Protection Agency Region III to ensure the District's drinking water quality meets regulatory requirements.

Please read and follow these instructions carefully:

STEP | Six Hour Water Stagnation Period*

Do not use any water in your household for at least six hours before collecting water samples. We cannot process the samples if water is not stagnated for the required period of time.

* Water Stagnation - No water use, including flushing toilets, showering, dishwashing, laundry and any other household water use. Be sure water appliances, such as icemakers, lawn sprinkler systems and HVAC humidifiers are shut off.



Write the date and time the water was last used on the Water Sampling Form (reverse-side)

STEP 2 Water Sampling (two sampling bottles provided)

Collect water samples from the kitchen cold water tap. Both samples must be collected from the same cold water tap.

If a water treatment unit or filter is attached to your plumbing system or faucet, remove the filter or bypass the unit before sampling.

Sample Bottle I

Open the cold water faucet at a normal flow rate and immediately fill the bottle to the top.

Immediately turn off water and tightly cap the sample bottle.

Fill out the bottle label - Collect Date, Collect Time, Collector (your name), Address, and circle 1st Draw. Leave Sample # blank.





Sample Bottle 2

Open the cold water faucet at a normal flow rate, and fill, dump, and refill the second sample bottle three times. Fill the bottle for the fourth time, and tightly cap the sample bottle. Turn off the faucet.

Fill out the bottle label - Collect Date, Collect Time, Collector (your name), Address, and circle 2nd Draw. Leave Sample # blank.







Sample Bottle 2

STEP 3 COMPLETE THE WATER SAMPLING FORM

Please answer all the questions and sign the form. We cannot process the samples if the form is incomplete.

STEP 4 BOTTLE PICK UP

Email leadtest@dcwater.com or call 202-612-3440 to schedule a pickup date. Place the bottles and this completed form in the bag on your front porch or where the kit was dropped off.

Water sampling instructions

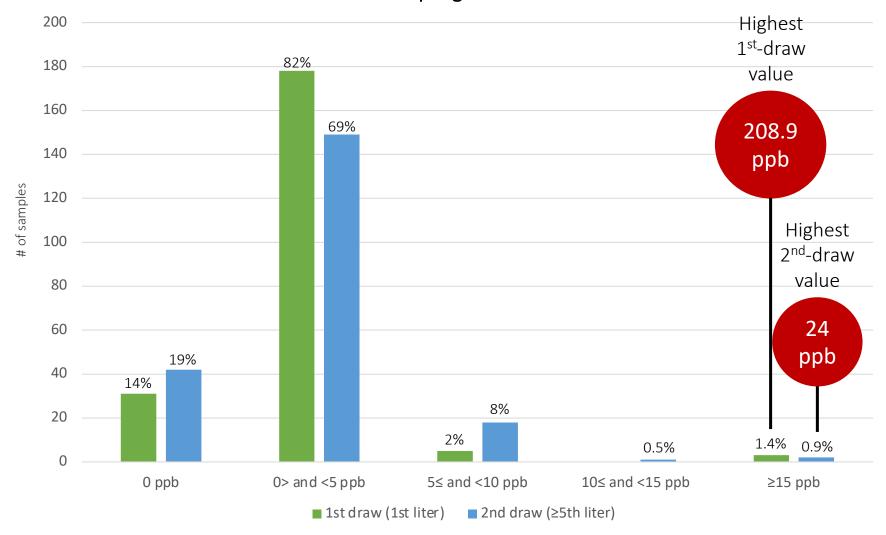
These sampling instructions do not tell residents to turn off the faucet while dumping the 2nd-, 3rd-, and 4th-liter samples. If residents leave the tap running during dumping, the last sample will not represent the 5th liter. In some cases, it may represent water that did not sit in the lead service line during stagnation. This means that DC Water's 2nd-draw measurements may be underestimations of lead-inwater levels in lead service line homes.

This collection method would be inappropriate for LCR 90th-percentile calculations because it would risk routine failure to capture worstcase lead-in-water levels in lead service line homes

Jan-Jun 90th percentile = 2.2 ppb Jul-Dec 90th percentile = 2.3 ppb

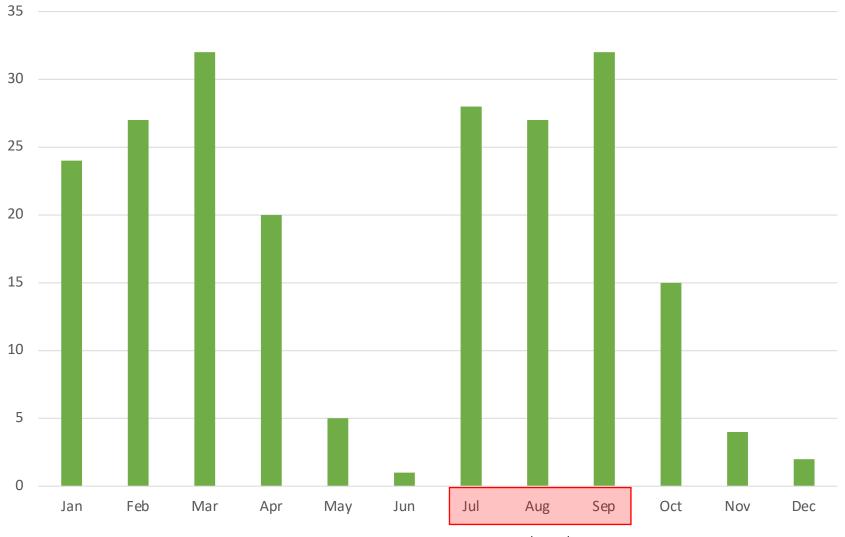
(reported to EPA Region 3 for regulatory compliance purposes)

LCR sampling results 2019



- Number of sampling events = 217
- For five sampling events there is no 2nddraw value
- 25 (11.5%) sampling events yielded 0 ppb in both samples
- 192 (88.5%) sampling events showed detectable levels of lead in one or both samples
- 165 (76%) sampling events showed detectable levels of lead in both samples
- No sampling event yielded ≥15 ppb in both samples

Number of 1st-draw samples per month



Systems on reduced monitoring must take all samples in Jul-Sep

<u>Notes</u>

• Number of 1st-draw samples by season:

- Percent of 1st-draw samples in warmest months as per LCR (Jul-Sep): 40%
- Percent of 1st-draw samples in DC's warmest months (Jun-Aug): 26%
- Percent of 1st-draw samples in DC's coldest months (Dec-Feb): 24%



CEO's Message

Dear Customers,

I am proud to present this year's annual water quality report that details the outstanding quality of the District's drinking water.

Every day we deliver close to 100 million gallons of life's most essential resource—fresh water—to homes, schools, restaurants and dozens of other types of customers each day.

Providing high quality water and reliable sanitation services to our customers day in and day out is our fundamental mission, but our duty goes further than that.

We take care of customers, we protect the environment and we maintain infrastructure that keeps this city thriving. Water connects us all and the importance of safe, clean water cannot be overstated.

Our team of more than 1,000 dedicated employees works hard to ensure our system continuously delivers safe drinking water. Around the clock monitoring and testing shows that the District's drinking water is exceptional: better than the standards set forth by the federal Safe Drinking Water Act.

We're proud that our water monitoring programs go beyond what is required—last year we performed more than 40,000 quality tests across the city. Extensive testing confirms that the tap water we deliver to D.C. is clean, safe and healthy.

Please take this opportunity to learn more about the District's drinking water quality in this report, and our efforts to protect the environment.



"Our team of more than 1,000 dedicated employees works hard 24-hours a day, 7 days a week to ensure our system continuously delivers the safe clean water to you."

DAVID L. GADIS I CEO

DC Water is here for you—I encourage you to call, email, or reach out to us via social media if you have any questions, concerns or suggestions. Thank you and be safe.

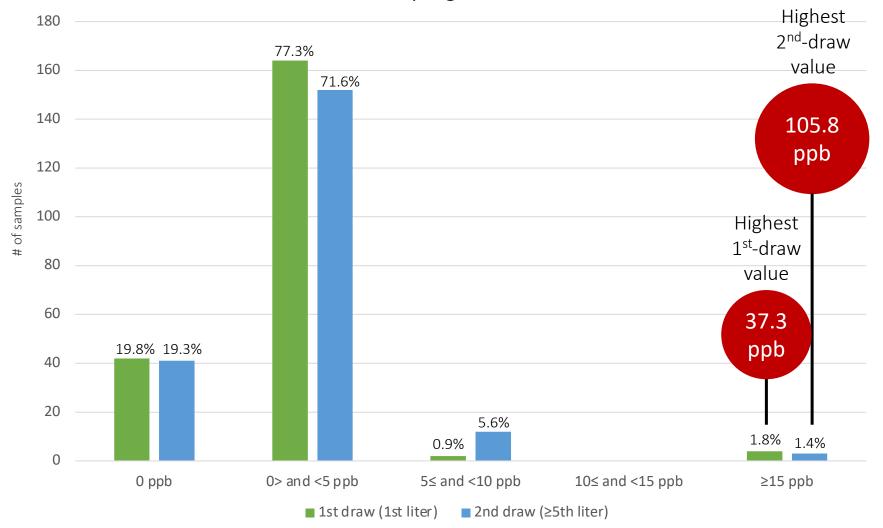
Sincerely.

David L. Gadis, CEO

Jan-Jun 90th percentile = 1.8 ppb Jul-Dec 90th percentile = 2.8 ppb

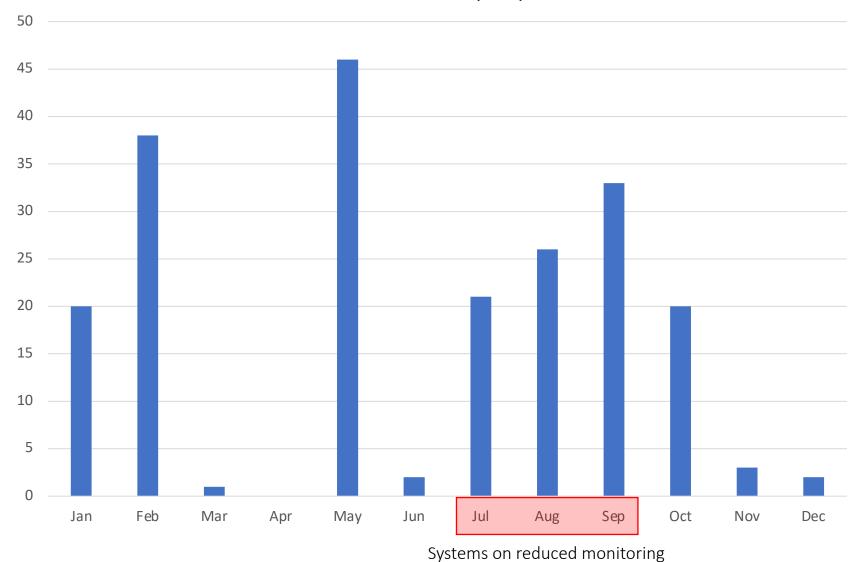
(reported to EPA Region 3 for regulatory compliance purposes)

LCR sampling results 2020



- Number of sampling events = 212
- For four sampling events there is no 2nddraw value
- 33 (15.5%) sampling events yielded 0 ppb in both samples
- 179 (84.5%) sampling events showed detectable levels of lead in one or both samples
- 162 (76.4%) sampling events showed detectable levels of lead in both samples
- 1 (0.4%) sampling event yielded ≥15 ppb in both samples
 - 1. 37.3 ppb and 16.1 ppb

Number of 1st-draw samples per month



must take all samples in Jul-Sep

<u>Notes</u>

• Number of 1st-draw samples by season:

- Percent of 1st-draw samples in warmest months as per LCR (Jul-Sep): 38%
- Percent of 1st-draw samples in DC's warmest months (Jun-Aug): 23%
- Percent of 1st-draw samples in DC's coldest months (Dec-Feb): 28%



CEO's Message

Dear Customers,

I am proud to present this year's Water Quality Report that details the outstanding quality of the District's drinking water.

The global COVID-19 pandemic has reinforced the importance of having access to clean and safe drinking water, and it is a testament to the team here at DC Water that despite the challenges we never faltered in our commitment to deliver high quality water to your tap every day.

Our 1,100 employees recognize the critical role they play in protecting public health. They have responded with tremendous dedication to our mission to ensure safe drinking water is always available for consumption, washing your hands and other daily activities.

Last year we performed more than 40,000 quality tests across the city. That testing and around the clock monitoring shows that the District's drinking water is exceptional: clean, safe, healthy and better than the standards set forth by the federal Safe Drinking Water Act.

It is our privilege to provide you with water service. I hope you will take this opportunity to learn more about the quality of that water in this report.

Should you have any questions, concerns or suggestions, I encourage you to call, email, or reach out to us via social media. Thank you and be safe.

Sincerely,

W.Z.J.

David L. Gadis Chief Executive Officer



"Extensive testing confirms that the tap water we deliver to our customers in the District is clean, safe and healthy."

- DAVID L. GADIS, CHIEF EXECUTIVE OFFICER Customer-Initiated Sampling



Please read instructions carefully and complete all questions from this form.

on on use any water in your household for at least six hours. No Water Use — Flushing toilets, showering, dishwashing, laund the sure water appliances, such as icemakers, lawn sprinkler system and you check for and fix all household leaks? Yes dritte the date and time you last used any water. Day the formal sampling (Immediately after Step 1) ollect water samples from the kitchen cold water faucet. Bo a water treatment unit or filter is attached to your plumb ampling. If necessary, collect water from a bathroom or ot Sample Bottle 1	dry or any other household water use. ss and HVAC humidifiers are shut off. No tite: oth samples must be collected from the same faucet. sing system or faucet, remove or bypass it before
ite sure water appliances, such as icemakers, lawn sprinkler system and you check for and flx all household leaks? Yes //rite the date and time you last used any water. Da STEP 2 Water Sampling (Immediately after Step 1) ollect water samples from the kitchen cold water faucet. Bo a water treatment unit or filter is attached to your plumb ampling. If necessary, collect water from a bathroom or ot	ns and HVAC humidifiers are shut off. No tee: oth samples must be collected from the same faucet. sing system or faucet, remove or bypass it before
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Trite the date and time you last used any water. Date TEP 2 Water Sampling (Immediately after Step 1) ollect water samples from the <u>kitchen</u> cold water faucet. But a water treatment unit or filter is attached to your plumb ampling. If necessary, collect water from a bathroom or ot Sample Bottle 1	oth samples must be collected from the <u>same faucet</u> . sing system or faucet, remove or bypass it before
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Sample Bottle 1	ther cold water tap.
	FILL WITH COLD WATER FILL OUT LABEL
Turn on the cold water faucet and immediately fill the bottle to the	
top. Immediately turn off water and tightly cap the sample bottle	
Fill out the bottle label – Collect Date & Time, Collector (your na	ime),
Address, and circle 1st Draw. Leave Sample#blank.	
	Sample Bottle 1 Sample Bottle 1
Sample Bottle 1 Collection: Date: Faucet	
Date: Faucet	t Location:
Sample Bottle 2 (After Sample 1) Turn on the	FILL, DUMP, REFILL DLD TAP AT THREE TIMES; FILL FLOW RATE A FOURTH TIME FILL OUT LABEL
	FLOW RATE A FOURTH TIME FILL OUT LABEL
fill, dump, and refill the second sample bottle <u>three</u> times. Fill the bottle for the fourth time and tightly	
cap the sample bottle. Turn off the faucet.	
Ell and the Cill Date To	
Fill out the bottle label – Collect Date & Time, Collector (your name), Address, and circle 2nd	
Draw. Leave Sample # blank.	Sample Bottle 2 Sample Bottle 2
Sample Bottle 2 Collection:	Sample Bottle 2 Sample Bottle 2
Date: Faucet	t Location:
TER 3. Computer All Quanties of From This Fo	
TEP 3 Complete All Questions From This Fo	orm and Leave Contact Information Below
ame;	LABORATORY USE ONLY
ddress (Apt/Suite):	
	Program Code: (DS) Post-LSR

STEP 4 Schedule Bottle Pick Ur

I have read the above directions and collected the water

Immediately, place the bottles AND this completed form in the DC Water bag outside your door. Email (leadtest@dcwater.com) or call the Drinking Water Division (202-612-3440) for pick up. DC Water will pick up the bottles within 3 business days.

Relinquished By

Bottles must be picked up within one week of collecting water samples or the laboratory will not accept the samples. You will receive your lead test results approximately four to six weeks after bottle pick up.

DCWATER-COM DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

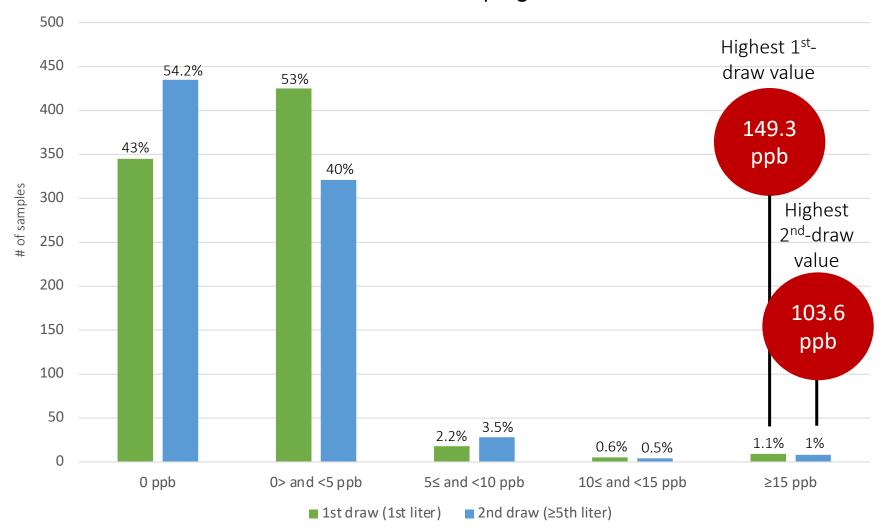
Water sampling instructions

These sampling instructions do not tell residents to turn off the faucet while dumping the 2nd-, 3rd-, and 4th-liter samples. If residents leave the tap running during dumping, the last sample will not represent the 5th liter. In homes with a lead service line, this sample may represent water that did not sit in the lead service line during stagnation. This means that DC Water's 2nd-draw measurements may be underestimations of lead-in-water levels in lead service line homes.

Jan-Jun 90th percentile = 1.6 ppb Jul-Dec 90th percentile = 1.9 ppb

(not reported)

Customer-initiated sampling results 2019

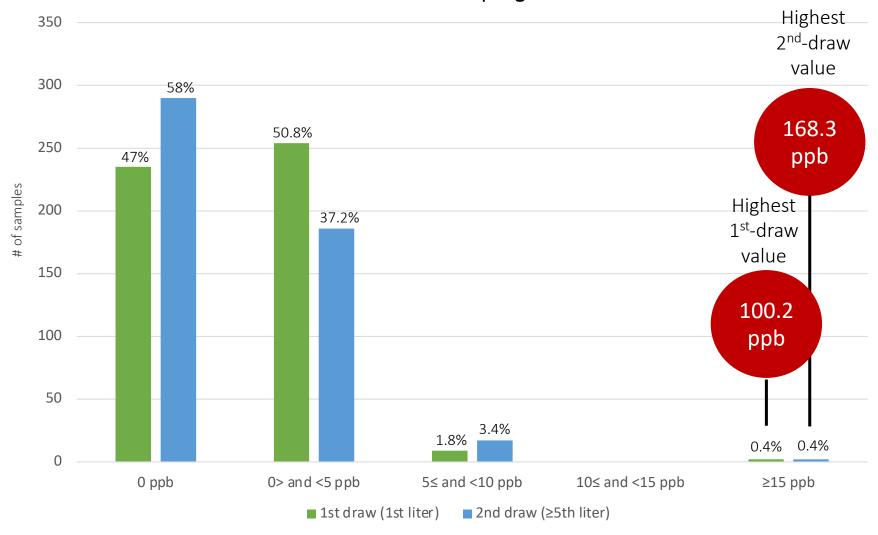


- Number of sampling events = 802
- For six sampling events there is no 2nddraw value
- 322 (40%) sampling events yielded 0 ppb in both samples
- 480 (60%) sampling events showed detectable levels of lead in one or both samples
- detectable levels of lead in both samples
- 4 (0.5%) sampling events yielded lead levels ≥15 ppb in both samples:
 - 1. 109.5 ppb and 46.2 ppb
 - 2. 134.4 ppb and 85.8 ppb
 - 3. 18 ppb and 21.1 ppb
 - 4. 52.1 ppb and 103.6 ppb

Jan-Jun 90th percentile = 1.4 ppb Jul-Dec 90th percentile = 1.9 ppb

(not reported)

Customer-initiated sampling results 2020



- Number of sampling events = 500
- For five sampling events there is no 2nd-draw value
- 211 (42.2%) sampling events yielded 0 ppb in both samples
- 289 (57.8%) sampling events showed detectable levels of lead in one or both samples
- 181 (36.2%) sampling events showed detectable levels of lead in both samples
- No sampling event yielded ≥15 ppb in both samples

Acknowledgment

I would like to thank Elin Warn Betanzo, Safe Water Engineering LLC; Valerie Baron, NRDC; Paul Schwartz, Campaign for Lead Free Water; and the office of DC Councilmember Mary Cheh for their assistance.

The analysis and any errors are my own.