

FRISCO WEST



WCIDDC

CONSUMER CONFIDENCE REPORT

ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2020



PWS ID#: TX0610253

**Frisco West Water Control & Improvement
District of Denton County**
Office: 972.987.4250
Operator: 214.773.6013
FriscoWest.org

EPA's Safe Drinking Water Hotline
[800.426.4791](tel:800.426.4791)
epa.gov/safewater/lead

Public Participation Opportunities

Date: 3rd Tuesday of each month

Time: 6:30 p.m.

Location: 1230 Brendan Dr, Little Elm, Texas 75068

Phone No: 972.987.4250

To learn about future public meetings (concerning your drinking water), or to request to schedule one, or for any further information regarding this report, please call us.

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

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono 972.987.4250.

WHERE YOUR WATER COMES FROM

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.

Frisco Hills Water Source – The water is purchased wholesale from the Town of Little Elm. The Town of Little Elm purchases water from North Texas Municipal Water District. The water is drawn from surface water sources including Lake Lavon, Texoma and Cooper.

Frisco Ranch & The Preserve Water Source – Pumps draw water from two ground water wells located in Frisco Ranch. These pumps are roughly 1,000 feet down drawing water from the [Trinity Aquifer](#).

WELL #1

Location: 11909 FM423

Type: GW | Activity: A

Status: Normal Operations

WELL #2

Location: 1230 Brendan Dr.

Type: GW | Activity: A

Status: Normal Operations

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

The data collected is from the U.S. Environmental Protection Agency (EPA) required tests. These tests monitor for contaminants in your drinking water according to Federal and State laws, rules, and regulations.

As authorized and approved by the EPA, the State has reduced monitoring requirements for certain contaminants to less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. As a result some of our data is more than one year old.

ALL DRINKING WATER MAY CONTAIN CONTAMINANTS

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

Contaminants that may be present in source water include:

INORGANIC CONTAMINANTS

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

DISINFECTANTS AND DISINFECTION BY-PRODUCTS

Water is chlorinated for disinfection purposes, aerated to reduce sulfides and treated with ortho-phosphate for corrosion control.

LEAD AND COPPER

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

MICROBAL CONTAMINANTS

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

ORGANIC CHEMICAL CONTAMINANTS

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

PESTICIDES AND HERBACIDES

These may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

RADIOACTIVE CONTAMINANTS

Can be naturally-occurring or be the result of oil and gas production and mining activities.

HEALTH RISKS

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office. You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care 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).

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

INORGANIC CONTAMINANTS

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

| Inorganic Contaminants | Collection Date | Highest Level Detected | Range of Individual Samples | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|--------------------------------|-----------------|------------------------|-----------------------------|------|-----|-------|-----------|--|
| Barium | 3/19/2020 | 0.006 | 0.006 - 0.006 | 2 | 2 | ppm | N | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
| Fluoride | 3/19/2020 | 1.61 | 1.61 - 1.61 | 4 | 4.0 | ppm | N | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Nitrate [measured as Nitrogen] | 3/19/2020 | 1 | 0.0481 - 0.927 | 10 | 10 | ppm | N | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. |

LEAD AND COPPER

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

| Lead and Copper | Date Sampled | MCLG | Action Level (AL) | 90th Percentile | # Sites Over AL | Units | Violation | Likely Source of Contamination |
|-----------------|--------------|------|-------------------|-----------------|-----------------|-------|-----------|---|
| Lead | 9/23/2019 | 15 | 15 | 0.001 | 0 | ppb | N | Corrosion of household plumbing systems, erosion of natural deposits |
| Copper | 9/23/2019 | 1.3 | 1.3 | 0.054 | 0 | ppm | N | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |

DISINFECTANTS AND DISINFECTION BY-PRODUCTS

Water is chlorinated for disinfection purposes, aerated to reduce sulfides and treated with ortho-phosphate for corrosion control.

NOTE: Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

| Disinfection By-Products | Collection Date | Highest Level Detected | Range of Individual Samples | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|--|-----------------|------------------------|-----------------------------|-----------------------|-----|-------|-----------|--|
| Haloacetic Acids (HAA5) | 9/10/2020 | 20 | 0 - 19.5 | No goal for the total | 60 | ppb | N | By-product of drinking water disinfection. |
| **The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year* | | | | | | | | |
| Total Trihalomethanes (TTHM) | 9/10/2020 | 32 | 2.85 - 32.2 | No goal for the total | 80 | ppb | N | By-product of drinking water disinfection. |
| **The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a Year* | | | | | | | | |

RADIOACTIVE CONTAMINANTS

Can be naturally-occurring or be the result of oil and gas production and mining activities.

| Radioactive Contaminants | Collection Date | Highest Level Detected | Range of Individual Samples | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|--------------------------|-----------------|------------------------|-----------------------------|------|-----|-------|-----------|--------------------------------|
| Combined Radium 226/228 | 02/12/2018 | 1.5 | 1.5 - 1.5 | 0 | 5 | pCi/L | N | Erosion of natural deposits. |

DISINFECTANT RESIDUAL REPORT | CHLORINE

| Year | Disinfectant | Average Level | Range of Levels Detected | MRDL | MRDLG | Unit of Measure | Violation (Y/N) | Source in Drinking Water |
|------|--------------|---------------|--------------------------|------|-------|-----------------|-----------------|--|
| 2020 | Chlorine | 1.02 | 0.32 - 2.8 | 4 | 4 | Mg/L | N | Water additive used to control microbes. |

SYSTEM SUSCEPTIBILITY SUMMARY | ADDITIONAL CONTAMINANTS

ASBESTOS | NA

SYNTHETIC ORGANIC CHEMICALS | NA

CYANIDE | NA

DISINFECTANT BYPRODUCTS | NA

METALS | **HIGH**

“HIGH” susceptibility means there are activities near the source water and the natural conditions of the aquifer or watershed make it very likely that chemical constituents may come into contact with the source water. It does **NOT** mean that there are any health risks present.

VOLATILE ORGANIC CHEMICALS | **HIGH**

“HIGH” susceptibility means there are activities near the source water and the natural conditions of the aquifer or watershed make it very likely that chemical constituents may come into contact with the source water. It does **NOT** mean that there are any health risks present.

MICROBIAL | NA

DRINKING WATER CONTAMINANT CANDIDATE | NA

MINERALS | NA

OTHER | NA

RADIOCHEMICAL | NA

TABLE NOTES

A. Results in the Level Detected column for radiological contaminants, inorganic contaminants, synthetic organic contaminants including pesticides and herbicides, and volatile organic contaminants are the highest average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency.

B. For bromate, chloramines, or chlorine, the level detected is the highest running annual average (RAA), computed quarterly of monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the p a s t y e a r .

For haloacetic acids or TTHM, the level detected is the highest RAA, computed quarterly of quarterly averages of all samples collected if the system is monitoring quarterly or is the average of all samples taken during the year if the system monitors less frequently than quarterly. Range of results is the range of individual samples (lowest to highest) for all monitoring locations.

DEFINITIONS AND ABBREVIATIONS

The following definitions contain scientific terms and measures, some of which may require explanation.

ACTION LEVEL

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

ACTION LEVEL GOAL (ALG)

The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

AVG

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

LEVEL 1 ASSESSMENT

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

LEVEL 2 ASSESSMENT

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

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.

NA

not applicable

MFL

million fibers per liter (a measure of asbestos)

mrem

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

NTU

nephelometric turbidity units (a measure of turbidity)

pCi/L

picocuries per liter (a measure of radioactivity)

ppb

micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water

ppm

milligrams per liter or parts per million - or one ounce in 7,350 gallons of water

ppq

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

ppt

parts per trillion, or nanograms per liter (ng/L)

TREATMENT TECHNIQUE (TT)

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

90th PERCENTILE

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

HELPFUL LINKS AND INFORMATION

[WATER QUALITY REPORTS](#)

[WATER RESTRICTIONS](#)

[COMMUNITY RESOURCE DIRECTORY](#)

[FAQ](#)

[REPORT AN ISSUE](#)

ADDITIONAL FRISCO HILLS WATER DATA BELOW | Provided by The Town of Little Elm

NTMWD Wylie Water Treatment Plants Water Quality Data for Year 2020

Coliform Bacteria

| Maximum Contaminant Level Goal | Total Coliform Maximum Contaminant Level | Highest No. of Positive | Fecal Coliform or E. Coli Maximum Contaminant Level | Total No. of Positive E. Coli or Fecal Coliform Samples | Violation | Likely Source of Contamination |
|--|--|-------------------------|---|---|-----------|---------------------------------------|
| 0 | 1 positive monthly sample | Cust# | 0 | Cust# | Cust# | Naturally present in the environment. |
| NOTE: Reported monthly tests found no fecal coliform bacteria. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. | | | | | | |

Regulated Contaminants

| Disinfectants and Disinfection By-Products | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|---|-----------------|--------------------------------|--------------------------|-----------------------|-----|-------|-----------|--|
| Total Haloacetic Acids (HAA5) | 2020 | CUST # | CUST # | No goal for the total | 60 | ppb | Cust# | By-product of drinking water disinfection. |
| Total Trihalomethanes (TTHM) | 2020 | CUST # | CUST # | No goal for the total | 80 | ppb | Cust# | By-product of drinking water disinfection. |
| Bromate | 2020 | 8.91 | 8.91 - 8.91 | 5 | 10 | ppb | No | By-product of drinking water ozonation. |
| NOTE: Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future. TCEQ only requires one sample annually for compliance testing. | | | | | | | | |
| Inorganic Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination |
| Antimony | 2020 | Levels lower than detect level | 0 - 0 | 6 | 6 | ppb | No | Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; and test addition. |
| Arsenic | 2020 | Levels lower than detect level | 0 - 0 | 0 | 10 | ppb | No | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes. |
| Barium | 2020 | 0.061 | 0.058 - 0.061 | 2 | 2 | ppm | No | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. |
| Beryllium | 2020 | Levels lower than detect level | 0 - 0 | 4 | 4 | ppb | No | Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries. |
| Cadmium | 2020 | Levels lower than detect level | 0 - 0 | 5 | 5 | ppb | No | Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints. |
| Chromium | 2020 | Levels lower than detect level | 0 - 0 | 100 | 100 | ppb | No | Discharge from steel and pulp mills; erosion of natural deposits. |
| Fluoride | 2020 | 0.225 | 0.218 - 0.225 | 4 | 4 | ppm | No | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories. |
| Mercury | 2020 | Levels lower than detect level | 0 - 0 | 2 | 2 | ppb | No | Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland. |
| Nitrate (measured as Nitrogen) | 2020 | 0.827 | 0.266 - 0.827 | 10 | 10 | ppm | No | Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits. |
| Selenium | 2020 | Levels lower than detect level | 0 - 0 | 50 | 50 | ppb | No | Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines. |
| Thallium | 2020 | Levels lower than detect level | 0 - 0 | 0.5 | 2 | ppb | No | Discharge from electronics, glass, and leaching from ore-processing sites; drug factories. |
| Nitrate Advisory: 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. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider. | | | | | | | | |
| Radioactive Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination |
| Beta/alpha emitters | 2018 | 8.0 | 8.0 - 8.0 | 0 | 50 | pCi/L | No | Decay of natural and man-made deposits. |
| Gross alpha excluding radon and uranium | 2018 | Levels lower than detect level | 0 - 0 | 0 | 15 | pCi/L | No | Erosion of natural deposits. |
| Radium | 2018 | Levels lower than detect level | 0 - 0 | 0 | 5 | pCi/L | No | Erosion of natural deposits. |

NTMWD Wylie Water Treatment Plants Water Quality Data for Year 2020 (Cont.)

| Synthetic organic contaminants including pesticides and herbicides | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|--|-----------------|--------------------------------|--------------------------|------|-----|-------|-----------|--|
| 2, 4, 5 - TP (Silvex) | 2019 | Levels lower than detect level | 0 - 0 | 50 | 50 | ppb | No | Residue of banned herbicide. |
| 2, 4 - D | 2019 | Levels lower than detect level | 0 - 0 | 70 | 70 | ppb | No | Runoff from herbicide used on row crops. |
| Alachlor | 2020 | Levels lower than detect level | 0 - 0 | 0 | 2 | ppb | No | Runoff from herbicide used on row crops. |
| Aldicarb | 2019 | Levels lower than detect level | 0 - 0 | 0 | 3 | ppb | No | Runoff from herbicide used on row crops. |
| Aldicarb Sulfone | 2019 | Levels lower than detect level | 0 - 0 | 0 | 2 | ppb | No | Runoff from herbicide used on row crops. |
| Aldicarb Sulfoxide | 2019 | Levels lower than detect level | 0 - 0 | 3 | 4 | ppb | No | Runoff from herbicide used on row crops. |
| Atrazine | 2020 | 0.2 | 0.2 - 0.2 | 3 | 3 | ppb | No | Runoff from herbicide used on row crops. |
| Benzo (a) pyrene | 2020 | Levels lower than detect level | 0 - 0 | 0 | 200 | ppt | No | Leaching from linings of water storage tanks and distribution lines. |
| Carbofuran | 2019 | Levels lower than detect level | 0 - 0 | 40 | 40 | ppb | No | Leaching of soil fumigant used on rice and alfalfa. |
| Chlordane | 2020 | Levels lower than detect level | 0 - 0 | 0 | 2 | ppb | No | Residue of banned termiticide. |
| Dalapon | 2019 | Levels lower than detect level | 0 - 0 | 200 | 200 | ppb | No | Runoff from herbicide used on rights of way. |

| | | | | | | | | |
|--------------------------------------|------------------------|--------------------------------|---------------------------------|-------------|------------|--------------|------------------|--|
| Di (2-ethylhexyl) adipate | 2020 | Levels lower than detect level | 0 - 0 | 400 | 400 | ppb | No | Discharge from chemical factories. |
| Di (2-ethylhexyl) phthalate | 2020 | 0.6 | 0.6 - 0.6 | 0 | 6 | ppb | No | Discharge from rubber and chemical factories. |
| Dibromochloropropane (DBCP) | 2019 | Levels lower than detect level | 0 - 0 | 0 | 200 | ppt | No | Runoff / leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards. |
| Dinoseb | 2019 | Levels lower than detect level | 0 - 0 | 7 | 7 | ppb | No | Runoff from herbicide used on soybeans and vegetables. |
| Endrin | 2020 | Levels lower than detect level | 0 - 0 | 2 | 2 | ppb | No | Residue of banned insecticide. |
| Ethylene dibromide | 2019 | Levels lower than detect level | 0 - 0 | 0 | 50 | ppt | No | Discharge from petroleum refineries. |
| Heptachlor | 2020 | Levels lower than detect level | 0 - 0 | 0 | 400 | ppt | No | Residue of banned termiticide. |
| Heptachlor epoxide | 2020 | Levels lower than detect level | 0 - 0 | 0 | 200 | ppt | No | Breakdown of heptachlor. |
| Hexachlorobenzene | 2020 | Levels lower than detect level | 0 - 0 | 0 | 1 | ppb | No | Discharge from metal refineries and agricultural chemical factories. |
| Hexachlorocyclopentadiene | 2020 | Levels lower than detect level | 0 - 0 | 50 | 50 | ppb | No | Discharge from chemical factories. |
| Lindane | 2020 | Levels lower than detect level | 0 - 0 | 200 | 200 | ppt | No | Runoff / leaching from insecticide used on cattle, lumber, and gardens. |
| Methoxychlor | 2020 | Levels lower than detect level | 0 - 0 | 40 | 40 | ppb | No | Runoff / leaching from insecticide used on fruits, vegetables, alfalfa, and livestock. |
| Oxamyl [Vydate] | 2019 | Levels lower than detect level | 0 - 0 | 200 | 200 | ppb | No | Runoff / leaching from insecticide used on apples, potatoes, and tomatoes. |
| Pentachlorophenol | 2019 | Levels lower than detect level | 0 - 0 | 0 | 1 | ppb | No | Discharge from wood preserving factories. |
| Picloram | 2019 | Levels lower than detect level | 0 - 0 | 4 | 500 | ppb | No | Herbicide runoff. |
| Simazine | 2020 | 0.08 | 0.07 - 0.08 | 4 | 4 | ppb | No | Herbicide runoff. |
| Toxaphene | 2020 | Levels lower than detect level | 0 - 0 | 0 | 3 | ppb | No | Runoff / leaching from insecticide used on cotton and cattle. |
| Volatile Organic Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination |
| 1, 1, 1 - Trichloroethane | 2020 | Levels lower than detect level | 0 - 0 | 200 | 200 | ppb | No | Discharge from metal degreasing sites and other factories. |
| 1, 1, 2 - Trichloroethane | 2020 | Levels lower than detect level | 0 - 0 | 3 | 5 | ppb | No | Discharge from industrial chemical factories. |
| 1, 1 - Dichloroethylene | 2020 | Levels lower than detect level | 0 - 0 | 7 | 7 | ppb | No | Discharge from industrial chemical factories. |
| 1, 2, 4 - Trichlorobenzene | 2020 | Levels lower than detect level | 0 - 0 | 70 | 70 | ppb | No | Discharge from textile-finishing factories. |
| 1, 2 - Dichloroethane | 2020 | Levels lower than detect level | 0 - 0 | 0 | 5 | ppb | No | Discharge from industrial chemical factories. |
| 1, 2 - Dichloropropane | 2020 | Levels lower than detect level | 0 - 0 | 0 | 5 | ppb | No | Discharge from industrial chemical factories. |
| Benzene | 2020 | Levels lower than detect level | 0 - 0 | 0 | 5 | ppb | No | Discharge from factories; leaching from gas storage tanks and landfills. |
| Carbon Tetrachloride | 2020 | Levels lower than detect level | 0 - 0 | 0 | 5 | ppb | No | Discharge from chemical plants and other industrial activities. |

NTMWD Wylie Water Treatment Plants Water Quality Data for Year 2020 (Cont.)

| Volatile Organic Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|---------------------------------|-----------------|--------------------------------|--------------------------|------|-----|-------|-----------|--|
| Chlorobenzene | 2020 | Levels lower than detect level | 0 - 0 | 100 | 100 | ppb | No | Discharge from chemical and agricultural chemical factories. |
| Dichloromethane | 2020 | Levels lower than detect level | 0 - 0 | 0 | 5 | ppb | No | Discharge from pharmaceutical and chemical factories. |
| Ethylbenzene | 2020 | Levels lower than detect level | 0 - 0 | 0 | 700 | ppb | No | Discharge from petroleum refineries. |
| Styrene | 2020 | Levels lower than detect level | 0 - 0 | 100 | 100 | ppb | No | Discharge from rubber and plastic factories; leaching from landfills. |
| Tetrachloroethylene | 2020 | Levels lower than detect level | 0 - 0 | 0 | 5 | ppb | No | Discharge from factories and dry cleaners. |
| Toluene | 2020 | Levels lower than detect level | 0 - 0 | 1 | 1 | ppm | No | Discharge from petroleum factories. |
| Trichloroethylene | 2020 | Levels lower than detect level | 0 - 0 | 0 | 5 | ppb | No | Discharge from metal degreasing sites and other factories. |
| Vinyl Chloride | 2020 | Levels lower than detect level | 0 - 0 | 0 | 2 | ppb | No | Leaching from PVC piping; discharge from plastics factories. |
| Xylenes | 2020 | Levels lower than detect level | 0 - 0 | 10 | 10 | ppm | No | Discharge from petroleum factories; discharge from chemical factories. |
| cis - 1, 2 - Dichloroethylene | 2020 | Levels lower than detect level | 0 - 0 | 70 | 70 | ppb | No | Discharge from industrial chemical factories. |
| o - Dichlorobenzene | 2020 | Levels lower than detect level | 0 - 0 | 600 | 600 | ppb | No | Discharge from industrial chemical factories. |
| p - Dichlorobenzene | 2020 | Levels lower than detect level | 0 - 0 | 75 | 75 | ppb | No | Discharge from industrial chemical factories. |
| trans - 1, 2 - Dichloroethylene | 2020 | Levels lower than detect level | 0 - 0 | 100 | 100 | ppb | No | Discharge from industrial chemical factories. |

Turbidity

| | (Treatment Technique) | Level Detected | Violation | Likely Source of Contamination |
|---|-----------------------|----------------|-----------|--------------------------------|
| Highest single measurement | 1 NTU | 0.31 NTU | No | Soil runoff. |
| Lowest monthly percentage (%) meeting limit | 0.3 NTU | 100.00% | No | Soil runoff. |
| NOTE: 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. | | | | |

Maximum Residual Disinfectant Level

| Disinfectant Type | Year | Average Level of Quarterly Data | Lowest Result of Single Sample | Highest Result of Single Sample | MRDL | MRDLG | Units | Source of Chemical |
|---------------------------------|------|---------------------------------|--------------------------------|---------------------------------|------|-------|-------|--|
| Chlorine Residual (Chloramines) | 2020 | Cust# | Cust# | Cust# | 4.00 | <4.0 | ppm | Disinfectant used to control microbes. |
| Chlorine Dioxide | 2020 | 0 | 0 | 0 | 0.80 | 0.80 | ppm | Disinfectant. |
| Chlorite | 2020 | 0.0475 | 0 | 0.483 | 1.00 | N/A | ppm | Disinfectant. |

NOTE: Water providers are required to maintain a minimum chlorine disinfection residual level of 0.5 parts per million (ppm) for systems disinfecting with chloramines and an annual average chlorine disinfection residual level of between 0.5 (ppm) and 4 parts per million (ppm).

Total Organic Carbon

| | Collection Date | Highest Level Detected | Range of Levels Detected | Units | Likely Source of Contamination |
|----------------|-----------------|------------------------|--------------------------|-------------|---------------------------------------|
| Source Water | 2020 | 5.16 | 3.95 - 5.16 | ppm | Naturally present in the environment. |
| Drinking Water | 2020 | 3.14 | 2.13 - 3.14 | ppm | Naturally present in the environment. |
| Removal Ratio | 2020 | 53.9 | 28.4 - 53.9 | % removal * | N/A |

NOTE: Total organic carbon (TOC) has no health effects. The disinfectant can combine with TOC to form disinfection by-products. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. By-products of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

* Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed.

Cryptosporidium and Giardia

| Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | Units | Likely Source of Contamination |
|-----------------|-----------------|------------------------|--------------------------|--------------|--------------------------------|
| Cryptosporidium | 2020 | 0 | 0 - 0 | (Oo) Cysts/L | Human and animal fecal waste. |
| Giardia | 2020 | 0 | 0 - 0 | (Oo) Cysts/L | Human and animal fecal waste. |

NTMWD Wylie Water Treatment Plants Water Quality Data for Year 2020 (Cont.)

Lead and Copper

| Lead and Copper | Date Sampled | Action Level (AL) | 90th Percentile | # Sites Over AL | Units | Violation | Likely Source of Contamination |
|-----------------|--------------|-------------------|-----------------|-----------------|-------|-----------|---|
| Copper | | 15 | CUST # | CUST # | ppb | | Corrosion of household plumbing systems; erosion of natural deposits. |
| Lead | | 1.30 | CUST # | CUST # | ppm | | Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems. |

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. [Customer] 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>.

Unregulated Contaminants

| Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | Units | Likely Source of Contamination |
|----------------------|-----------------|------------------------|--------------------------|-------|--|
| Chloroform | 2020 | CUST # | CUST # | ppb | By-product of drinking water disinfection. |
| Bromoform | 2020 | CUST # | CUST # | ppb | By-product of drinking water disinfection. |
| Bromodichloromethane | 2020 | CUST # | CUST # | ppb | By-product of drinking water disinfection. |
| Dibromochloromethane | 2020 | CUST # | CUST # | ppb | By-product of drinking water disinfection. |

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

Secondary and Other Constituents Not Regulated

| Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | Units | Likely Source of Contamination |
|---------------------------|-----------------|--------------------------------|--------------------------|-------|---|
| Aluminum | 2020 | Levels lower than detect level | 0 - 0 | ppm | Erosion of natural deposits. |
| Calcium | 2020 | 62.4 | 58.3 - 62.4 | ppm | Abundant naturally occurring element. |
| Chloride | 2020 | 78.9 | 23.2 - 78.9 | ppm | Abundant naturally occurring element; used in water purification; by-product of oil field activity. |
| Iron | 2020 | Levels lower than detect level | 0 - 0 | ppm | Erosion of natural deposits; iron or steel water delivery equipment or facilities. |
| Magnesium | 2020 | 9.40 | 8.83 - 9.40 | ppm | Abundant naturally occurring element. |
| Manganese | 2020 | 0.017 | 0.012 - 0.017 | ppm | Abundant naturally occurring element. |
| Nickel | 2020 | 0.0068 | 0.0066 - 0.0068 | ppm | Erosion of natural deposits. |
| pH | 2020 | 8.60 | 8.04 - 8.60 | units | Measure of corrosivity of water. |
| Silver | 2020 | Levels lower than detect level | 0 - 0 | ppm | Erosion of natural deposits. |
| Sodium | 2020 | 68.5 | 62.7 - 68.5 | ppm | Erosion of natural deposits; by-product of oil field activity. |
| Sulfate | 2020 | 158 | 42.0 - 158 | ppm | Naturally occurring; common industrial by-product; by-product of oil field activity. |
| Total Alkalinity as CaCO3 | 2020 | 107 | 72.0 - 107 | ppm | Naturally occurring soluble mineral salts. |
| Total Dissolved Solids | 2020 | 504 | 265 - 504 | ppm | Total dissolved mineral constituents in water. |
| Total Hardness as CaCO3 | 2020 | 207 | 106 - 207 | ppm | Naturally occurring calcium. |
| Zinc | 2020 | Levels lower than detect level | 0 - 0 | ppm | Moderately abundant naturally occurring element used in the metal industry. |

Violations Table

| Violation Type | Violation Begin | Violation End | Violation Explanation |
|----------------|-----------------|---------------|-----------------------|
| | | | |