

# 2021 Annual Drinking Water Quality Report

(Consumer Confidence Report)

**Sonterra M.U.D.**

Phone No. (512) 246-1400

*Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems:*

Some people may be more vulnerable to contaminants in drinking water, such as Cryptosporidium, than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

## **Public Participation Opportunities**

Please call (512) 246-1400 to confirm meeting dates and times.

The Board of Directors meets on the third Monday of each month at 6:00 pm at 113 Limestone Terrace, Jarrell, Tx.

The District's water system is operated by Crossroads Utility Services, LLC. If you have any questions concerning water quality or the source of your water, please call (512) 246-1400 or (512) 246-5905.

## **Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements**

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

**WATER SOURCES:** 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 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 before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

## ***En Español***

Este informe incluye informacion importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español favor de llamar al tel. (512) 246-1400 para hablar con una persona bilingue en español.

## Where do we get our drinking water?

Your drinking water is supplied by groundwater sources located in the Edwards North BFZ aquifer and surface water from Brazos River Authority. A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the TCEQ. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus our source water protection strategies. Some of this source water assessment information will be available later this year on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>. For more information on source water assessments and protection efforts at our system, please contact us.

### ***ALL drinking water may contain contaminants.***

When drinking water meets federal standards there may not be any health based 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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

### **Secondary Constituents**

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concerns. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

## About the Following Pages

The pages that follow list all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

### **DEFINITIONS**

#### **Maximum Contaminant Level (MCL)**

The highest permissible level of a contaminant 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 health risk. MCLGs allow for a margin of safety.

#### **Maximum Residual Disinfectant Level (MRDL)**

The highest level of 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 contamination.

#### **Treatment Technique (TT)**

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

#### **Action Level (AL)**

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

### **ABBREVIATIONS**

NTU – Nephelometric Turbidity Units

MFL – million fibers per liter (a measure of asbestos)

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

ppm – parts per million, or milligrams per liter (mg/L)

ppb – parts per billion, or micrograms per liter (µg/L)

ppt – parts per trillion, or nanograms per liter

ppq – parts per quadrillion, or picograms per liter

**Inorganic Contaminants**

| Year       | Contaminant                 | Average Level | Minimum Level | Maximum Level | MCL  | MCLG | Source of Contaminant  |
|------------|-----------------------------|---------------|---------------|---------------|------|------|--|
| 2021 (BRA) | Antimony (ppm)              | <0.001        | <0.001        | <0.001        | 6    | 6    | Discharge from petroleum refineries; fire retardants; ceramics; solder; test addition.                     |
| 2021 (BRA) | Arsenic (ppm)               | 0.0034        | 0.0034        | 0.0034        | 0.01 | 0.01 | Erosion of natural deposits; Runoff from orchards; runoff from glass and production wastes.                |
| 2021 (BRA) | Asbestos (MFL)              | <0.197        | <0.197        | <0.197        | 7    | 7    | Decay of asbestos cement in water mains; erosion of natural deposits.                                      |
| 2021 (BRA) | Barium (ppm)                | 0.0526        | 0.0526        | 0.0526        | 2    | 2    | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.                |
| 2021 (BRA) | Beryllium (ppm)             | <0.0008       | <0.0008       | <0.0008       | 2    | 2    | Discharge from metal refineries and coal-burning factories   |
| 2021 (BRA) | Cadmium (ppm)               | <0.001        | <0.001        | <0.001        | 5    | 5    | Corrosion of galvanized pipes; Erosion of natural deposits.  |
| 2021       | Fluoride* (ppm)             | 2.50          | 0.24          | 4.33          | 4    | 4    | Erosion of natural deposits; additive which promotes strong teeth; disch. from fertilizer/alum. factories. |
| 2021       | Nitrate** (ppm)             | 0.239         | <0.05         | 0.43          | 10   | 10   | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.               |
| 2021       | Nitrite** (ppm)             | <0.05         | <0.05         | <0.05         | 1    | 1    | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.               |
| 2021       | Nitrate-nitrite** (ppm)     | <0.05         | <0.05         | <0.05         | 10   | 10   | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.               |
| 2020       | Gross alpha (pCi/L)         | <3.0          | <3.0          | <3.0          | 15   | 0    | Erosion of natural deposits.   |
| 2020       | Gross beta emitters (pCi/L) | <4.0          | <4.0          | <4.0          | 50   | 0    | Decay of natural and man-made deposits.  |
| 2020       | Radium-228 (pCi/L)          | <1.0          | <1.0          | <1.0          | 5    | 0    | Decay of natural and man-made deposits.  |

\*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 mg/L of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by Sonterra M.U.D. has a fluoride concentration of 3.18 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. EPA's drinking water standard) can increase your risk of developing bone disease. We are 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 Dennis Hendrix of Crossroads Utility Services (Sonterra M.U.D.) at (512) 246-5913. 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 1-877-8-NSF-HELP.

\*\*Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. If you are caring for an infant you should ask advice from your health care provider

**Organic Contaminants**

| Year       | Contaminant     | Average Level | Minimum Level | Maximum Level | MCL  | MCLG | Source of Contaminant |
|------------|-----------------|---------------|---------------|---------------|------|------|-----------------------|
| 2021 (BRA) | Simazine (ppb)  | <0.07         | <0.07         | <0.07         | 4    | 4    | Herbicide runoff.     |
| 2021 (BRA) | Toxaphene (ppb) | <1.0          | <1.0          | <1.0          | 3.0  | 3.0  | Insecticide.          |
| 2021       | Toluene (ppb)   | <0.5          | <0.5          | <0.5          | 1000 | 1000 | Petrochemical runoff. |

**Volatile Organic Contaminants**

| Year | Contaminant          | Average Level | Minimum Level | Maximum Level | MCL | MCLG | Source of Contaminant                                    |
|------|----------------------|---------------|---------------|---------------|-----|------|--|
| 2021 | Benzene (ppb)        | <0.5          | <0.5          | <0.5          | 5.0 | 5.0  | Petrochemical runoff.                                    |
| 2021 | Vinyl Chloride (ppb) | <0.5          | <0.5          | <0.5          | 2   | 2    | Leaching from PVC piping; Discharge of plastic factories |

**Maximum Residual Disinfectant Level**

| Year | Disinfectant         | Average Level | Minimum Level | Maximum Level | MRDL | MRDLG | Source of Disinfectant                |
|------|----------------------|---------------|---------------|---------------|------|-------|---------------------------------------|
| 2021 | Total Chlorine (ppm) | 1.69          | 0.5           | 3.8           | 4.0  | <4.0  | Disinfectant used to control microbes |

**Disinfection Byproducts**

| Year | Contaminant            | LR Average Level | Minimum Level | Maximum Level | MCL | Unit of Measure | Source of Contaminant                     |
|------|------------------------|------------------|---------------|---------------|-----|-----------------|---|
| 2021 | Total Haloacetic Acids | 11.2             | 11.2          | 11.2          | 60  | mg/L            | Byproduct of drinking water disinfection. |
| 2021 | Total Trihalomethanes  | 22.6             | 22.6          | 22.6          | 80  | mg/L            | Byproduct of drinking water disinfection. |

**Unregulated Contaminants**

Bromoform, chloroform, bromodichloromethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

| Year | Contaminant          | Average Level | Minimum Level | Maximum Level | Unit of Measure | Source of Contaminant                     |
|------|----------------------|---------------|---------------|---------------|-----------------|---|
| 2021 | Chloroform           | 6.0           | 5.5           | 6.5           | ppb             | Byproduct of drinking water disinfection. |
| 2021 | Bromoform            | 5.45          | 1.6           | 9.3           | ppb             | Byproduct of drinking water disinfection. |
| 2021 | Bromodichloromethane | 11.65         | 8.3           | 15            | ppb             | Byproduct of drinking water disinfection. |
| 2021 | Dibromochloromethane | 12.1          | 6.2           | 18            | ppb             | Byproduct of drinking water disinfection. |

**Turbidity** NOT REQUIRED

**Total Organic Carbon** NOT REQUIRED

**Lead and Copper**

| Year | Contaminant | The 90 <sup>th</sup> Percentile | Number of Sites Exceeding Action Level | Action Level | Unit of Measure | Source of Contaminant   |
|------|-------------|---------------------------------|--|--------------|-----------------|---|
| 2021 | Lead        | 0.00321/0.00321                 | 0                                      | 15           | ppm             | Corrosion of household plumbing systems; erosion of natural deposits.                                   |
| 2021 | Copper      | 0.0957/0.231                    | 0                                      | 1.3          | ppm             | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives. |

**Required Additional Health Information for Lead**

"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 cannot control the variety of material used 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>."

2021 **Total Coliform** REPORTED MONTHLY TESTS FOUND NO COLIFORM BACTERIA

2021 **Fecal Coliform** REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

**Secondary and Other Constituents Not Regulated** (No associated adverse health effects)

| Year       | Contaminant                              | Average Level | Minimum Level | Maximum Level | Limit | Source of Contaminant  |
|------------|--|---------------|---------------|---------------|-------|--|
| 2021 (BRA) | Aluminum (ppm)                           | 0.119         | 0.119         | 0.119         | 0.2   | Abundant naturally occurring element.  |
| 2021 (BRA) | Bicarbonate (ppm)                        | 126           | 126           | 126           | NA    | Corrosion of carbonate rocks such as limestone.  |
| 2021 (BRA) | Carbonate (ppm)                          | <2.0          | <2.0          | <2.0          | NA    | Corrosion of carbonate rocks such as limestone.  |
| 2021       | Calcium (ppm)                            | 41.16         | 33.4          | 51.5          | NA    | Abundant naturally occurring element.  |
| 2021       | Chloride (ppm)                           | 71.04         | 43.5          | 113           | 300   | Abundant naturally occurring element; used in water purification; byproduct of oil field activity. |
| 2021       | Iron (ppm)                               | 0.08          | 0.09          | .305          | 0.3   | Abundant naturally occurring element.  |
| 2021 (BRA) | Magnesium (ppm)                          | 10.1          | 10.1          | 10.1          | NA    | Abundant naturally occurring element.  |
| 2021       | Manganese (ppm)                          | 0.008         | <0.005        | 0.023         | 0.05  | Abundant naturally occurring element.  |
| 2021 (BRA) | P. Alkalinity as CaCO <sub>3</sub> (ppm) | <10           | <10           | <10           | NA    | Naturally occurring soluble mineral salts.   |
| 2021       | pH (units)                               | 7.54          | 7.5           | 7.6           | 7     | Measure of corrosivity of water.   |
| 2021       | Sodium (ppm)                             | 77.78         | 24.5          | 175           | NA    | Erosion of natural deposits; byproduct of oil field activity.                                      |

|      |                                 |        |        |        |      |  |
|------|---------------------------------|--------|--------|--------|------|--|
| 2021 | Sulfate (ppm)                   | 88.29  | 41.7   | 200    | 300  | Naturally occurring; common industrial byproduct; byproduct of oil field activity. |
| 2021 | Total Alkalinity as CaCO3 (ppm) | 170.65 | 96     | 258    | NA   | Naturally occurring soluble mineral salts.   |
| 2021 | Total Dissolved Solids (ppm)    | 429.7  | 252    | 738    | 1000 | Total dissolved mineral constituents in water.                                     |
| 2021 | Total Hardness as CaCO3 (ppm)   | 168.3  | 147    | 220    | NA   | Naturally occurring calcium.   |
| 2020 | Zinc (ppm)                      | 0.0917 | 0.0917 | 0.0917 | 5    | Moderately abundant naturally occurring element; used in the metal industry.       |

**Violations Table**

|   |             |           |  |
|---|-------------|-----------|--|
| <b>Fluoride - Secondary Constituent Level</b>                                       |             |           |  |
| Naturally occurring from erosion of natural deposits in some ground water supplies. |             |           |  |
| <b>Violation Type- Fluoride -Secondary Constituent Level</b>                        |             |           |  |
| Year  | Month Begin | Month End | Explanation                              |
| 2021  | January     | December  | Secondary Constituent Level of 2.50 mg/L |
|   |             |           |  |

**Required Language for SCL Exceedance of Fluoride:**

The Texas Commission on Environmental Quality (TCEQ) has notified the SONTERRA MUD, TX2460157 that the drinking water being supplied to customers has exceeded the Secondary Constituent Level (SCL) of 2.0 mg/L for fluoride.

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 SONTERRA MUD has a fluoride concentration of 2.50 mg/L.

Dental fluorosis, in its moderate or severe forms, may result in a brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternate 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 Darrell Winslett of SONTERRA MUD at 512 246-1400. Some home water treatment units are also available to remove fluoride from drinking water.

**P.W.S. #2460157**