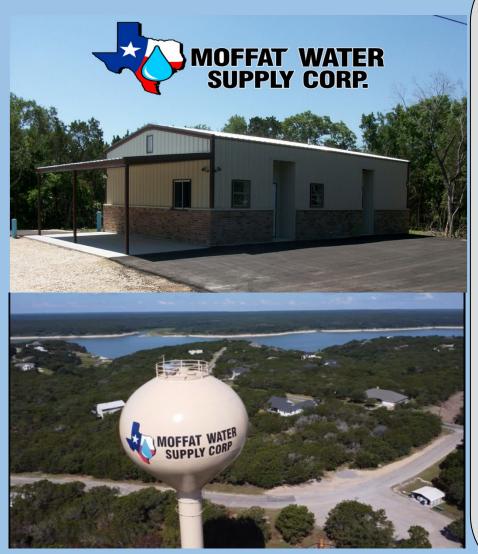
# 2023 Annual Drinking Water Quality Report



## How Can I Learn More About Our Drinking Water?

**Community Participation:** 

You are invited to participate in our monthly board meetings. We meet on the third Monday of each month, beginning at 5:30p.m., at Moffat Community Center located at 13410 Kuykendall Mnt. Rd., Temple, Texas.

#### En español

Este informe contiene información importante sobre su agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al (254) 986-2457 para hablar conuna persona bilingüe en español.

#### **Greetings from your Water Supply:**

Moffat WSC continues to reinvest in the system by capital planning for resiliency while ensuring the delivery of safer drinking water to its valued members. In 2023, the water supply received construction bids and approved a \$2.321 construction contract for replacing the original pump station on Water Supply Road that was constructed in the mid-1960s. The facility has served the membership well for several decades. Still, it has long exceeded its useful life requiring a complete replacement to be strategically performed in multiple phases using the existing location. The new pumps and storage tank capacities will be large enough for long-term efficient and safe operations servicing the community for many decades. The new station is scheduled to be in full operation in the spring of 2024.

Moffat replaced 1,200 linear feet of 2-inch diameter waterline with a 3-inch line on Moffat Loop for continued compliance with TCEQ regulations related to line capacity when figuring the number of meter connections vs line diameter size.

The new 200,000-gallon elevated storage tank on Jubilee Springs Road was completed in the summer of 2023. The new tank will serve the water supply by maintaining compliance with capacity requirements per TCEQ based on the number of service connections in the system while providing more balanced water hydraulics throughout.

Providing safe, reliable, and affordable drinking water to the membership is the top priority for the water supply and the 2023 Consumer Confidence Report proves that the water continues to remain safe to drink. Please contact the office with any questions (254) 986-2457, Monday through Friday from 8:00 a.m. to 4:30 p.m.

Finally, the Corporation's greatest asset is the dedicated team of employees who work hard daily providing professional customer service and ensuring the delivery of safe drinking water. In addition, we appreciate the Board of Directors' selfless time and dedication necessary to be the governing body of the water supply by fulfilling the responsibility of ensuring the Corporation remains fiscally sound for continued reliable service to the membership.

Respectfully,

Damon B. Boniface General Manager

#### Where does our drinking water come from?

The source of drinking water for Moffat Water Supply Corporation is Ground Water from Lower Trinity Aquifer blended with purchased Surface Water from Bluebonnet Water Supply which diverts water from Lake Belton and is located within the Brazos River Basin.

## How safe is the source of our drinking water?

A source water assessment describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. Information on Moffat Water Supply Corporation source water assessment and availability of the assessment may be obtained by contacting our office (254) 986-2457. Some of this source water assessment information is available on Texas Drinking Water Watch at https://www.tceq.texas.gov/drinkingwater. For more information on source water assessments and protection efforts at our system, please contact us.

#### Why provide a water quality report?

The sources of drinking water (both tap and bottled) 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, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbialcontaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- In organic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which 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 can also come from gas stations, urban stormwater runoff and septic systems.
- May be the result of oil and gas production and mining activities

### 2023 Test Results

To ensure that tap water is safe to drink, EPA prescribes regulations which limit the number of contaminants in water provided by public water systems. The table below lists all the drinking water contaminants that we detected during the calendary ear of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendaryear of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find some terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

| Disinfectants and Disinfection Byproducts |                 |                               |                                |                               |                                |      |     |           |   |
|---|-----------------|-------------------------------|--------------------------------|-------------------------------|--------------------------------|------|-----|-----------|---|
|   | Moff            | at WSC                        | Bluebo                         | onnet WSC                     |                                |      |     |           |   |
| Contaminant (Unit)                        | Date<br>Sampled | Highest<br>Levels<br>Detected | Range of<br>Levels<br>Detected | Highest<br>Levels<br>Detected | Range of<br>Levels<br>Detected | MCLG | MCL | Violation | Likely Source of Contamination            |
| Haloacetic Acids (HAA5)*(ppb)             | 2023            | 10                            | 5.5-13.2                       | 15                            | 15.2-15.2                      | NA   | 60  | No        | By-product of drinkingwater disinfection. |
| Total Trihalomethanes (TTHM)**(ppb)       | 2023            | 15                            | 9.8-18.8                       | 21                            | 20.9-20.9                      | NA   | 80  | No        | By-product of drinkingwater disinfection. |
| Chloramines (ppm)                         | 2023            | 3.98                          | 0.21-3.98                      | 4.7                           | 2.7-4.7                        | 4    | 4   | No        | Water additive used to control microbes   |
| Chlorite (ppm)                            | 2023            | NA                            | NA                             | 0.48                          | 0.062-0.48                     | 0.8  | 1   | No        | By-product of drinkingwater disinfection. |

<sup>\*</sup> The value in the Highest Level or Range Detected column is the highest average of all HAA5 sample results collected at a location over a year.

<sup>\*\*</sup> The value in the Highest Level or Range Detected column is the highest average of all TTHM sample results collected at a location over a year.

| Inorganic Contaminants   |                 |                               |                                |                               |                       |         |      |        |          |  |
|--|-----------------|-------------------------------|--------------------------------|-------------------------------|-----------------------|---------|------|--------|----------|--|
|  | Moffat          | Moffat WSC Bluebonnet WSC     |                                |                               |                       |         |      |        |          |  |
| Contaminant (Unit)   | Date<br>Sampled | Highest<br>Levels<br>Detected | Range of<br>Levels<br>Detected | Highest<br>Levels<br>Detected | Rang<br>Leve<br>Detec | els     | MCLG | MCL    | Violatio | on Likely Source of Contamination  |
| Asbestos (mfl)   | 2021/2022       | 0.197                         | 0.197-0.197                    | 0.197                         | 0.197-0               | .197    | 7    | 7      | No       | Decay of asbestos cement water mains; Erosion of natural deposits.   |
| Barium (ppm)   | 2022/2023       | 0.0636                        | 0.0513-0.0636                  | 0.0611                        | 0.0611-0.611          |         | 2    | 2      | No       | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.                                |
| Cyanide (ppb)  | 2023            | 40                            | 40-40                          | 10                            | 10-1                  | 10-10   |      | 200    | No       | Discharge from plastic and fertilizer factories, and steel/metal factories.  |
| Fluoride (ppm)   | 2023            | 0.2                           | 0.2-0.2                        | 0.2                           | 0.2-0                 | 0.2-0.2 |      | 4.0    | No       | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Nitrate [measured as<br>Nitrogen] (ppm)                              | 2023            | 0.26                          | 0.14-0.26                      |                               | 0.13-0                |         | 10   | 10     | No       | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.                               |
| Synthetic Organic Contaminants (including pesticides and herbicides) |                 |                               |                                |                               |                       |         |      |        |          |  |
|  | Bluebonnet      | WSC                           |                                |                               |                       |         |      |        |          |  |
| Contaminant (Unit)   | Date<br>Sampled | Highest<br>Levels             |                                | _                             | lange of Levels       | MCLC    | G M  | CL Vid | olation  | Likely Source of Contamination   |

#### Sampled Detected Detected Detected Detected Runoff from herbicide used on row crops. 3

0.2-0.2

No

0.2

Lead and Copper - Moffat WSC

2023

0.1

0.1 - 0.1

Atrazine (ppb)

| Contaminant (Unit) | Date<br>Sampled | MCLG | Action<br>Level (AL) | 90th<br>Percentile | # of Sites of AL | Violation | Likely Source of Contamination  |
|--------------------|-----------------|------|----------------------|--------------------|------------------|-----------|---|
| Copper (ppm)       | 2023            | 1.3  | 1.3                  | 0.237              | 0                |           | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |
| Lead (ppb)         | 2023            | 0    | 15                   | 3.71               | 0                |           | Corrosion of household plumbing systems; Erosion of natural deposits.                                   |

### 2023 Test Results, continued

| Radioactive Contaminants - Bluebonnet WSC  |      |     |         |   |    |    |  |  |  |
|--|------|-----|---------|---|----|----|--|--|--|
| Contaminant (Unit)  Date Sampled Detected Detect |      |     |         |   |    |    |  |  |  |
| Beta/photon emitters   | 2023 | 5.6 | 5.6-5.6 | 0 | 50 | No | Decay of natural and man-made deposits |  |  |

| Turbidity - Bluebonnet WSC  |               |              |           |                                |  |  |  |  |  |
|---|---------------|--------------|-----------|--------------------------------|--|--|--|--|--|
|   | Highest Level | Max<br>Level | Violation | Likely Source of Contamination |  |  |  |  |  |
| Highest Single Measurement  | 0.12 NTU      | 1 NTU        | No        | Soil runoff.                   |  |  |  |  |  |
| Lowest monthly % meeting limit  | 100%          | 0.30         | No        | Soil runoff.                   |  |  |  |  |  |
| Turbidity is a magazament of the deutlings of the vector around by granned departing. We maritar it because it is a good indicator of vector quality and the effectiveness of our filteration |               |              |           |                                |  |  |  |  |  |

Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.

| Coliform Bacteria  |                 |      |                                 |                               |                            |   |           |                                       |  |  |
|--------------------|-----------------|------|---------------------------------|-------------------------------|----------------------------|---|-----------|---------------------------------------|--|--|
| Contaminant (Unit) | Date<br>Sampled | MCLG | Total<br>Coliform<br>MCL        | Highest<br>No. of<br>Positive | Fecal or<br>E. Coli<br>MCL | Total No. of<br>Positive E. Coli<br>or Fecal<br>Coliform<br>Samples | Violation | Likely Source of Contamination        |  |  |
| Moffat WSC         | 2023            | 0    | 1 positive<br>monthly<br>sample | 1                             | 0                          | 0   | No        | Naturally present in the environment. |  |  |
| Bluebonnet WSC     | 2023            | 0    | 0                               | 0                             | 0                          | 0   | No        | Naturally present in the environment. |  |  |

#### **All Drinking Water May Contain Contaminants**

When drinking water meets federal standards there may not be any health benefits to purchasing bottled water or point of use devices. 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 PacSafe Drinking Water Hotline (800) 426-4791.

#### **Lead and Drinking Water**

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. Moffat WSC is responsible for providing high quality drinking water but 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

#### My immune system is compromised, should I be concerned?

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 undergoneorgan 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 healthcare providers. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800)426-4791.

#### Tapvs. Bottled, Rethinking What You Are Drinking

When choosing the water, you want to drink, it is often easy to be convinced that bottled water is healthier for you than tap water, but in truth is it? The answer, thanks to a study by the Natural Resources Defense Council (NRDC) is not always. First, approximately 25 percent of bottled water is – in reality – bottled tap water. Additionally, the Food and Drug Administration (FDA) regulates bottled water; however, their testing standards are not as rigorous as the ones required by the US Environmental Protection Agency (EPA) for tap water. Moreover, FDA oversight does not apply to water that is packaged and sold within the same state.

According to the NRDC's report, this leaves approximately 60-70 percent of bottled water, including the contents of water cooler jugs, free of FDA regulation. It is estimated that people spend almost 5,000 times more per gallon of bottled water than they would for tap water. For those who get their recommended eight glasses of water a day, you could be saving over \$1,000 annually if you switched to tap water!

## Mandatory Language for Monitoring and Reporting Violation Failure to Submit a Disinfectant Level Quarterly Operating Report (DLQOR) MONITORING, ROUTINE (DBP), MAJOR/CHLORINE

The <u>MOFFAT WSC</u> water system PWS ID <u>0140028</u> has violated the monitoring and reporting requirements set by Texas Commission on Environmental Quality (TCEQ) in Title 30, Texas Administrative Code (30 TAC), Section 290, Subchapter F. Public water systems are required to properly disinfect water before distribution, maintain acceptable disinfection residuals within the distribution system, monitor the disinfectant residual at various locations throughout the distribution system, and report the results of that monitoring to the TCEQ on a quarterly basis.

Results of regular monitoring are an indicator of whether or not your drinking water is safe from microbial contamination.

This violation occurred in the monitoring period, second quarter 2023.

We are taking the following actions to address this issue:

The water supply took immediate action to ensure future quarterly report due dates are properly recorded for timely delivery to TCEQ. The quarterly disinfection report for the violation period was submitted following the required due date per TCEQ regulations. All daily disinfection levels met or exceeded minimum standard requirements, plus all monthly bacteriological sample results prove the water was safe to drink during the monitoring period (second quarter 2023).

Please share this information with all people who drink this water, especially those who may not have received this notice directly (i.e., 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.

If you have questions regarding this matter, you may contact **Damon Boniface** at (254) 986-2457.

#### **DEFINITIONS**

90th Percentile - 90% of samples are equal to or less than the number in the chart.

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

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

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 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 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.

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 contaminants.

Million Fiber per Liter (MFL) -

a measure of the presence of asbestos fibers that are longer than 10 micrometers.

NA - not applicable

NTU - nephelometric turbidity units (a measure of turbidity)

Parts per billion (ppb) - micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

Parts per million (ppm) - milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

**pCi/L** – picocuries per liter (a measure of radioactivity)

