A high-speed photograph of water splashing, with a central stream of water falling and creating a large, dynamic splash at the bottom. The water is clear and blue, with many droplets and ripples visible.

# ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2019



*Presented By*  
**SJW TX for Triple Peak**

## A Message from the General Manager

We are excited to provide you with our 2019 Consumer Confidence Report (CCR). The annual water quality report covers all testing performed between January 1 and December 31, 2019. Our team has worked diligently analyzing data and compiling this report for your review. The focus of our vision - to serve customers, communities, employees, shareholders, and the environment at world-class levels - binds us together to provide exceptional water quality.

As you review the data in the Test Results section, keep in mind that many substances are detected at levels that vary throughout the year and at different locations. As a reminder, just because a substance is detected does not mean the water is unhealthy. Natural waters, including the sources used by SJWTX, contain a wide range of natural substances; in fact, some of the minerals detected are essential for good health.

The water source is one of the primary factors that affect the levels of the substances reflected in this report. SJWTX supplies both groundwater and surface water to the customers in your system. As water percolates from the surface into the aquifer, it absorbs many of the minerals it comes in contact with. On the other hand, surface water typically contains small levels of natural organic substances and requires treatment by filtration. Regardless of the source, regulations require that we disinfect the water with chlorine and maintain a minimum level of chlorine residual throughout the distribution system.

In 1996 the Safe Drinking Water Act was amended to require that every five years, the U.S. EPA issue a list of no more than 30 unregulated contaminants to be monitored by public water systems under the Unregulated Contaminant Monitoring Rule. Sample collection under the fourth iteration of the program, Fourth Unregulated Contaminant Monitoring Rule (UCMR4), began in 2018 and will conclude in 2020. You will see any detected results of these contaminants located in the Test Results section of this CCR.

The Lead and Copper Program protects public health by minimizing lead and copper levels in drinking water. This is primarily done by helping customers identify whether they may be at high risk for exposure through sampling. Sampling is conducted every three years, and the number of samples taken depends on population size. In 2019 SJWTX collected 30 samples throughout the system to test for lead and copper content in your drinking water. Determining the level of exposure helps SJWTX make decisions about updating the system and helps customers evaluate their plumbing. In the Test Results section, you can see the 90th-percentile value of the most recent round of sampling.

## Our Mission Continues

Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available should you ever have any questions or concerns about your water.

We remain vigilant in delivering the best-quality drinking water

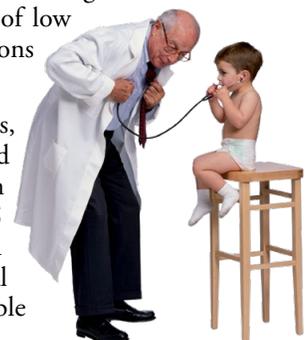
## Information on the Internet

The U.S. EPA (<https://goo.gl/TFAMKc>) and the Centers for Disease Control and Prevention (<https://www.cdc.gov/healthywater/drinking/>) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. Also, TCEQ has a Web site (<https://goo.gl/vNHNJN>) that provides complete and current information on water issues in Texas, including valuable information about our watershed.

## Important Health Information

While your drinking water meets U.S. EPA's standard for arsenic, it does contain low levels of this substance. U.S. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. U.S. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and linked to other health effects such as skin damage and circulatory problems.

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; those 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 Safe Drinking Water Hotline at (800) 426-4791.



## Contaminates in Source Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.



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 the land or through the ground, it can acquire naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

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

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. For more information on the taste, odor, or color of drinking water, please contact our business office, (830)312-4600. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## What Are PPCPs?

When cleaning out your medicine cabinet, what do you do with your expired pills? Many people flush them down the toilet or toss them into the trash. Although this seems convenient, these actions could threaten our water supply.

Recent studies are generating a growing concern over pharmaceuticals and personal care products (PPCPs) entering water supplies. PPCPs include human and veterinary drugs (prescription or over-the-counter) and consumer products, such as cosmetics, fragrances, lotions, sunscreens, and household cleaning products. From 2006 to 2010, the number of U.S. prescriptions increased 12 percent to a record 3.7 billion, while nonprescription drug purchases held steady around 3.3 billion. Many of these drugs and personal care products do not biodegrade and may persist in the environment for years.

The best and most cost-effective way to ensure safe water at the tap is to keep our source waters clean. Never flush unused medications down the toilet or sink. Instead, check to see if the pharmacy where you made your purchase accepts medications for disposal, or contact your local health department for information on proper disposal methods and drop-off locations. You can also go on the Web (<https://goo.gl/aZPgeB>) to find more information about disposal locations in your area.

## Lead in Home Plumbing

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. This water supply is 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 at (800) 426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).



## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please contact Laura Gloria, Water Quality Specialist, at (830) 312-4600.

## Count on Us

Delivering high-quality drinking water to our customers involves far more than just pushing water through pipes. Water treatment is a complex, time-consuming process. Because tap water is highly regulated by state and federal laws, water treatment plant and system operators must be licensed and are required to commit to long-term, on-the-job training before becoming fully qualified. Our licensed water professionals have a basic understanding of a wide range of subjects, including mathematics, biology, chemistry, and physics. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water;
- Monitoring and inspecting machinery, meters, gauges, and operating conditions;
- Conducting tests and inspections on water and evaluating the results;
- Maintaining optimal water chemistry;
- Applying data to formulas that determine treatment requirements, flow levels, and concentration levels;
- Documenting and reporting test results and system operations to regulatory agencies; and
- Serving our community through customer support, education, and outreach.

So, the next time you turn on your faucet, think of the skilled professionals who stand behind each drop.

## Water Treatment Process

Surface water for the Triple Peak system is produced at a rate of 2.5 million gallons per day (MGD) at our Triple Peak Surface Water Treatment Plant. Raw water is pumped from Canyon Lake Reservoir through our raw water pump station with three 900-gallon-per-minute (gpm) pumps. As the water travels to the filters, it is injected with alum, polymer, coagulating agents, and chlorine dioxide - a disinfecting agent. The alum-and-polymer injection causes smaller particulates in the water to join together to form bigger particles. These particles are captured in the clarifier located at the front of each filter.

There are three filters at the plant: two are rated at 1 MGD each; the third filter is rated at 0.5 MGD. The filters are up-flow clarifiers, meaning the water enters the bottom of the filter clarifier and makes its way through layers of gravel and sand before spilling over into the filter chamber. Once the water enters the top of the filter chamber, it percolates through the media, which consist of layers of anthracite and varying sizes of gravel. As the water leaves the filters, it is injected with chlorine for final disinfection and storage prior to being pumped into the distribution system.

## Our Fluoride Levels

The Texas Commission on Environmental Quality (TCEQ) has notified the CLWSC Canyon Lake Shores, TX0460019 that the drinking water being supplied to customers has exceeded the Secondary Constituent Level (SCL) of 2.43 mg/L for fluoride.

Prior to June 2019, the groundwater from wells in this system had fluoride readings of 1.02 mg/L or less for 2019. Since June 2019 to the present, results from state sampling events have been 1.52 mg/l or less and averaged 0.904 mg/L in 2019. Fluoride is a naturally occurring mineral and the amount of it that exists in groundwater varies. Well characteristics such as soil, water table levels, geology, temperature, depth and other features affect fluoride concentrations. SJWTX does not add fluoride to any of its drinking water systems. It is important to note that water used in the Triple Peak system combines groundwater with surface water from Canyon Lake. Water from all of these sources is blended and used throughout the system. Independent of state required sampling, SJWTX is proactively increasing monitoring for fluoride in the Triple Peak water system; at this time, customers do not need to take any action. However, in keeping with public notice practices established by the TCEQ, SJWTX is providing the enclosed mandatory language regarding fluoride in drinking water (see the following): This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/L) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by your community water system, SJWTX Triple Peak Plant, has a fluoride concentration of 2.43 mg/L.

Dental fluorosis, in its moderate or severe forms, may result in a brown staining or pitting - or both - of the permanent teeth. This problem occurs only in developing teeth before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/L of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/L of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/L because of this cosmetic dental problem.

For more information, please call Laura Gloria, Water Quality Specialist, at (830) 312-4600. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at (877) 8-NSF-HELP.

## Water Loss Audit

In the water loss audit submitted to the Texas Water Development Board during the year covered by this report, our system lost an estimated 164,096,168 gallons of water. If you have any questions about the water loss audit, please call (830) 312-4600.

## Impact of Zebra Mussels

The zebra mussel is a small mussel native to Russia. In 1988 it reached North America by a transatlantic freighter. Since then, they have continued to spread throughout the country. Zebra mussels are very successful invaders because they live and feed in many different aquatic habitats and breed prolifically (each female produces 1 million eggs per year) for their entire five-year lifespan.

Adult zebra mussels colonize on living and non-living surfaces, including boats, buoys, piers, plants, and clams. They are a great concern to drinking water utilities because they can attach to water intake pipes, severely restricting the flow of fresh water. They can also impact water quality by increasing taste-and-odor problems in the water supply.

Zebra mussels are almost impossible to eradicate once they become established. Water utilities have had to retool their water intake systems to prevent zebra mussel-related problems costing millions of dollars a year. Utilities rely on a variety of methods to remove mussels from intake pipes; since there is no single, ideal removal solution, new methods are constantly under investigation.

While complete removal may be impossible, preventing zebra mussel spread is not. Human activities have spread them into many inland lakes and streams, usually through recreational boating, fishing, and diving practices. Simple steps such as draining live wells, cleaning vegetation off boat trailers, removing attached zebra mussels from boat hulls, and not dumping bait into lakes or rivers can prevent the spread of zebra mussels into non-infested waters.

## Safeguard Your Drinking Water

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – They contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA's Adopt Your Watershed Web site to locate groups in your community.
- Organize a storm drain stenciling project with others in your neighborhood. Stencil a message next to the street drain reminding people "Dump No Waste – Drains to River" or "Protect Your Water". Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.



## Where Does My Water Come From?

SJWTX Triple Peak Plant provides surface water from Canyon Lake Reservoir, located in Canyon Lake, Texas, and groundwater from the Trinity Aquifer.

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

SOURCE NAME / LOCATION	SOURCE WATER	TYPE OF WATER	REPORT STATUS	TCEQ SOURCE ID
Astro Hills	Trinity Aquifer	Groundwater	Active	G0460172W / G0460172X
Canyon Lake Forest	Trinity Aquifer	Groundwater	Active	G0460172S / G0460172T
Canyon Lake Hills - Hampton	Trinity Aquifer	Groundwater	Active	G0460172AI
Canyon Lake Hills - Riviera	Trinity Aquifer	Groundwater	Active	G0460172Y
Lakeview Park	Trinity Aquifer	Groundwater	Inactive	G0460172P
Netherhill	Trinity Aquifer	Groundwater	Active	G0460172A
Rolling Hills	Trinity Aquifer	Groundwater	Active	G0460172Q / G0460172R
The Woodlands - Dorothy Drive	Trinity Aquifer	Groundwater	Active	G0460172AK / G0460172AL
The Woodlands - Watts Lane	Trinity Aquifer	Groundwater	Active	G0460172U
Triple Peak Treatment Plant	Canyon Lake Reservoir	Surface Water	Active	S0460172A
Vintage Oaks - Passare	Trinity Aquifer	Groundwater	Active	G0460172AJ
Vintage Oaks - Vintage Way	Trinity Aquifer	Groundwater	Active	G0460172AB

## Source Water Assessments

TCEQ completed an assessment of your source water, and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this CCR. For more information on source water assessments and protection efforts at our system, contact Laura Gloria, Water Quality Specialist, at (830) 312-4600.

SYSTEM SUSCEPTIBILITY SUMMARY										
ASBESTOS	CYANIDE	METALS	MICROBIAL	MINERALS	RADIOCHEMICAL	SYNTHETIC ORGANIC CHEMICALS	DISINFECTION BYPRODUCT	VOLATILE ORGANIC CHEMICALS	DRINKING WATER CONTAMINANT CANDIDATE	OTHER
LOW	LOW	HIGH	LOW	HIGH	LOW	HIGH	HIGH	LOW	HIGH	LOW

## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

The percentage of total organic carbon (TOC) removal was measured each month, and the system met all TOC removal requirements set.

We participated in the fourth stage of the U.S. EPA's UCMR4 program by performing additional tests on our drinking water. UCMR4 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water in order to determine if U.S. EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.



## Table Talk

Get the most out of the Testing Results data table with this simple suggestion. In less than a minute, you will know all there is to know about your water:

For each substance listed, compare the value in the Amount Detected column against the value in the MCL (or AL, SCL) column. If the Amount Detected value is smaller, your water meets the health and safety standards set for the substance.

### Other Table Information Worth Noting

If there was a violation, you will see a detailed description of the event in this report.

The Range column displays the lowest and highest sample readings. If the lowest sample reading and the highest sample reading are the same, that means that only a single sample was taken to test for the substance (assuming there is a reported value in the Amount Detected column).

If there is a 0, that means that the substance was not detected (i.e., below the detectable limits of the testing equipment).

If there is sufficient evidence to indicate from where the substance originates, it will be listed under Typical Source.

### REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	HIGHEST AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
<b>Arsenic</b> (ppb)	2019	10	0	5.4	0–5.4	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
<b>Barium</b> (ppm)	2019	2	2	0.0117	0.0117–0.0278	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
<b>Beta/Photon Emitters</b> (pCi/L)	2018	50 <sup>1</sup>	0	7	0–7	No	Decay of natural and man-made deposits
<b>Chlorine</b> (ppm)	2019	[4]	[4]	1.5 <sup>2</sup>	0.2–3.94	No	Water additive used to control microbes
<b>Chlorite</b> (ppm)	2019	1	0.8	0.72	0–0.72	No	By-product of drinking water disinfection
<b>Combined Radium</b> (pCi/L)	2018	5	0	1.11	0–1.11	No	Erosion of natural deposits
<b>Cyanide</b> (ppb)	2017	200	200	20	0–20	No	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
<b>Dalapon</b> (ppb)	2015	200	200	1.1	0–1.1	No	Runoff from herbicide used on rights-of-way
<b>Di(2-ethylhexyl) Phthalate</b> (ppb)	2015	6	0	3.6	0–3.6	No	Discharge from rubber and chemical factories
<b>Fluoride</b> (ppm)	2019	4	4	2.43	0.21–2.43	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
<b>Gross Alpha [excluding Radon and Uranium]</b> (pCi/L)	2018	15	0	5.9	0–5.9	No	Erosion of natural deposits
<b>Haloacetic Acids [HAAs]</b> (ppb)	2019	60	NA	12 <sup>3</sup>	3–14.8	No	By-product of drinking water disinfection
<b>Nitrate</b> (ppm)	2019	10	10	2.37	0–2.37	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Selenium</b> (ppb)	2019	50	50	3.4	0–3.4	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
<b>TTHMs [Total Trihalomethanes]</b> (ppb)	2019	80	NA	51 <sup>3</sup>	24.6–72.5	No	By-product of drinking water disinfection
<b>Turbidity<sup>4</sup></b> (NTU)	2019	TT	NA	0.38	NA	No	Soil runoff
<b>Turbidity</b> (Lowest monthly percent of samples meeting limit)	2019	TT = 95% of samples meet the limit	NA	100%	NA	No	Soil runoff
<b>Uranium</b> (ppb)	2017	30	0	1.2	0–1.2	No	Erosion of natural deposits

**Tap water samples were collected for lead and copper analyses from sample sites throughout the community**

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
<b>Copper</b> (ppm)	2019	1.3	1.3	0.118	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
<b>Lead</b> (ppb)	2019	15	0	3.6	0/30	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

**SECONDARY SUBSTANCES**

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
<b>Aluminum</b> (ppb)	2019	200	NA	124	124–124	No	Erosion of natural deposits; Residual from some surface water treatment processes
<b>Chloride</b> (ppm)	2019	300	NA	26	17–26	No	Runoff/leaching from natural deposits
<b>Fluoride</b> (ppm)	2019	2.0	NA	2.43	0.21–2.43	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
<b>Iron</b> (ppb)	2019	300	NA	257	257–257	No	Leaching from natural deposits; Industrial wastes
<b>Manganese</b> (ppb)	2019	50	NA	26.6	26.6–26.6	No	Leaching from natural deposits
<b>Sulfate</b> (ppm)	2019	300	NA	244	12–244	No	Runoff/leaching from natural deposits; Industrial wastes
<b>Total Dissolved Solids [TDS]</b> (ppm)	2019	1,000	NA	674	263–674	No	Runoff/leaching from natural deposits
<b>Zinc</b> (ppm)	2019	5	NA	0.248	0.248–0.248	No	Runoff/leaching from natural deposits; Industrial wastes

**UNREGULATED AND OTHER SUBSTANCES <sup>5</sup>**

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	HIGHEST AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
<b>4-Methylphenol</b> (ppb)	2015	2.6	2.6–2.6	Erosion of natural deposits
<b>Bicarbonate</b> (ppm)	2019	328	193–328	Erosion of natural deposits
<b>Bromacil</b> (ppb)	2015	0.19	0.19–0.19	Erosion of natural deposits
<b>Bromochloroacetic Acid</b> (ppb)	2019	5.9	1.4–5.9	Disinfection by-product
<b>Calcium</b> (ppm)	2019	82	48.2–82	Erosion of natural deposits
<b>Dibromoacetic Acid</b> (ppb)	2019	4.5	4.5–4.5	Disinfection by-product
<b>Dichloroacetic Acid</b> (ppb)	2019	5.4	1.5–5.4	Disinfection by-product
<b>Diluted Conductance</b> (µmho/cm)	2019	1,170	447–1,170	Erosion of natural deposits
<b>Gross Alpha [including radon and uranium]</b> (pCi/L)	2018	5.9	5.9–5.9	Erosion of natural deposits
<b>Magnesium</b> (ppm)	2019	65.9	16.3–65.9	Erosion of natural deposits
<b>Monobromoacetic Acid</b> (ppb)	2019	1.6	1.6–1.6	Disinfection by-product
<b>Monochloroacetic Acid</b> (ppb)	2019	2.1	2.1–2.1	Disinfection by-product
<b>Potassium</b> (ppm)	2019	9.04	1.44–9.04	Erosion of natural deposits
<b>Total Alkalinity [as CaCO3]</b> (ppm)	2019	269	158–269	Erosion of natural deposits
<b>Total Hardness</b> (ppm)	2019	476	187–476	Erosion of natural deposits
<b>Trichloroacetic Acid</b> (ppb)	2019	2.8	2.8–2.8	Disinfection by-product
<b>Bromodichloromethane</b> (ppb)	2019	25	25–25	Disinfection by-product
<b>Bromoform</b> (ppb)	2019	7	7–7	Disinfection by-product
<b>Chloroform</b> (ppb)	2019	17.6	17.6–17.6	Disinfection by-product
<b>Dibromochloromethane</b> (ppb)	2019	23.6	23.6–23.6	Disinfection by-product
<b>Nickel</b> (ppb)	2019	6.4	1.5–6.4	Discharge from petroleum and metal refineries; Erosion of natural deposits
<b>Sodium</b> (ppm)	2019	18.2	7.82–18.2	Erosion of natural deposits

## UNREGULATED CONTAMINANT MONITORING RULE - PART 4 (UCMR4) <sup>5</sup>

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	HIGHST AMOUNT DETECTED	RANGE LOW-HIGH
<b>Bromide</b> (ppb)	2019	109	109–109
<b>Total Organic Carbon [TOC]</b> (ppb)	2019	1,860	1,860–1,860
<b>HAA5</b> (ppb)	2019	13.72	6.52–13.72
<b>HAA6Br</b> (ppb)	2019	19.52	11.62–19.52
<b>HAA9</b> (ppb)	2019	28.82	15.42–28.82

<sup>1</sup>The MCL for beta particles is 4 mrem/year. U.S. EPA considers 50 pCi/L to be the level of concern for beta particles.

<sup>2</sup>Average

<sup>3</sup>Highest Locational Running Annual Average (LRAA)

<sup>4</sup>Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

<sup>5</sup>Unregulated contaminants are those for which U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist U.S. EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

## Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90 percent of our lead and copper detections.

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

**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 were found.

**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 *Escherichia coli* (*E. coli*) maximum contaminant level (MCL) violation has occurred and/or why total coliform bacteria were found 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.

**NA:** Not applicable

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**SCL (Secondary Contaminant Level):** These standards are developed to protect aesthetic qualities of drinking water and are not health based.

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

**µmho/cm (micromhos per centimeter):** A unit expressing the amount of electrical conductivity of a solution.