

# WHAT IS THIS REPORT?

The Environmental Protection Agency requires public water suppliers that serve the same people year-round (community water systems) to provide consumer confidence reports to their customers. These reports are also known as annual water quality reports. This report summarizes information regarding water sources used, any detected contaminants, compliance and educational information.

# Where does your water come from?

Denver's drinking water comes from rivers, lakes, streams, reservoirs and springs fed by high-quality mountain snowmelt. Denver Water's supply is 100% surface water that covers about 4,000 square miles of watersheds on both sides of the Continental Divide.

### Mountain water sources

Denver Water's water sources include the upper South Platte River, the upper Blue River, Bear Creek, South Boulder
Creek, Ralston Creek, tributaries to the Fraser River, and the upper Williams
Fork River. Denver Water stores its water in five mountain reservoirs: Antero, Eleven Mile Canyon, Cheesman, Dillon and Gross. From these reservoirs, the water is sent to the metro area through a complex system of streams, canals and pipes to be treated.

After treatment, drinking water is fed by both gravity and pumps to a system of underground, clean-water reservoirs before continuing to your home or business. More than 3,000 miles of water mains — enough to stretch from Los Angeles to New York — carry water to

Denver Water customers.

### Source water assessment

The Colorado Department of Public
Health and Environment has completed
a source water assessment
of the potential for
contaminants reaching any of
Denver Water's three terminal
reservoirs at Strontia Springs,
Marston and Ralston, the last stop for
water before it is treated. The potential
sources of contamination that may exist
are:

- EPA areas of concern.
- permitted wastewater discharge sites.
- above-ground, underground and leaking storage tank sites.
- solid waste sites.
- existing or abandoned mine sites.

Continued on the next page.

### In this report:

### What we test for

Denver Water has met all drinking water standards for regulated water contaminants. Test results are detailed on pages 6-13.

### Monitoring requirements not met

In 2024, Denver Water failed to meet two monitoring requirements. This did not pose a safety risk and does not require any action from you. For details, see page 4.

#### **Public board meetings**

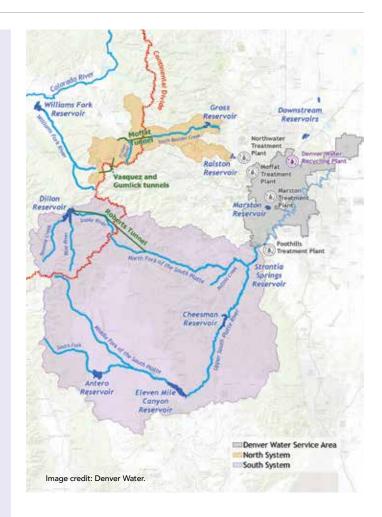
The Denver Board of Water Commissioners is responsible for setting water rates and monitoring the cost and maintenance of the water system. Public meetings are generally held twice a month. For a schedule and location of board meetings, visit denverwater.org/BoardMeetings.

### Obtain a paper copy of this report

Paper copies of this report, in English or Spanish, can be requested through Denver Water Customer Care at **303-893-2444**, Monday through Friday, from 7:30 a.m. to 5:30 p.m. You can also email **CustomerCare@denverwater.org.** 

### Informacion importante acerca de la calidad del agua

Para recibir la versión en español del Informe de Calidad de Agua de 2025 de Denver Water, llame a Servicio al cliente al 303-893-2444 o visite denverwater.org/2025CalidadDeAgua



- other facilities.
- commercial, industrial and transportation activities.
- residential, urban recreational grasses.
- quarries, strip mines and gravel pits.
- agriculture.
- forests.
- septic systems; oil and gas wells and roads.

The Source Water Assessment Report provides a screeninglevel evaluation of potential contamination that could occur. It does not mean that the contamination has or will occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that high-quality drinking water is delivered to your home.

For general information, or to obtain a copy of the report, please visit wqcdcompliance.com/ccr. The report is located under "Guidance: Source Water Assessment Reports." Search the table using 116001, Denver Water Board, or call Denver Water Customer Care at 303-893-2444.

# **DENVER WATER'S SYSTEM**

### **Devoted to water quality**

Denver Water proudly serves high-quality water to 1.5 million people in the city of Denver and many surrounding suburbs. Since 1918, we have expertly planned, developed and operated a complex system that provides clean, safe, great-tasting water. Denver Water is a public agency funded by water rates, new tap fees and the sale of hydropower, not taxes. We are Colorado's oldest and largest water utility — Denver Water has a total water service area of approximately 300 square miles.

Denver Water serves 25% of the state's population with less than 2% of all the water used in the state. The natural environment is our lifeline, and we help protect it by promoting wise water use. In 2024, we collected about 63,000 water samples and conducted about 145,000 tests. Denver Water is required by state and federal law to monitor for — and provide this report on — regulated contaminants in drinking water.

Denver Water also goes above and beyond these requirements to monitor for additional compounds in drinking water. This information is available on our website at denverwater.org/TreatedWater.

# **SOURCES OF DRINKING WATER**



Sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material. It can also pick up substances resulting from human activity and the presence of animals. Contaminants may include the following:

### Microbial contaminants

Viruses, bacteria and other microbes that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

### **Inorganic contaminants**

Salts and metals, which can naturally occur or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

### Pesticides and herbicides

Chemical substances resulting from a variety of sources, such as agricultural and urban stormwater runoff, and residential uses.

### Organic chemical contaminants

Substances including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff and septic systems.

### Radioactive contaminants

Substances that can be naturally occurring or be the result of oil and gas production, and mining activities.

# WATER AT A GLANCE

All 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 the water poses a health risk. In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment's regulations set limits on the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration sets limits for contaminants in bottled water to provide the same protection for public health.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency Safe Drinking Water Hotline at 800-426-4791 or by visiting epa.gov/ ground-water-and-drinking-water.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people, such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people

with HIV/AIDS or other immune system disorders, some elderly and infants, can be particularly at risk of infections.

Those at risk should seek advice about drinking water from their health care providers. Guidelines from the EPA and the Centers for Disease Control and Prevention on appropriate ways to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline, 800-426-4791.

# LEAD REDUCTION PROGRAM

Denver Water is committed to delivering safe water to our customers. Lead can get into water as it moves through customer-owned water service lines and household plumbing that contain lead.

Service lines bring water into a home or building from Denver Water's main delivery pipe in the street. In Denver Water's experience, homes built prior to 1951 are more likely to have lead service lines. Homes built before 1987 may have lead solder connecting copper pipes in their plumbing. Faucets and fixtures made before 2014 do not meet today's "lead-free" requirements.

Lead exposure can cause serious health problems for all age groups, especially pregnant people and young children.

To address this issue, Denver Water has launched the Lead Reduction Program, which was approved in December 2019 by the Environmental Protection Agency and Colorado Department of Public Health and Environment.

### The Lead Reduction Program has five main components:

• Managing our system's water chemistry, including an increased pH level to reduce the risk of lead getting into drinking water from lead service lines or household plumbing.

- Maintaining (and updating) a publicly accessible inventory of all customer-owned lead service lines in Denver Water's service area. This interactive map is available at denverwater.org/Lead.
- Providing a free water pitcher and filters that are certified to remove lead to all customers suspected of having a lead service line until their line is replaced, and for six months after.
- Replacing the entire inventory of lead service lines within our service area with copper lines at no direct charge to the customer. When initially launched, all lead service lines were slated to be removed by 2035. Progress on service line replacements can be viewed on the program dashboard at denverwater.org/Lead.
- · Ongoing communication, outreach and education to reach and engage with the diverse communities we serve.

### How the program came to be

Since 1992, as part of the EPA's Lead and Copper Rule, Denver Water has

monitored water quality in homes that have service lines or plumbing that contain lead.

Only once, in 2012, did test results from those homes indicate additional action was needed to protect public health, and Denver Water remains in compliance today. However, Denver Water is still required to implement the best plan to reduce the risk of lead in tap water in homes with lead-containing plumbing or service lines.

That plan is the Lead Reduction Program, which is now underway. Learn more about this effort and the program at denverwater.org/Lead.

If you are concerned about lead, you can request to have your water tested. Denver Water customers can request a free lead test kit at denverwater.org/Leadtest.

Information on lead in drinking water, testing and steps to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791, at epa.gov/safewater/lead and at denverwater.org/Lead.

## HOW TO MINIMIZE YOUR EXPOSURE TO LEAD

You share the responsibility of protecting yourself and your family from lead in your home's plumbing. You can take the following actions to reduce your household's risk of exposure.

Flush If water has not been used in the property for a few hours, such as first thing in the morning or when coming home from work, run cold water from the kitchen or any bathroom faucet for five minutes. You can also run the dishwasher, take a shower or do a load of laundry to help flush water in your home's internal plumbing before drinking, cooking or preparing infant formula.

### Replace old fixtures Replace faucets and indoor



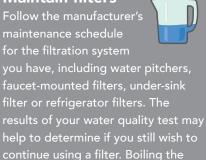
plumbing with "lead-free" components. Faucets and fixtures installed prior to 2014 do not meet today's requirements for "lead-free" fixtures.

### Clean aerators

A faucet aerator is a small screen added to the end of a faucet to mix air with water to reduce the flow of water coming from the faucet. Remove and

they may have trapped particles

### Maintain filters



water does not remove lead.

You can find instructional videos on flushing and filter use at denverwater.org/Lead.

# IS THERE A PRESENCE OF **CRYPTOSPORIDIUM AND GIARDIA?**

Denver Water has tested for Cryptosporidium (crypto) and giardia in both raw and treated water since the 1980s. Since that time. Denver Water has never detected a viable indication of either in the drinking water.

Crypto and giardia are microscopic organisms that, when ingested, can cause diarrhea, cramps, fever and other gastro-intestinal symptoms. Crypto and giardia are usually spread through means other than drinking water.

While most people readily recover from the symptoms, crypto and giardia can cause more serious illness in people with compromised immune

systems. The organisms are in many of Colorado's rivers and streams and are a result of animal wastes in the watershed. At the treatment plants, Denver Water removes crypto and giardia through effective filtration, and giardia is also killed by disinfection.

# SIGNIFICANT DEFICIENCY

Public water suppliers are required to notify customers of unresolved deficiencies in design, operation, maintenance or administration, or a failure or malfunction in a system component, including sources, treatment, storage or distribution system that have the potential to cause risks to the reliable delivery of safe drinking water.

### What happened?

During a state inspection in September

2022, inspectors found a deficiency related to storage conditions. There is no evidence that the water you drink was affected by this situation.

Storage conditions: State inspectors found that the hatches on the 56th Avenue tank were installed incorrectly. Denver Water is repairing the hatches according to the corrective action plan; repairs will be completed by May 2025.

### How did this impact drinking water quality?

There is no evidence that the water you drink was affected by this situation.

### What has been done to correct this situation?

Denver Water worked with the state health department to develop a corrective action plan and make necessary repairs.

# WATER QUALITY VIOLATIONS

### **Combined Uranium Sampling**

In 2024, our water system was in violation of a drinking water monitoring requirement. Although this situation did not pose a safety risk and does not require you to take action, as our customers you have a right to know what happened and what we did to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the first quarter of 2024, monitoring and testing for combined uranium at the Moffat Treatment Plant was not completed.

### What happened?

Combined uranium sampling at Moffat Treatment Plant is a quarterly requirement and was automatically scheduled for collection in January 2024. The treatment plant went offline January 9th, 2024 and the collection was not rescheduled when Moffat Treatment Plant came back online, which resulted in the monitoring violation.

### How did this impact water quality?

Five years of historical combined uranium results at Moffat Treatment Plant show no detection of uranium. Additionally, uranium was sampled monthly during 2024 while Moffat Treatment Plant was online during subsequent quarters, and no uranium was detected. Given historical and ongoing results, we do not believe there is a risk to public health.

#### What was done?

- Instituted monthly sampling for combined uranium at Moffat Treatment Plant to ensure redundancy in our sampling program.
- Developed procedure and trained staff on scheduling and verifying collection of compliance drinking water samples in tandem with plant outage schedules in accordance with our state compliance monitoring schedule.

This problem has been resolved. For more information, please contact Denver Water Customer Care, 303-893-2444, 7:30 a.m.-5:30 p.m., Monday through Friday.

### **Turbidity Monitoring**

In 2024, our water system was in violation of a state drinking water monitoring requirement at one of our treatment plants. Although this situation did not pose a safety risk and does not require you to take action, as our customers you have a right to know what happened and what we did to correct this situation.

### What happened?

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether our drinking water meets health standards. During the first quarter of 2024 there was a 17-hour lapse in monitoring and testing for turbidity at one of our 17

regulatory turbidity meters at Foothills Treatment Plant due to lack of water flow to that specific meter. Turbidity measures suspended material in water, or, how clear the water is.

### How did this impact water quality?

Turbidity at the treatment plant was confirmed to be within acceptable ranges at alternate sampling points during the 17-hour time lapse. Given results at the other 16 turbidity meters and all other water quality parameters within regulatory limits, we do not believe that water quality was impacted during the lapse in turbidity measurements at the single meter

### What was done?

• A new alarm system was programmed to notify treatment plant staff when turbidity

- instrumentation flow rates are outside of manufacturer recommended settings. The alarms trigger immediate intervention and investigation to restore flow or further repair.
- All turbidity instrument flow alarm functions were then tested and confirmed to be in working order. This change in alarm settings supplement instrument checks done on a regular shift by shift basis to ensure all turbidity instruments have correct flow and meet manufacturer settings.

The problem was resolved in March 2024. For more information, please contact Denver Water Customer Care, 303-893-2444, 7:30 a.m.-5:30 p.m., Monday through Friday.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

### What is Denver Water doing about PFAS?

Denver Water is committed to ensuring a clean, safe water supply for our customers that meets or goes beyond state and federal drinking water standards.

We have tested for PFAS-related compounds in the source water that comes into our treatment plants and the drinking water that leaves the plants since 2017 and have not detected anything above the Environmental Protection Agency's new regulatory limits.

Learn more about PFAS monitoring at denverwater.org/PFAS.

### Fluoride in Denver Water's treated water

Fluoride is a naturally occurring compound in Denver Water's source water. It enters the water when fluoriderich minerals in soils and rock dissolve.

The Centers for Disease Control and Prevention recognizes the widespread adoption of community fluoridation as one of the 10 greatest public health achievements of the 20th century.

Since Denver Water began monitoring and managing the level of fluoridation in our water back in 1953, we have relied on the latest science from the foremost national and local authorities to inform our policy.

Learn more at denverwater.org/Fluoride.

# THE TREATMENT PROCESS

The treatment process consists of five steps:

### COAGULATION/ **FLOCCULATION**

Raw water is drawn into mixing basins at our treatment plants where we add positively charged coagulant and polymer to bond with the negatively charged particles that are suspended in the water that we want to remove. As the negatively charged particles and the positively charged coagulants are joined together, they form larger particles called floc.



Over time, the now larger floc particles become heavy enough to settle to the bottom of a basin from which sediment is removed.

# FILTRATION

The water is then filtered through layers of filter media made of anthracite coal. As the water moves through the filter media, larger particles get caught in the spaces between the grains of anthracite, and clear water emerges.

# **DISINFECTION**

As protection against any bacteria, viruses and other microbes that might remain, disinfectant is added before the water flows into underground reservoirs throughout the distribution system and into your home or business. Denver Water carefully monitors the amount of disinfectant added to maintain quality of the water at the farthest reaches of the system.

### CORROSION CONTROL

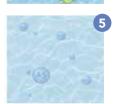
Treatment operators maintain the water's pH by adding alkaline substances to make the water less corrosive. This helps strengthen an existing coating on the inside of water service lines. The coating reduces the potential for lead to get into the water.











# REGULATED WATER CONTAMINANTS: WHAT IS IN THE WATER?

### TERMS, ABBREVIATIONS AND SYMBOLS

Some of the terms, abbreviations and symbols contained in this report are unique to the water industry and might not be familiar to all customers. Terms used in the table are explained below.

### action level (AL)

Concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

#### average

Typical value.

#### below reporting level (BRL)

Below the reportable level for an analysis or below the lowest reliable level that can be measured.

#### compliance value

Single or calculated value used to determine if a regulatory contaminant level is met. Examples of calculated values include average, 90th percentile, running annual average, locational running annual average.

#### contaminant

Potentially harmful physical, biological, chemical or radiological substance.

### formal enforcement action

Escalated action taken by the state (due to the risk to public health, or number or severity of violations) to bring a noncompliant water system back into compliance.

#### health-based

Violation of either a maximum contaminant level or treatment technique.

### gross alpha

Gross alpha particle activity compliance value. It includes r**Level 1 assessment** 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 very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli maximum contaminant level violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

### locational running annual average (LRAA)

The average of sample results for samples collected at a particular monitoring location during the most recent four calendar quarters.

#### maximum contaminant level (MCL)

Highest level of a contaminant allowed in drinking water. MCLs are set as close to the maximum contaminant level goal as feasible using the best available treatment technology.

#### maximum contaminant level goal (MCLG)

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 residual disinfection level (MRDL)

Highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of disinfectant is necessary to control microbial contaminants.

# maximum residual disinfection 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 contaminants.

### nephelometric turbidity unit (NTU)

Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.

#### non-health-based

A violation that is not a maximum contaminant level or treatment technique.

### not applicable (N/A)

Does not apply or not available.

### parts per billion (ppb)

Parts per billion = Micrograms per liter (ppb = ug/L). One part per billion corresponds to one minute in 2,000 years or a single penny in \$10 million.

### parts per million (ppm)

Parts per million = Milligrams per liter

(ppm = mg/L). One part per million corresponds to one minute in two years or a single penny in \$10,000.

### picocuries per liter (pCi/L)

Measure of radioactivity in water.

#### range (R)

Lowest value to the highest value.

### running annual average (RAA)

The average of sample results for samples collected during the most recent four calendar quarters.

#### sample size

Number or count of values. (i.e., number of water samples collected).

# secondary maximum contaminant level (SMCI)

Non-enforceable, recommended limits for substances that may affect the taste, odor, color, or other aesthetic qualities of drinking water.

### treatment technique (TT)

Required process intended to reduce the level of a contaminant in drinking water.

#### turbidity

Measure of suspended material in water. In the water field, a turbidity measurement, expressed in nephelometric turbidity units (NTU), is used to indicate clarity of water.

# unregulated contaminant monitoring rule five (UCMR5)

The fifth list of unregulated contaminants, created by the Environmental Protection Agency, to be monitored by public water systems. A new list is determined every five years.

### variance and exemptions

Department permission not to meet maximum contaminant level or treatment technique under certain conditions.

### violation

Failure to meet a Colorado primary drinking water regulation.

# **REGULATED WATER CONTAMINANTS: WHAT WE TEST FOR**

Data collected throughout 2024

Denver Water monitors for the list of regulated parameters below in our treated drinking water. Sample points include entry points to the distribution system from our four treatment plants — Foothills, Marston, Moffat, Northwater — and sites throughout Denver Water's distribution system.

Inorganio	c Chemicals	1	/olatile Orga	nic Chemicals			
Antimony	Thallium	Benzene	Trichloroethylene				
Arsenic	Sodium	Carbon Tetrachloride Ethyll		benzene	Xylenes (total)		
Barium	Total Chlorine	1,2-Dichloroethane	Monoch	lorobenzene	Vinyl Chloride		
Beryllium	Fluoride	o-Dichlorobenzene	St	yrene			
Cadmium	Nitrate	p-Dichlorobenzene	Tetrachl	oroethylene			
Chromium	Nitrite	1,1-Dichloroethylene	Тс	luene			
Mercury	Lead	cis-1,2-Dichloroethylene	1,2,4-Tric	hlorobenzene			
Nickel	Copper	trans-1,2-Dichloroethylene	1,1,1-Trio	chloroethane			
Selenium		Dichloromethane	1,1,2-Trio	chloroethane			
Synthetic Org	ganic Chemicals		Disinfection	Byproducts			
1,2-Dibromo-3-chloropro- pane	Endothall	as the sum of the five contaminants regula			nalomethanes (TTHM) are ed as the sum of the four aminants listed below:		
2,4,5-TP	Endrin	Dibromoacetic Acid			Chloroform		
2,4-D	Ethylene dibromide	Dichloroacetic Acid		Bron	nodichloromethane		
Aldicarb	Heptachlor	Monobromoacetic Ac	id	Dibr	omochloromethane		
Aldicarb sulfone	Heptachlor Epoxide	Monochloroacetic Ac	id		Bromoform		
Aldicarb sulfoxide	Hexachlorobenzene	Trichloroacetic Acid	k				
Atrazine	Hexachlorocyclopentadiene	R	tadiological (	Contaminants			
Benzo(a)pyrene	Lasso (Alachlor)	Gross A	Alpha Emitte	rs excluding Ura	nium		
BHC-Gamma	Methoxychlor		Combine	ed Radium			
Carbofuran	Oxamyl	Combined Uranium					
Chlordane	Pentachlorophenol	Microbiological Contaminants					
Dalapon	Picloram	Total Coliform					
Di(2-ethylhexyl) adipate	Polychlorinated Biphenyls	E.coli					
Di(2-ethylhexyl) phthalate	Simazine	Other Regulated Contaminants					
Dinoseb	Toxaphene		Total Orga	anic Carbon			
Diquat			Turk	oidity			

The data tables below include regulated contaminants from page 7 that were monitored for and detected at Foothills Treatment Plant, one entry point to the Denver Water distribution system, in 2024. If a contaminant from page 7 is not displayed in these tables, then it was not detected above the reporting limit at the sample location.

	Inorganic Contaminants Detected at the Entry Point to the Distribution System — Foothills											
Chemical Parameters	Year	Sampling Frequency	Average	Range	Unit of Measure	MCL	MCLG	Standard Met	Typical Sources			
Barium	2024	Monthly	34.0	30.0-36.5	ppb	2,000	2,000	1	Erosion of natural deposits, discharge of drilling wastes.			
Fluoride	2024	Monthly	675	530-930	ppb	4,000 (2,000 is SMCL)*	4,000	1	Erosion of natural deposits, water additive that promotes strong teeth, discharge from fertilizer and aluminum factories.			
Nitrate as N	2024	Monthly	107	BRL-144	ppb	10,000	10,000	1	Runoff from fertilizer use, leaching from septic tanks and sewage, erosion of natural deposits.			
Nickel	2024	Monthly	1.10	1.0-1.2	ppb	N/A	N/A	1	Discharge from industrial uses such as transportation, chemical industry, electrical equipment and construction.			
Sodium	2024	Monthly	19,520	17,700- 21,100	ppb	N/A	N/A	1	Naturally occurring.			

<sup>\*</sup>Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water.

Summary of Turbidity Sampled at the Entry Point to the Distribution System — Foothills											
Chemical Parameters	Year	Sampling Frequency	Level Found	Unit of Measure	Treatment Technique Requirement	Standard Met	Typical Sources				
Turbidity	2024	Daily	Highest single measurement: 0.131 NTU (August)	NTU	Maximum 1 NTU for any one single measurement.	✓	Soil runoff				
Turbidity	2024	Daily	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%	NTU	In any month, at least 95% of samples must be less than 0.3 NTU.	✓	Soil runoff				

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.

Total Organic Carbon (Disinfection Byproducts Precursor) Removal Ratio of Raw and Finished Water — Foothills										
Chemical Parameters	Year	Frequency	Treatment Technique Requirement	Standard Met	Typical Sources					
Total Organic Carbon Ratio	2024	Once per month	Denver Water uses enhanced treatment to remove the required amount of natural organic material and/or demonstrates compliance with alternative criteria.	✓	Natural organic matter present in the environment.					

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts including trihalomethanes (TTHMs) and haloacetic acids (HAA5s). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

	Radiologicals Detected at the Entry Point to the Distribution System — Foothills											
Chemical Parameters	Year	Sampling Frequency	Average	Result	Unit of Measure	MCL	MCLG	Standard Met	Typical Sources			
Combined Radium (Ra-226 and Ra-228)	2021	6-9 years	0.75	BRL-1.5	pCi/L	5	0	✓	Erosion of natural deposits, mine drainage, industrial or manufacturing discharges.			
Gross Alpha (excluding Uranium)	2024	6-9 years	N/A	1.8	pCi/L	15	0	✓	Erosion of natural deposits, mine drainage, industrial or manufacturing discharges.			
Combined Uranium	2024	Monthly	Average	Range	nnh	30	0	<b>✓</b>	Erosion of natural deposits, mine drainage.			
Combined Oranium 2024		IVIOLITIII	0.1	BRL-0.5	ppb	ppb 30			crosion of natural deposits, milie drainage.			

The data tables below include regulated contaminants from page 7 that were monitored for and detected at Marston Treatment Plant, one entry point to the Denver Water distribution system, in 2024. If a contaminant from page 7 is not displayed in these tables, then it was not detected above the reporting limit at the sample location.

	lno	rganic Conta	aminants De	tected at the	Entry Poi	nt to the D	istributio	n System -	— Marston
Chemical Parameters	Year	Sampling Frequency	Average	Range	Unit of Measure	MCL	MCLG	Standard Met	Typical Sources
Arsenic	2024	Monthly	0.1	BRL-0.8	ppb	10	0	1	Erosion of natural deposits, discharge of drilling wastes
Barium	2024	Monthly	39.9	33.9-49.9	ppb	2,000	2,000	1	Erosion of natural deposits, discharge of drilling wastes.
Fluoride	2024	Monthly	636	510-760	ppb	4,000 (2,000 is SMCL)*	4,000	1	Erosion of natural deposits, water additive that promotes strong teeth, discharge from fertilizer and aluminum factories
Nitrate as N	2024	Monthly	119	58-167	ppb	10,000	10,000	✓	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nickel	2024	Monthly	1.65	1.0-2.3	ppb	N/A	N/A	1	Discharge from industrial uses such as transportation, chemical industry, electrical equipment & construction.
Sodium	2024	Monthly	23,350	19,100- 29,300	ppb	N/A	N/A	1	Naturally occurring.

<sup>\*</sup>Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water

	Summary of Turbidity Sampled at the Entry Point to the Distribution System — Marson											
Chemical Parameters	Year	Sampling Frequency	Level Found	Unit of Measure	Treatment Technique Requirement	Standard Met	Typical Sources					
Turbidity	2024	Daily	Highest single measurement: 0.129 NTU (February)	NTU	Maximum 1 NTU for any one single measurement.	1	Soil runoff					
Turbidity	2024	Daily	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%	NTU	In any month, at least 95% of samples must be less than 0.3 NTU	1	Soil runoff					

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.

Total Organic Carbon (Disinfection Byproducts Precursor) Removal Ratio of Raw and Finished Water — Marston										
Chemical Parameters	Year	Frequency	Treatment Technique Requirement	Standard Met	Typical Sources					
Total Organic Carbon Ratio	2024	Once per month	**Denver Water uses enhanced treatment to remove the required amount of natural organic material and/or demonstrates compliance with alternative criteria.	✓	Natural organic matter present in the environment.					

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts including trihalomethanes (TTHMs) and haloacetic acids (HAA5s). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

	Radiologicals Detected at the Entry Point to the Distribution System — Marston											
Chemical Parameters	Year	Sampling Frequency	Average	Result	Unit of Measure	MCL	MCLG	Standard Met	Typical Sources			
Combined Radium (Ra-226 and Ra-228)	2021	6-9 years	0.95	BRL-1.9	pCi/L	5	0	✓	Erosion of natural deposits, mine drainage, industrial or manufacturing discharges.			
Gross Alpha (excluding Uranium)	2024	6-9 years	N/A	2.7	pCi/L	15	0	1	Erosion of natural deposits, mine drainage, industrial or manufacturing discharges.			
Combined Uranium	2024	Monthly	Average	Range	nnh	30	0	1	Erosion of natural deposits,			
Combined Orallium	2024	ivioritiny	0.2	BRL-1.4	ppb	30	30 0		mine drainage.			

The data tables below include regulated contaminants from page 7 that were monitored for and detected at Moffat Treatment Plant, one entry point to the Denver Water distribution system, in 2024. If a contaminant from page 7 is not displayed in these tables, then it was not detected above the reporting limit at the sample location.

	Inorganic Contaminants Detected at the Entry Point to the Distribution System — Moffat											
Chemical Parameters	Year	Sampling Frequency	Average	Range	Unit of Measure	MCL	MCLG	Standard Met	Typical Sources			
Barium	2024	Monthly	21.7	18.9-26.8	ppb	2,000	2,000	1	Erosion of natural deposits, discharge of drilling wastes.			
Chromium	2024	Monthly	0.33	BRL-1.0	ppb	100	100	1	Discharge from steel and pulp mills; erosion of natural deposits.			
Fluoride	2024	Monthly	585	480-640	ppb	4,000 (2,000 is SMCL)*	4,000	1	Erosion of natural deposits, water additive that promotes strong teeth, discharge from fertilizer and aluminum factories.			
Nitrate as N	2024	Monthly	86	76-93	ppb	10,000	10,000	1	Runoff from fertilizer use, leaching from septic tanks and sewage, erosion of natural deposits.			
Sodium	2024	Monthly	12,230	11,300- 12,900	ppb	N/A	N/A	✓	Naturally occurring.			

<sup>\*</sup>Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water.

Summary of Turbidity Sampled at the Entry Point to the Distribution System — Moffat										
Chemical Parameters	Year	Sampling Frequency	Level Found	Unit of Measure	Treatment Technique Requirement	Standard Met	Typical Sources			
Turbidity	2024	Daily	Highest single measurement: 0.208 NTU (July)	NTU	Maximum 1 NTU for any one single measurement	✓	Soil runoff			
Turbidity	2024	Daily	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%	NTU	In any month, at least 95% of samples must be less than 0.3 NTU	1	Soil runoff			

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.

Total	Total Organic Carbon (Disinfection Byproducts Precursor) Removal Ratio of Raw and Finished Water — Moffat									
Chemical Parameters	Year	Frequency	Treatment Technique Requirement	Standard Met	Typical Sources					
Total Organic Carbon Ratio	2024	Once per month	Denver Water uses enhanced treatment to remove the required amount of natural organic material and/or demonstrates compliance with alternative criteria.	1	Natural organic matter present in the environment.					

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts including trihalomethanes (TTHMs) and haloacetic acids (HAA5s). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

	Radiologicals Detected at the Entry Point to the Distribution System — Moffat											
Chemical Parameters	Year	Sampling Frequency	Average	Range	Unit of Measure	MCL	MCLG	Standard Met	Typical Sources			
Combined Radium (Ra-226 and Ra-228)	2021	6-9 years	1.1	BRL-2.1	pCi/L	5	0	1	Erosion of natural deposits, mine drainage, industrial or manufacturing discharges.			
Gross Alpha (excluding Uranium)	2023	6-9 years	3	1.1-4.8	pCi/L	15	0	1	Erosion of natural deposits, mine drainage, industrial or manufacturing discharges.			
Combined Uranium	2024	Monthly	BRL	BRL	ppb	30	0	1	Erosion of natural deposits, mine drainage.			

The data tables below include regulated contaminants from page 7 that were monitored for and detected at Northwater Treatment Plant, one entry point to the Denver Water distribution system, in 2024. If a contaminant from page 7 is not displayed in these tables, then it was not detected above the reporting limit at the sample location.

	Inorg	anic Contan	ninants Det	ected at the	Entry Point	to the Dis	tribution	System —	Northwater
Chemical Parameters	Year	Sampling Frequency	Average	Range	Unit of Measure	MCL	MCLG	Standard Met	Typical Sources
Barium	2024	Monthly	23.4	17.3-30.2	ppb	2,000	2,000	1	Erosion of natural deposits, discharge of drilling wastes.
Chromium	2024	Monthly	0.80	BRL-1.1	ppb	100	100	1	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride	2024	Monthly	251	BRL-600	ppb	4,000 (2,000 is SMCL)*	4,000	1	Erosion of natural deposits, water additive that promotes strong teeth, discharge from fertilizer and aluminum factories.
Nitrate as N	2024	Monthly	76	60-93	ppb	10,000	10,000	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	2024	Monthly	13,844	10,200- 16,500	ppb	N/A	N/A	1	Naturally occurring.

<sup>\*</sup>Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water.

	Summary of Turbidity Sampled at the Entry Point to the Distribution System — Northwater									
Chemical Parameters	Year	Sampling Frequency	Level Found	Unit of Measure	Treatment Technique Requirement	Standard Met	Typical Sources			
Turbidity	2024	Daily	Highest single measurement: 0.141 NTU (October)	NTU	Maximum 1 NTU for any one single measurement.	1	Soil runoff			
Turbidity	2024	Daily	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%	NTU	In any month, at least 95% of samples must be less than 0.3 NTU.	1	Soil runoff			

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.

Total Organic Carbon (Disinfection Byproducts Precursor) Removal Ratio of Raw and Finished Water — Northwater									
Chemical Parameters Year Frequency Treatment Technique Requirement Standard Met Typical Sources									
Total Organic Carbon Ratio	2024	Once per month	Denver Water uses enhanced treatment to remove the required amount of natural organic material and/or demonstrates compliance with alternative criteria.	1	Natural organic matter present in the environment.				

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts including trihalomethanes (TTHMs) and haloacetic acids (HAA5s). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

	Radiologicals Detected at the Entry Point to the Distribution System — Northwater										
Chemical Parameters	Year	Sampling Frequency	Average	Result	Unit of Measure	MCL	MCLG	Standard Met	Typical Sources		
Gross Alpha (excluding Uranium)	2024	Quarterly	BRL	BRL	pCi/L	15	0	✓	Erosion of natural deposits, mine drainage, industrial or manufacturing discharges.		
Combined Uranium	2024	Monthly	BRL	BRL	ppb	30	0	✓	Erosion of natural deposits, mine drainage.		

### The following data tables provide regulated contaminants in Denver Water's distribution system.

	Lead and Copper Sampled in the Distribution System											
Contaminant Name	Period	Tap Sample Range	90th Percentile	Sample Size	Unit of Measure	90th Percentile Action Level	Sample Sites Above Action Limit	Standard Met	Typical Sources			
Copper	1/1/2024 - 6/30/2024	BRL-826	60	402	ppb	1,300	0	<b>✓</b>	Corrosion of household plumbing; erosion of natural deposits.			
Lead	1/1/2024 - 6/30/2024	BRL-44.6	4	457	ppb	15	7	1	Corrosion of household plumbing; erosion of natural deposits.			
Copper	7/1/2024 - 12/31/2024	BRL-261	60	478	ppb	1,300	0	1	Corrosion of household plumbing; erosion of natural deposits.			
Lead	7/1/2024 - 12/31/2024	BRL-35.9	3.6	478	ppb	15	3	1	Corrosion of household plumbing; erosion of natural deposits.			

	Microbial Contaminants Regulated in the Distribution System										
Name	Year	Sampling Frequency		MCLG	Unit of Measure	Highest Monthly Percentage	Number of Positives	Standard Met	Typical Sources		
Total Coliform (T. coli)	2024	Daily	No more than 5% positive per month		Present/ Absent	No positive samples in 2024	0 out of 4,723 total samples 0; 0 <i>E. coli</i> positive samples	1	Naturally present in the environment.		

	Disinfectants Sampled in the Distribution System*										
Name	Year	Results	Number of Samples Below Level	Frequency	MRDL	Standard Met	Typical Sources				
Disinfectant as Total Cl2	2024	Lowest period percentage of samples above 0.2 ppm: 100%	0	Daily	4.0 ppm	1	Drinking water disinfectant used to control microbial growth.				

<sup>\*</sup>Treatment technique requirement: at least 95% of samples per period (month or quarter) must be at least 0.2 ppm.

	Disinfection Byproducts Sampled in the Distribution System										
Name	Year	Sampling Frequency	Highest Locational RAA	Range	Unit of Measure	MCL	MCLG	Standard Met	Typical Sources		
Total Trihalo -methanes (TTHM)	2024	Quarterly	37.9	16.4-64.7	ppb	80	N/A	1	Byproduct of drinking water disinfection.		
Haloacetic Acids (HAA5s)	2024	Quarterly	22.9	7.7-37.2	ppb	60	N/A	1	Byproduct of drinking water disinfection.		

### The data tables below provide information on unregulated parameters that were detected in the Denver Water distribution system.

Wat	er Quality	/ Parameters	with Seco	ndary Max	imum Cont	aminant L	evels Sam	oled in the I	Distribution System
Name	Year	Sampling Frequency	Average	Range	Unit of Measure	MCL	SMCL*	Standard Met	Typical Sources
Aluminum	2024	Quarterly	39.5	17.5-81.0	ppb	N/A	50-200	1	Erosion of natural deposits.
Chloride	2024	Quarterly	21,400	8,700- 34,500	ppb	N/A	250,000	1	Naturally occurring; road salt.
Copper	2024	Quarterly	5.9	BRL-69.5	ppb	N/A	1,000	1	Corrosion of household plumbing; erosion of natural deposits.
Manganese	2024	Quarterly	2.5	BRL-10.6	ppb	N/A	50	1	Naturally occurring.
Sulfate	2024	Quarterly	49,200	22,000- 69,000	ppb	N/A	250,000	<b>✓</b>	Naturally occurring.
Zinc	2024	Quarterly	2.5	BRL-11.1	ppb	N/A	5,000	1	Naturally occurring.

<sup>\*</sup>Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

	Additional Water Quality Parameters Sampled in the Distribution System										
Name	Year	Sampling Frequency	Average	Range	Unit of Measure	Typical Sources					
Alkalinity	2024	Monthly	62,200	44,000-81,000	ppb	Erosion of natural deposits.					
Total Hardness	2024	Quarterly	89,000	48,000-116,000	ppb	Erosion of natural deposits.					
Conductivity	2024	Quarterly	296	140-410	μs/cm	Naturally occurring.					
Potassium	2024	Quarterly	1,700	810-2,200	ppb	Erosion of natural deposits.					
Calcium	2024	Quarterly	25,300	15,400-33,100	ppb	Erosion of natural deposits.					
Magnesium	2024	Quarterly	6,400	2,400-8,200	ppb	Erosion of natural deposits.					
Boron	2024	Quarterly	12.1	BRL-19.8	ppb	Erosion of natural deposits.					

These parameters do not have an EPA MCL or SMCL, but can be helpful in understanding the buffering capacity and mineral content of the water. Some applications of these parameters include understanding scale build-up on water fixtures, caring for a home aquarium or brewing beer.

# **TESTING FOR UNREGULATED CONTAMINANTS**

Since 1996, the Environmental Protection Agency, through its Unregulated Contaminant Monitoring Rule, every five years requires water utilities across the country to test for a list of substances that are suspected of being in drinking water but are not currently regulated under the Safe Drinking Water Act. Utilities report their test results to the EPA, which uses the information to learn more about the presence of these substances and decide whether they should be regulated in the future to protect public health.

Denver Water's 2024 test results were reported to the EPA as required. The data tables

Lithium

below include substances that were detected during Denver Water's tests and the levels at which they were found.

The American Water Works Association has more information about the rule and the process on its website: drinktap.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR. Information about the rule also can be found on the EPA's website at <a href="https://www.epa.gov/dwumr/learn-about-unregulated-contaminant-monitoring-rule">www.epa.gov/dwumr/learn-about-unregulated-contaminant-monitoring-rule</a> or you can contact the Safe Drinking Water Hotline at 800-426-4791 or <a href="https://www.epa.gov/drink/contact.cfm">water.epa.gov/drink/contact.cfm</a>.

UCMR5: PFAS Contaminants Sampled	at Entry Po	oint to the Dis	tribution Sy	stem — All Treatmo	ent Plants
Chemical Parameters	Year	Average	Range	Unit of Measure	Minimum Reporting Level
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2023/2024	BRL	BRL	ppb	0.005
1H,1H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)	2023/2024	BRL	BRL	ppb	0.003
1H,1H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)	2023/2024	BRL	BRL	ppb	0.005
1H,1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	2023/2024	BRL	BRL	ppb	0.005
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CI-PF3ONS)	2023/2024	BRL	BRL	ppb	0.002
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	2023/2024	BRL	BRL	ppb	0.003
Hexafluoropropylene oxide dimer acid (HFPO DA)	2023/2024	BRL	BRL	ppb	0.005
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2023/2024	BRL	BRL	ppb	0.02
Perfluorobutanoic acid (PFBA)	2023/2024	BRL	BRL	ppb	0.005
Perfluorobutanesulfonic acid (PFBS)	2023/2024	BRL	BRL	ppb	0.003
Perfluorodecanoic Acid (PFDA)	2023/2024	BRL	BRL	ppb	0.003
Perfluorododecanoic Acid (PFDoA)	2023/2024	BRL	BRL	ppb	0.003
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	2023/2024	BRL	BRL	ppb	0.003
Perfluoroheptanesulfonic acid (PFHpS)	2023/2024	BRL	BRL	ppb	0.003
Perfluoroheptanoic acid (PFHpA)	2023/2024	BRL	BRL	ppb	0.003
Perfluorohexanoic Acid (PFHxA)	2023/2024	BRL	BRL	ppb	0.003
Perfluorohexanesulfonic acid (PFHxS)	2023/2024	BRL	BRL	ppb	0.003
Perfluoro-4-methoxybutanoic acid (PFMBA)	2023/2024	BRL	BRL	ppb	0.003
Perfluoro-3-methoxypropanoic acid (PFMPA)	2023/2024	BRL	BRL	ppb	0.004
Perfluorononanoic Acid (PFNA)	2023/2024	BRL	BRL	ppb	0.004
Perfluorooctanoic Acid (PFOA)	2023/2024	BRL	BRL	ppb	0.004
Perfluorooctanesulfonic acid (PFOS)	2023/2024	BRL	BRL	ppb	0.004
Perfluoropentanoic acid (PFPeA)	2023/2024	BRL	BRL	ppb	0.003
Perfluoropentanesulfonic acid (PFPeS)	2023/2024	BRL	BRL	ppb	0.004
Perfluoroundecanoic acid (PFUnA)	2023/2024	BRL	BRL	ppb	0.002
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2023/2024	BRL	BRL	ppb	0.005
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2023/2024	BRL	BRL	ppb	0.006
Perfluorotetradecanoic acid (PFTA)	2023/2024	BRL	BRL	ppb	0.008
Perfluorotridecanoic acid (PFTrDA)	2023/2024	BRL	BRL	ppb	0.007

In 2023, three treatment plant entry points (Foothills, Marston and Moffat) were tested for the above Per- and polyfluoroalkyl Substances (PFAS) under UCMR5, and were below the minimum reporting levels. In 2024, North Treatment Plant entry point was tested for the above Per- and polyfluoroalkyl Substances (PFAS) under UCMR5, and were below the minimum reporting levels.

	Contaminant Sample					
Chemical Param	eters	Year	Average	Range	Unit of Measure	Minimum Reporting Level
Lithium		2023	5.30	BRL-10.8	ppb	9
UCMR5 Lithium Contaminant Sampled at Entry Point to the Distribution System — Marston Treatment Plant						
Chemical Param	eters	Year	Average	Range	Unit of Measure	Minimum Reporting Level
Lithium		2023	9.23	9- 9.4	ppb	9
UCMR5 Lithium Contaminant Sampled at Entry Point to the Distribution System — Moffat Treatment Plant						
Chemical Param	eters	Year	Average	Range	Unit of Measure	Minimum Reporting Level
Lithium		2023	BRL	BRL	ppb	9
UCMR5: Lithium Contaminant Sampled at Entry Point to the Distribution System - NTP						
Chemical Param	eters	Year	Average	Range	Unit of Measure	Minimum Reporting Level

BRL

BRL

ppb

2024

