



City of Dalworthington Gardens

2021 Annual Drinking Water Quality Report

(Consumer Confidence Report)

City of Dalworthington Gardens

Water Department

817.274.7368

817.275.1234 after hours

Administrative Office:

City of Dalworthington Gardens City Hall

2600 Roosevelt Dr.

The Water Department is part of the City of Dalworthington Gardens city government. The City Council meets the third Thursday of each month. The meetings are at 7p.m. Check the website online to make sure a meeting is not cancelled or rescheduled.

Frequently asked questions about this report

Why am I receiving this report?

In 1996, Congress amended the Safe Drinking Water Act to include a requirement that water utilities annually notify customers about their drinking water quality.

The law is quite specific regarding what information must be included.

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

For more information regarding this report contact Lola Hazel, City Administrator at 817.274.7368.

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al teléfono 817.274.7368.

Sources of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 800.426.4791.

Contaminants that may be present in source water include:

-Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

-Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

-Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

-Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

-Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns.

How is this report distributed?

The direct web address of the CCR Report will be listed on the monthly bill mailed to all utility accounts, posted on the city website: www.cityofdwwg.net.

Information for immunocompromised people

The following information is not meant to alarm or scare you. It is meant to make you aware. The exact wording shown below is required by state regulations.

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immunocompromised persons, such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections.

You should seek advice about drinking water from your physician or health care provider.

Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Source water assessments

The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Lola Hazel, City Administrator at 817.274.7368.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <http://www.tceq.texas.gov/gis/swaview>.

Further details about sources and source water assessments are available in Drinking Water Watch at the following URL: <https://dww2.tceq.texas.gov/DWW/>.

Where do we get our drinking water?

Dalworthington Gardens' drinking water during 2021 consisted of 100% surface water. City of Dalworthington Gardens purchases treated **surface** water from the City of Fort Worth and the City of Arlington. The Fort Worth main comes into the Dalworthington Gardens pump station located at 3214 Arkansas Lane. The Arlington main comes into the Dalworthington Gardens system at the intersection of Pleasant Ridge and Kay Lynn Drive.

The City of Fort Worth Drinking Water Quality Report is included in this report. An electronic copy is available on the City of Fort Worth website:

<https://www.fortworthtexas.gov/departments/water/drinking-water/report>

The City of Arlington Drinking Water Quality Report is included in this report. An electronic copy is available on the City of Arlington website:

<https://viewer.joomag.com/consumer-confidence-report-fy2021/0571918001651266755?short&>

The City of Fort Worth Water Quality Data

Drinking Water Quality Test Results

Compound	Measure	Year	Violation	MCL	Yötur wa er	Public Health Goal	Common Sources of Substance
Turbidity	NTU	2021	Nb	TT=1 TT= Lowest monthly% of samples s 0.3 NTU	0.7 99.3%	NIA	Soil runoff (Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of the filtration system.)

Compound	Year	Violation	MCL	Yötur wa er	Range	Public Health Goal	Common Sources of Substance
Total Coliforms (including fecal coliform ft E.coli)	2021	Nb	TT = 5% of monthly samples are positive	20%	0 to 2%	0	Coliforms are naturally present in the environment as well as feces; fecal coliforms and E coli only come from human and animal fecal waste.

Compound	Measure	Year	Violation	MCL	Yötur wa er	Range	Public Health Goal	Common Sources of Substance
Beta/photon emitters	pCi/L	2021	Nb	50	7	7 to 7	0	Decay of natural and man-made deposits
Uranium	ppb	2021	Nb	30	1.1	1.1 to 1.1		Erosion of natural deposits
Arsenic	ppb	2021	Nb	10	1.5	0 to 1.5	0	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Atrazine	ppb	2021	Nb	3	0.1	0 to 0.2	3	Runoff from herbicide used on row crops
Barium	ppm	2021	Nb	2	0.07	0.05 to 0.07	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	ppb	2021	Nb	100	1.8	0 to 1.8	100	Erosion of natural deposits; discharge from steel and pulp mills
Cyanide	ppb	2021	Nb	200	197	66.2 to 197	200	Discharge from plastic and fertilizer factories; discharge from steel and metal factories
Fluoride	ppm	2021	Nb	4	0.68	0.18 to 0.68	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	ppm	2021	Nb	10	0.66	0.13 to 0.66	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Bromate	ppb	2021	Nb	10	4.23	0 to 13.6	0	By-product of drinking water disinfection
Haloacetic Acids	ppb	2021	NIA	60	12.4	2.6 to 15.9	N/A	By-product of drinking water disinfection
Total Trihalomethanes	ppb	2021	N/A	80	22.4	1.05 to 22.3	N/A	By-product of drinking water disinfection

Compound	Measure	Year	Violation	MRDL	Yötur wa er	Range	Public Health Goal	Common Sources of Substance
Chloramines	ppm	2021	Nb	4	3.4	0.6 to 4.6	4	Water additive used to control microbes

Compound	MCL	Year	Violation	High	Low	Average	Public Health Goal	Common Sources of Substance
Total Organic Carbon	TT=% removal	2021	Nb	1	1	1	N/A	Naturally occurring

It is used to determine disinfection by-product precursors. Fort Worth was in compliance with all monitoring and treatment technique requirements for disinfection by-product precursors. A removal ratio of 1 in Specific Ultra Violet Absorbance calculations is considered passing.

Corrosion Control

To meet the requirements of the Lead and Copper Rule, Fort Worth achieves corrosion control through pH adjustment.

Unregulated Contaminants

Unregulated contaminants are those for which EPA has not established drinking water standards. The following items are all disinfection by-products that are not regulated individually, but as two groups - Total Trihalomethanes and Haloacetic Acids. The chart on the previous page lists the group levels.

Compound	Measure	Year	MRDL	Public Health	Average	Range of Detects	Common Sources of Substance
Bromoform	ppb	2021	Not regulated	0	0.5	0 to 3.69	By-products of drinking water disinfection; regulated as a group called Total Trihalomethanes
Bromodichloromethane	ppb	2021	Not regulated	0	2.55	2.48 to 6.91	
Chloroform	ppb	2021	Not regulated	70	2.43	2.5 to 10.6	
Dibromochloromethane	ppb	2021	Not regulated	60	2.33	2.02 to 6.61	
Dibromoacetic Acid	ppb	2021	Not regulated	N/A	1.24	1.2 to 4	By-products of drinking water disinfection; regulated as a group called Haloacetic Acids
Dichloroacetic Acid	ppb	2021	Not regulated	0	3.54	3.80 to 9.4	
Monobromoacetic Acid	ppb	2021	Not regulated	N/A	0	0 to 0	
Monochloroacetic Acid	ppb	2021	Not regulated	70	0.68	1 to 2.3	
Trichloroacetic Acid	ppb	2021	Not regulated	20	0.14	0 to 2.4	

Secondary Constituents

These items do not relate to public health but rather to the aesthetic effects. These items are often important to industry.

Compound	Measure	Your water
Bicarbonate	ppm	99.9 to 138
Calcium	ppm	37.8 to 58.5
Chloride	ppm	13.7 to 36.7
Conductivity	µmhos/cm	296 to 470
pH	units	7.8 to 8.3
Magnesium	ppm	2.91 to 9.10
Sodium	ppm	15 to 29.9
Sulfate	ppm	22.6 to 40.8
Total Alkalinity as CaCO ₃	ppm	99.9 to 142
Total Dissolved Solids	ppm	149 to 249
Total Hardness as CaCO ₃	ppm	107 to 183
Total Hardness in Grains	grains/gallon	6 to 11

Microorganism testing shows low detections in raw water

Tarrant Regional Water District monitors the raw water at all intake sites for *Cryptosporidium*, *Giardia Lamblia* and viruses. The source is human and animal fecal waste in the watershed.

The 2021 sampling showed occasional low level detections of *Cryptosporidium*, *Giardia lamblia* and viruses in some but not all of the water supply sources. These are either deactivated or removed through disinfection and/or filtration.

Abbreviations used in tables

MCL: Maximum Contaminant Level - the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG: Maximum Contaminant Level Goal - the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL: Maximum Residual Disinfectant Level - the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG: Maximum Residual Disinfectant Level Goal - the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NIA - not applicable/does not apply

NTU - Nephelometric Turbidity Unit; a measure of water turbidity or clarity

pCi/L - Picocuries per liter; a measure of radioactivity

ppb - Parts per billion or micrograms per liter (µg/L)

ppm - Parts per million or milligrams per liter (mg/L)

TT: Treatment Technique - a required process intended to reduce the level of a contaminant in drinking water

TCEQ assesses raw water supplies for susceptibility

Fort Worth uses surface water from Lake Worth, Eagle Mountain Lake, Lake Bridgeport, Richland Chambers Reservoir, Cedar Creek Reservoir, Lake Benbrook and the Clear Fork Trinity River.

Fort Worth owns Lake Worth. The U.S. Army Corps of Engineers is responsible for Benbrook Lake. The other four lakes are owned and operated by Tarrant Regional Water District.

The Texas Commission on Environmental Quality completed an assessment of Fort Worth's source waters. TCEQ classified the risk to our source waters as high for most contaminants.

High susceptibility means there are activities near the source water or watershed that make it very likely that chemical constituents may come into contact with the

source water. It does not mean that there are any health risks present.

Tarrant Regional Water District, from which Fort Worth purchases its water, received the assessment reports.

For more information on source water assessments and protection efforts at our system, contact Stacy Walters at 817-392-8203.

Further details about the source-water assessments are available in the Texas Commission on Environmental Quality's Drinking Water Watch database at http://dww2.tceq.texas.gov/DWW/JSP/SWAP.jsp?tinwsys_is_number=5802&tinwsys_st_code=TX&wsnumber=TX2200012%20%20%20&DWWState=TX.

The following information pertains only to Aledo, Westover Hills and White Settlement.

Drinking water violation affected part of FW water system

Fort Worth had a non-acute drinking water violation in 2021. The violation affected only Fort Worth homes and businesses in the westside pressure planes, and three other cities - Aledo, Westover Hills and White Settlement.

The Westside Water Treatment Plant failed to meet the minimum treatment technique requirements for the month of March 2021. The Texas Commission on Environmental Quality classifies the violation as a failure to maintain microbial treatment.

The Westside plant uses membranes to achieve removal credits for *Cryptosporidium*, *Giardia lamblia* and viruses. To receive the removal credits, TCEQ requires that each membrane rack pass a direct integrity test (DIT) every seven days.

The DIT is performed by pressurizing air through the membrane modules and holding that pressure for a pre-established duration. If the pressure drops below a minimum value, the test fails. Then the utility places the rack off line and inspects each module, looking for broken fibers that may impact the filtration effectiveness.

The treatment technique violation occurred because eight days elapsed between the successful integrity test

and membrane rack #5 was in service for three days after a failed test.

The Westside Water Plant, is the only Fort Worth plant to use membranes in the treatment process. Unlike most drinking water membrane filtration plants, the Westside plant has a full conventional treatment process upstream of the membrane filters. The pre-membrane treatment includes using ozone for taste and odor control and disinfection, chemical mixing, settling and granular media filtration. After the membranes, final disinfection occurs prior to being pumped to the water distribution system for use by our customers.

The other four membrane racks had successful DIT performed within the required timeframe and without any failures. Both the conventional granular filters and membrane filters recorded exceptionally good water quality levels throughout the period in question. The effectiveness of filters is measured by the turbidity (clarity) of the water. All routine bacteriological samples taken in the westside pressure planes on March 2, 3, 8, 10, 11, 15 and 25 passed.

The utility retrained all of the Westside plant's operations staff on how to respond to alarms pertaining to the membrane system.

City of Arlington 2021 Water Quality Report

Definitions to help you understand the tables.

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

< (xxx) - less than the amount listed.

≥ (xxx) - equal to or greater than the amount listed

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

ND (Not detected) - No level of the parameter was detected.

NA - Not applicable

NE - Not established

NTU (Nephelometric Turbidity Units) - A unit used when measuring turbidity, a measure of the cloudiness of the water.

pCi/L (picocuries per Liter) - A measure of radioactivity in the water.

ppb (parts per billion, ug/L) - A unit of measurement roughly equal to 1 drop in 100,000 gallons.

ppm (parts per million, mg/L) - A unit of measurement roughly equal to 1 drop in 100 gallons.

TT (Treatment Technique) - A required process intended to reduce the level of a contaminant in drinking water

Level 1 Assessment - a study of the water system to identify possible problems and determine (if possible) why total coliform bacteria were found.

Level 2 Assessment - a very detailed study of the water system to identify potential problems and determine (if possible) why an E. Coli Maximum Contaminant Level (MCL) violation has occurred and/or why total coliform bacteria were found on multiple occasions.

Raw Water - water that has not yet been treated for consumption

Substances that are regulated or are required to be monitored and were detected in Arlington tap water in 2021

Substance	Units	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Possible source of substance
Atrazine	ppb	0.05	ND	0.10	3	3	Runoff from use as a common herbicide and pesticide
Barium	ppm	0.041	0.041	0.041	2	2	Discharge from metal and chemical factories, well drilling operations
Cyanide	ppb	125.5	111	140	200	200	Discharge from metal and chemical factories
Bromate ¹	ppb	<5	<5	<5	10	10	Byproduct of drinking water disinfection
Fluoride	ppm	0.228	0.112	0.564	4	4	Water additive promoting strong teeth
Chromium	ppb	0.7	ND	1.40	100	100	Discharge from metal and chemical factories
Nitrate	ppm	0.455	0.155	0.883	10	10	Runoff from fertilizers or livestock feedlots
Nitrite	ppm	<0.05	ND	0.219	1	1	Runoff from fertilizers or livestock feedlots
Chloramines ²	ppm	3.1	2.5	3.3	MRDL=4	MRDLG=4	Water additive used to control microbes
Total Trihalomethanes ²	ppb	6.6	5.5	7.3	80	NA	By-product of drinking water disinfection
Haloacetic Acids (HAA5) ²	ppb	5.2	4.6	5.8	60	NA	By-product of drinking water disinfection

¹ Compliance is based on a calculated running annual average of the quarterly averages.

² Compliance is based on a calculated annual average of all samples at routine sites.

Total Organic Carbon (TOC)

Source	Water Source	Average Level	Minimum Level	Maximum Level	units	Possible source of substance
Total Organic Carbon (TOC) PB Plant	Raw	5.2	4.7	6.3	ppm	Naturally present in the environment PB = Pierce Burch Treatment Plant JK = John Kubala Treatment Plant
	Drinking	3.1	2.7	3.7	ppm	
		1.2	1.0	1.4	removal ratio*	
Total Organic Carbon (TOC) JK Plant	Raw	5.0	4.5	5.6	ppm	
	Drinking	2.8	2.5	3.1	ppm	
		1.3	1.0	1.5	removal ratio*	

* removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed. Compliance is based on a running annual average of ratio's. If the annual average removal ratio is greater than or equal to 1.0, the system is in compliance.

Radioactive substances

Substance	Units	PB Plant (2017)	JK Plant (2018)	MCL	MCLG	Possible source of substance
Radium 228	pCi/L	1.43	<1.0	5	NA	Decay of natural and man-made deposits
Beta/Photon Emitters	pCi/L	4.8	4.5	50	NA	
Gross Alpha Particle Activity	pCi/L	<2.0	<3.0	15	NA	

Microbiological substances

Tarrant Regional Water District analyzed all **raw water sources** for cryptosporidium and there were no detections of cryptosporidium for any month in 2021. Cryptosporidium is a pathogen which may be found in water contaminated by feces. Although filtration removes cryptosporidium, it cannot guarantee 100% removal.

Turbidity

	Units	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Possible source of substance
Highest single turbidity measurement	NTU	0.09	0.03	0.95	TT = 1.0	0	Soil runoff
Percentage of samples less than 0.3 NTU	%	99.01%	97.77%	100.00%	TT = 95%		

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Other Substances of Interest

Substance	Units	Average Level	Minimum Level	Maximum Level
Calcium	ppm	32.0	27.0	41.0
Chloride	ppm	19.0	12.0	26.0
Magnesium	ppm	3.70	3.26	4.13
pH	pH units	7.97	7.64	8.22
Potassium	ppm	4.28	4.19	4.36
Sodium	ppm	22.4	19	25.7
Sulfate	ppm	39.2	36.9	42.8
Alkalinity, Total	ppm	85.8	73.1	104
Total Dissolved Solids	ppm	178	140	218
Hardness, Total (as CaCO3)	ppm	98.6	84	116
	grains/gallon	5.8	4.9	6.8

Water quality test results

Definitions/Abbreviations – The following tables contain scientific terms and measures, some of which may require explanation.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

MCL – Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG – Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL – Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG – Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

MFL: Million fibers per liter (a measure of asbestos).

mrem: millirems per year (a measure of radiation absorbed by the body).

na: not applicable.

City of Dalworthington Gardens
2021 Annual Drinking Water Quality Report
(Consumer Confidence Report)

NTU: Nephelometric turbidity units (a measure of turbidity).

pCi/L: Picocuries per liter (a measure of radioactivity).

ppb: Micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water.

ppm: Milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.

ppq: parts per quadrillion, or picograms per liter (pg/L).

ppt: Parts per trillion, or nanograms per liter (ng/L).

Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

City of Dalworthington Gardens Regulated Contaminants Detected

Inorganic Contaminants

Collection Date	Contaminants	Highest Level Detected	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
3/10/2014	Fluoride	1.75	1.75	1.75	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
1/12/2016	Barium	0.016	0.016	0.016	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
1/12/2016	Chromium	2	2	2	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
3/10/2014	Cyanide	46.4	46.4	46.4	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
2021	Nitrate Measured as Nitrogen	1	0.143	0.769	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
7/18/2017	Nitrite Measured as Nitrogen	0.269	0.269	0.269	1	1	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
1/12/2016	Selenium	1.2	1.2	1.2	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

Disinfection Byproducts

Year	Contaminants	Highest Level Detected	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
2021	Haloacetic Acids (HAA5)	9	3.2	10.2	60	No goal for the total	ppb	N	By-product of drinking water disinfection.

* The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year

2021	Trihalomethanes (TTHM)	9	5.87	10.5	80	No goal for the total	ppb	N	By-product of drinking water disinfection.
------	---------------------------	---	------	------	----	-----------------------	-----	---	--

* The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year

Radioactive Contaminants

Year	Contaminants	Highest Level Detected	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
1/29/2015	Beta/photon emitters	4.7	4.7	4.7	50	0	pCi/L*	N	Decay of natural and man-made deposits

* EPA considers 50 pCi/L to be the level of concern for beta particles

1/29/2015	Combined Radium 226/228	1.5	1.5	1.5	5	0	pCi/L	N	Erosion on natural deposits
-----------	-------------------------	-----	-----	-----	---	---	-------	---	-----------------------------

Lead and Copper

Date Sampled	Contaminants	The 90th Percentile	Number of Sites Over All	Action Level	MCLG	Unit of Measure	Violation	Source of Contaminant
9/16/2020	Lead	3.2	1	15	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.
9/16/2020	Copper	0.31	0	1.3	1.3	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Disinfectant Residual

Year	Contaminants	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation	Source of Contaminant
2021	Chloramines & Free Chlorine	2.5	0.4	4	4	4	mg/L	N	Water additive used to control microbes