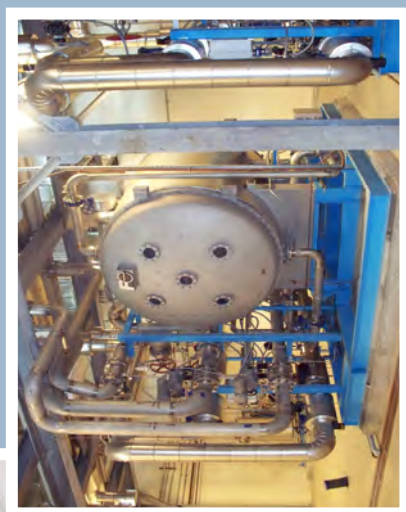
CONSUMER CONFIDENCE REPORT 2013

About this report

The Consumer Confidence Report is a summary of the quality of the water NTMWD provides to its customers. The report includes analysis results from the most current USEPA required water quality tests. NTMWD hopes this information helps you, the consumer, become more knowledgeable about your drinking water supply.



Drinking Water Quality Report for the North Texas Municipal Water District's Wylie and Tawakoni Water Treatment Plants

North Texas Municipal Water District
505 E. Brown Street
P.O. Box 2408
Wylie, TX 75098

Electronic copy also available at the link below:

https://ntmwd.com/aboutyourwater.html

Contact Us

For more information regarding this report, contact: Denise Hickey, Public Relations and Water Conservation Manager at (972) 442-5405.

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda biezzn.

NTMWD Board Meetings

NTMWD Board of Director's Meetings are held on the fourth Thursday of each month with adjustments made for holidays or other conflicts. Meetings are held at 505 E. Brown Street, Wylie, Texas in the Board Room and begin at 4:00 p.m., unless otherwise posted on the agenda. A schedule of Board of Director's Regular Meetings held throughout the year can be found at www.ntmwd.com.

USEPA Safe Drinking Water Hotline

The U.S. Environmental Protection Agency (USEPA) Safe Drinking Water Hotline provides the general public, regulators, medical and water professionals, academia, and media, with information about drinking water and ground water programs authorized under the Safe Drinking Water Act. The Hotline responds to factual questions in the following program areas:

- Local drinking water quality
- Drinking water standards
- Public drinking water systems
- Source water protection
- Large capacity residential septic systems
- Commercial and industrial septic systems
- Injection wells
- Drainage wells

Only Adequate Rainfall Replenishes Our Reservoirs

Often times consumers are puzzled why water restrictions are in place when rain events have occurred. The answer is that only adequate rainfall in the reservoir's watershed can replenish this supply.

Local rainfall can temporarily ease the demand by decreasing the need for additional outdoor irrigation in the warmer months; however, significant and adequate rainfall in the watershed of the reservoir is the only answer to refilling our lakes.

A reservoir is not shaped like a storage tank or swimming pool—think of its shape more like that of a V-shaped bowl. A foot of water at the top of the lake yields more supply than a foot of water in the middle or close to the bottom. As the lake level drops, less water is yielded as supply per foot of elevation.

How Much Water Do You Use?

Most consumers are unaware of the amount of water use that occurs inside and outside their homes. If you average around 140 gallons of water per person/per day, then you are most likely using water wisely. Many consumers look only at the cost of the water bill, and not the amount of water usage indicated. If this is you, then now is a great time to learn! A great first step may be to visit the Alliance for Water Efficiency's water calculations page to see how much water you may be using both INDOORS and OUTDOORS.

www.home-water-works.org/calculator

About Your Water Supplier

NTMWD Purpose and Mission Statement

The North Texas Municipal Water District ("NTMWD" or "the District") is a conservation and reclamation district and political subdivision of the State of Texas, created and functioning under Article XVI, Section 59, of the Texas Constitution, pursuant to Chapter 62, Acts of 1951, 52nd Legislature of Texas, Regular Session, as amended (the ACT). An amendment to the NTMWD's creating ACT by the legislature in 1975, Section 27, authorizes the NTMWD to acquire, treat, and distribute potable water, and to collect, treat and dispose of wastes, both liquid and solid, in order to reduce pollution, conserve and develop the natural resources of Texas.

The primary mission of the District is to meet the various needs of the NTMWD Member Cities and Customers, whether that is the need for drinking water, solid waste disposal or wastewater treatment. The District acts as a regional wholesaler of water to its Member Cities and Customers. Rates for services are set at cost. No profits are included, and no taxes are collected. Unit costs for services are lower because the services are regional.

Providing Safe and Reliable Drinking Water

The NTMWD provides safe and reliable drinking water to meet the needs of the citizens it serves. With a service area of 2,200 square miles and serving in excess of 1.6 million individuals, it is of utmost importance to assure that water quality meets or exceeds all Safe Drinking Water Standards established by the USEPA as well regulations set by the Texas Commission on Environmental Quality (TCEQ). The NTMWD utilizes a multi-barrier treatment process to accomplish this goal. The treatment process eliminates or reduces particulates, impurities, and waterborne microorganisms in the water supply. The NTMWD routinely performs a range of water quality tests prior to, during, and after the water treatment process to ensure that high quality water is delivered to those served.

Where We Get Our Water

The water NTMWD uses for supply is obtained from several water sources. NTMWD holds water rights in Lavon Lake, Lake Texoma, Jim Chapman Lake (Cooper Lake), Lake Tawakoni (through a contract with the Sabine River Authority), and the East Fork Raw Water Supply Project (Wetland) which augment raw water supplies. In times of need, it may also purchase water by contract with the City of Dallas Water Utilities. For detailed information on our water sources, treatment processes and more, visit our website at www.ntmwd.com.

Our Drinking Water is Regulated

In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. The Consumer Confidence Report is a summary of the quality of the water NTMWD provides to its customers. The report includes analysis results from the most current USEPA required water quality tests. NTMWD hopes this information helps you, the consumer, become more knowledgeable about your drinking water supply.

NTMWD Water Treatment Plants Service Areas

The NTMWD Member Cities and Customers (except the City of Bonham) are served by the Wylie Water Treatment Plant. In addition, the following areas routinely receive water from the Tawakoni Water Treatment Plant:

- City of Terrell
- City of Kaufman
- College Mound SUD
- Gastonia-Scurry SUD
- Rose Hill SUD

In higher demand periods, the following areas may also receive water from the Tawakoni Water Treatment Plant:

- City of Forney
- City of Mesquite (south portions)
- Forney Lake WSC
- Kaufman Four-One
- Town of Sunnyvale

The City of Bonham is currently the only area serviced by the Bonham Water Treatment Plant.

Public Notice
DBP2 Compliance Monitoring Extension

The NTMWD was granted a two-year extension by the TCEQ to the Stage 2 Disinfection Byproducts Rule (DBP2) in accordance with 30 TAC §290.115 (a)(2). This extension was warranted because: the NTMWD is constructing extensive and complex capital improvements to the Wylie Water Treatment Plant to facilitate compliance with the rule; and, the NTMWD and its Member Cities and Customers have demonstrated a need for the extension by having one or more locations where elevated DBP results were evident or possible during drought conditions. The extension was valid from April 1, 2012, to March 30, 2014. During this period, compliance monitoring continued under the Stage 1 Disinfection Byproducts Rule. Compliance monitoring for DBP2 began on April 1, 2014.

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 report in a public place or distributing copies by hand or mail. If you have questions regarding this matter, you may contact Denise Hickey, Public Relations and Water Conservation Manager, at (972) 442-5405 or by email at dhickey@ntmwd.com.

Lead in Your Home's 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. NTMWD is responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two 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.

Tap Into Texas A&M AgriLife Research | Extension

Agrilife Research and Extension Center at Dallas offers a wide variety of courses (some free) to help you learn more about how to use water wisely while still maintaining beautiful landscaping. Some course topics are:

- Making a Rain Barrel
- Vegetable Gardening
- Drip Irrigation
- WaterSense Labeled Home
- Native and Adaptive Plants for North Texas
- Smart Watering During Restrictions
- Lawn Care Maintenance
- Landscape Care for New Homeowners
- Landscape Basics
- Sprinkler System Quick Fixes

Texas A&M AgriLife Research/ Extension Center at Dallas:

17360 Coit Road
Dallas, Texas 75252
Phone: (972) 231-5362
Fax: (972) 952-9216

You can access their course offerings at: **http://dallas.tamu.edu/courses/**

Source Water Susceptibility Assessments

Wylie Water Treatment Plants

The TCEQ completed an assessment of the NTMWD Wylie Water Treatment Plant source water from Lavon Lake, and results indicate that some of those sources are susceptible to certain contaminants. The sampling requirements for the NTMWD Wylie Water Treatment Plant Water System are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confidence Report.

Tawakoni Water Treatment Plant

A Source Water Susceptibility Assessment for the NTMWD Tawakoni Water Treatment Plant water source from Lake Tawakoni is currently being conducted by the TCEQ and should be provided this year. The report will describe the susceptibility and types of constituents that may come into contact with Lake Tawakoni based on human activities and natural conditions. The information in this assessment will allow NTMWD to focus on source water protection strategies.

For more information on source water assessments and protection efforts at the NTMWD Wylie Water Treatment Plant system, contact Denise Hickey, Public Relations and Water Conservation Manager, at (972) 442-5405 or dhickey@ntmwd.com.

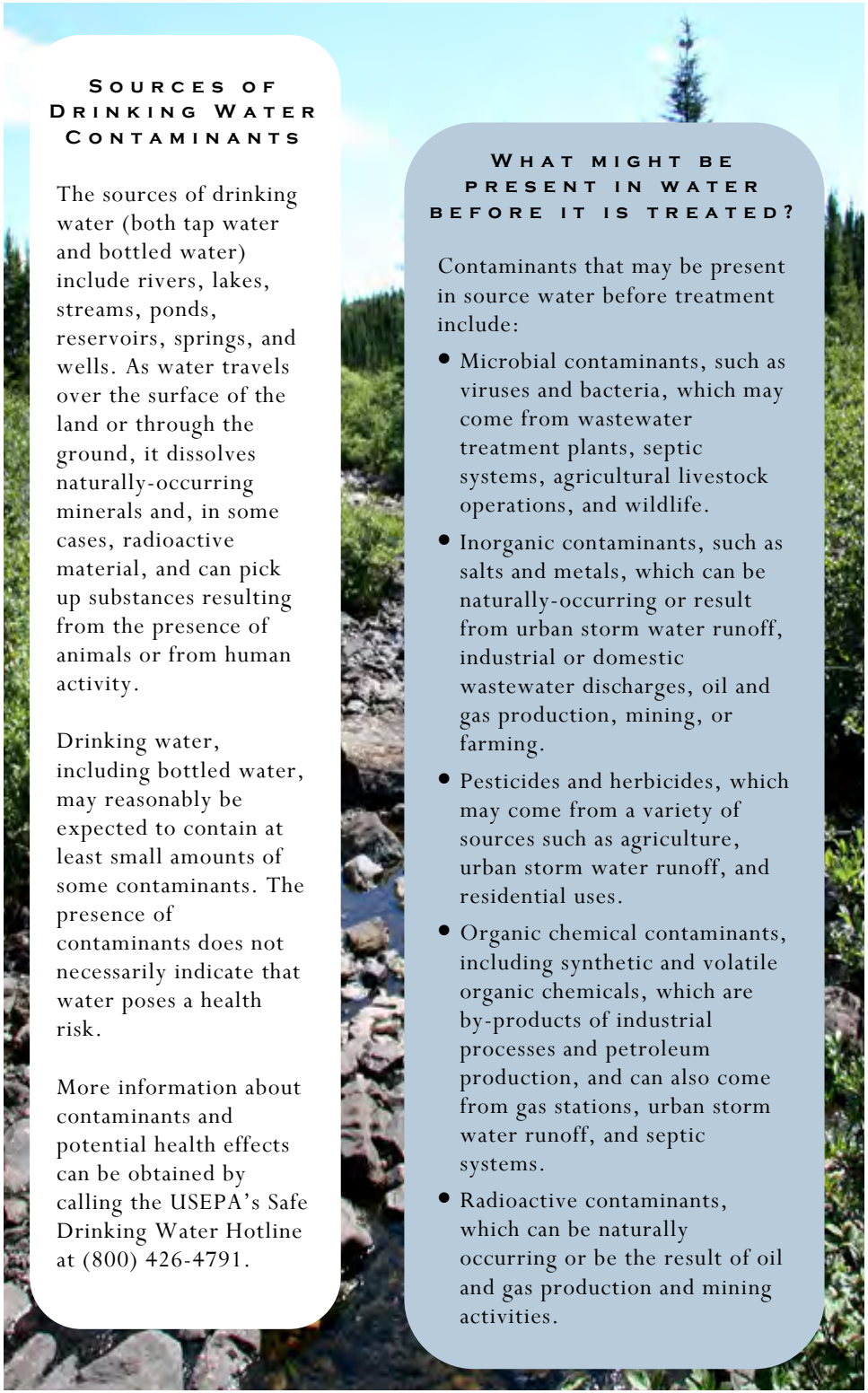
For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: http://dww.tceq.texas.gov/DWW

Water Loss Report

During the 2013 83rd Regular Legislative Session, House Bill (HB) 1461 was passed and became effective on September 1, 2013. HB 1461 requires any retail public utility that is required to file a water loss audit with Texas Water Development Board to notify its customers of the most recent water loss reported in the water loss audit.

In the water loss audit submitted to the Texas Water Development Board for the time period of January-December 2013, the NTMWD Water System lost an estimated 8,595,160,193 gallons of water. If you have any questions about the water loss audit, please contact Denise Hickey at (972) 442-5405.



Sources of Drinking Water Contaminants

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.

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 USEPA's Safe Drinking Water Hotline at (800) 426-4791.

What might be present in water before it is treated?

Contaminants that may be present in source water before treatment include:

- Microbial contaminants, such as viruses and bacteria, which may come from wastewater treatment plants, septic systems, agricultural livestock operations, and wildlife.
- 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.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water 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 storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

TERMS TO KNOW

DEFINITIONS

Action Level (AL): 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.

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 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 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.

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.

ABBREVIATIONS

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

MFL: Million fibers per liter (a measure of asbestos)

NA: Not applicable

NTU: Nephelometric Turbidity Units (a measure of turbidity)

pCi/L: Picocuries per liter (a measure of radioactivity)

ppm: Milligrams per liter or parts per million - or one ounce in 7,350 gallons of water

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

ppq: Parts per quadrillion, or picograms per liter (pg/L)

ppt: Parts per trillion, or nanograms per liter (ng/L)

The tables in this report contain scientific terms and measures, some of which may require explanation. Please refer to the terms on this page as a resource for interpreting the data.

SPECIAL NOTICES

VULNERABILITY OF SOME POPULATIONS TO CONTAMINANTS IN DRINKING WATER

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immuno-compromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800) 426-4791.

NORTH TEXAS MUNICIPAL WATER DISTRICT TESTS FOR CRYPTOSPORIDIUM

The NTMWD continues to diligently analyze both source water and treated water for the presence of Cryptosporidium, and it has not been detected in any of the samples tested. Cryptosporidium is a microbial parasite that may be commonly found in surface water. Cryptosporidium may come from animal and human feces in the watershed. Although treatment by filtration removes Cryptosporidium, it cannot guarantee 100 percent removal. The testing methods used cannot determine if the organisms are alive and capable of causing cryptosporidiosis, an abdominal infection with nausea, diarrhea and abdominal cramps that may occur after ingestion of contaminated water.

TASTE AND ODOR OF DRINKING WATER

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, you can contact NTMWD offices or read about common causes on the NTMWD website at: www.ntmwd.com/taste_odor.html.

NTMWD Wylie Water Treatment Plants - Water Quality Data

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	1	0	0	No	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)	2013	21	10.6-21	No goal for the total	60	ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2013	45.5	0-45.5	No goal for the total	80	ppb	No	By-product of drinking water disinfection.
Bromate	2013	Levels lower than detect level	0-0	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.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Antimony	2013	Levels lower than detect level	0-0	6	6	ppb	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; and test addition.
Arsenic	2013	1.21	0.00-1.21	0	10	ppb	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium	2013	0.0443	0.0361-0.0443	2	2	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Beryllium	2013	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	2013	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	2013	0.961	0.00-0.961	100	100	ppb	No	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride	2013	0.76	0.36-0.76	4	4	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Mercury	2013	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)	2013	0.80	0.56-0.80	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
Selenium	2013	3.45	2.83-3.45	50	50	ppb	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Thallium	2013	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/photon emitters	4/29/2010	4.4	4.4 - 4.4	0	50	pCi/L	No	Decay of natural and man-made deposits.
Gross alpha excluding radon and uranium	4/29/2010	Levels lower than detect level	0 - 0	0	15	pCi/L	No	Erosion of natural deposits.
Radium	NA	NA	NA	0	5	pCi/L	No	Erosion of natural deposits.

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)	2011	Levels lower than detect level	0 - 0	50	50	ppb	No	Residue of banned herbicide.
2, 4 - D	2013	Levels lower than detect level	0 - 0	70	70	ppb	No	Runoff from herbicide used on row crops.
Alachlor	2013	Levels lower than detect level	0 - 0	0	2	ppb	No	Runoff from herbicide used on row crops.
Atrazine	2013	0.40	0.36-0.40	3	3	ppb	No	Runoff from herbicide used on row crops.
Benzo (a) pyrene	2013	Levels lower than detect level	0 - 0	0	200	ppt	No	Leaching from linings of water storage tanks and distribution lines.
Carbofuran	2013	Levels lower than detect level	0 - 0	40	40	ppb	No	Leaching of soil fumigant used on rice and alfalfa.
Chlordane	2013	Levels lower than detect level	0 - 0	0	2	ppb	No	Residue of banned termiticide.
Dalapon	2013	Levels lower than detect level	0 - 0	200	200	ppb	No	Runoff from herbicide used on rights of way.
Di (2-ethylhexyl) adipate	2013	0.74	0 - 0.74	400	400	ppb	No	Discharge from chemical factories.
Di (2-ethylhexyl) phthalate	2013	Levels lower than detect level	0 - 0	0	6	ppb	No	Discharge from rubber and chemical factories.
Dibromochloropropane (DBCP)	2013	Levels lower than detect level	0 - 0	0	0	ppt	No	Runoff / leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards.
Dinoseb	2013	Levels lower than detect level	0 - 0	7	7	ppb	No	Runoff from herbicide used on soybeans and vegetables.
Endrin	2013	Levels lower than detect level	0 - 0	2	2	ppb	No	Residue of banned insecticide.
Ethylene dibromide	2013	Levels lower than detect level	0 - 0	0	50	ppt	No	Discharge from petroleium refineries.
Heptachlor	2013	Levels lower than detect level	0 - 0	0	400	ppt	No	Residue of banned termiticide.
Heptachlor epoxide	2013	Levels lower than detect level	0 - 0	0	200	ppt	No	Breakdown of heptachlor.
Hexachlorobenzene	2012	Levels lower than detect level	0 - 0	0	1	ppb	No	Discharge from metal refineries and agricultural chemical factories.
Hexachlorocyclopentadiene	2013	Levels lower than detect level	0 - 0	50	50	ppb	No	Discharge from chemical factories.
Lindane	2013	Levels lower than detect level	0 - 0	200	200	ppt	No	Runoff / leaching from insecticide used on cattle, lumber, and gardens.
Methoxychlor	2013	Levels lower than detect level	0 - 0	40	40	ppb	No	Runoff / leaching from insecticide used on fruits, vegetables, alfalfa, and livestock.
Oxamyl [Vydate]	2013	Levels lower than detect level	0 - 0	200	200	ppb	No	Runoff / leaching from insecticide used on apples, potatoes, and tomatoes.
Pentachlorophenol	2013	Levels lower than detect level	0 - 0	0	1	ppb	No	Discharge from wood preserving factories.
Simazine	2013	0.18	0.17-0.18	4	4	ppb	No	Herbicide runoff.
Toxaphene	2013	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	2013	Levels lower than detect level	0 - 0	200	200	ppb	No	Discharge from metal degreasing sites and other factories.
1, 1, 2 - Trichloroethane	2013	Levels lower than detect level	0 - 0	3	5	ppb	No	Discharge from industrial chemical factories.
1, 1 - Dichloroethylene	2013	Levels lower than detect level	0 - 0	7	7	ppb	No	Discharge from industrial chemical factories.
1, 2, 4 - Trichlorobenzene	2013	Levels lower than detect level	0 - 0	70	70	ppb	No	Discharge from textile-finishing factories.
1, 2 - Dichloroethane	2013	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from industrial chemical factories.
1, 2 - Dichloropropane	2013	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from industrial chemical factories.
Benzene	2013	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from factories; leaching from gas storage tanks and landfills.
Carbon Tetrachloride	2013	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from chemical plants and other industrial activities.
Chlorobenzene	2013	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from chemical and agricultural chemical factories.
Dichloromethane	2013	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from pharmaceutical and chemical factories.
Ethylbenzene	2013	Levels lower than detect level	0 - 0	0	700	ppb	No	Discharge from petroleum refineries.
Styrene	2013	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from rubber and plastic factories; leaching from landfills.
Tetrachloroethylene	2013	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from factories and dry cleaners.
Toluene	2013	Levels lower than detect level	0 - 0	1	1	ppm	No	Discharge from petroleum factories.
Trichloroethylene	2013	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from metal degreasing sites and other factories.
Vinyl Chloride	2013	Levels lower than detect level	0 - 0	0	2	ppb	No	Leaching from PVC piping; discharge from plastics factories.
Xylenes	2013	Levels lower than detect level	0 - 0	10	10	ppm	No	Discharge from petroleum factories; discharge from chemical factories.
cis - 1, 2 - Dichloroethylene	2013	Levels lower than detect level	0 - 0	70	70	ppb	No	Discharge from industrial chemical factories.
o - Dichlorobenzene	2013	Levels lower than detect level	0 - 0	600	600	ppb	No	Discharge from industrial chemical factories.
p - Dichlorobenzene	2013	Levels lower than detect level	0 - 0	75	75	ppb	No	Discharge from industrial chemical factories.
trans - 1, 2 - Dicholoroethylene	2013	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from industrial chemical factories.

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.82 NTU	No	Soil runoff.
Lowest monthly percentage (%) meeting limit	0.3 NTU	95.61%	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

Chemical Used	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)	2013	3.12	2.37	3.44	4.0	<4.0	ppm	Disinfectant used to control microbes.
Chlorine Dioxide	2013	<0.10	0	0.12	0.8	0.8	ppm	Disinfectant.
Chlorite	2013	0.47	0.09	0.85	1.0	N/A	ppm	Disinfectant.

Total Organic Carbon

	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
Source Water	2013	5.61	4.59-5.61	ppm	Naturally present in the environment.
Drinking Water	2013	4.12	3.16-4.12	ppm	Naturally present in the environment.
Removal Ratio	2013	37.9%	19%-37.9%	% 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.

Lead and Copper

Lead and Copper	Date Sampled	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2013	1.3	0.916	1	ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead	2013	15	3.42	0	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits.

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 The NTMWD 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.

Cryptosporidium And Giardia

Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
Cryptosporidium	2013	0	0 - 0	(Oo) Cysts/L	Human and animal fecal waste.
Giardia	2013	0	0 - 0	(Oo) Cysts/L	Human and animal fecal waste.

NOTE: Taken on treated water samples.

Unregulated Contaminants

Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
Chloroform	2013	25.40	4.92-25.40	ppb	By-product of drinking water disinfection.
Bromoform	2013	1.62	0.00-1.62	ppb	By-product of drinking water disinfection.
Bromodichloromethane	2013	15.10	7.30-15.10	ppb	By-product of drinking water disinfection.
Dibromochloromethane	2013	10.60	3.00-10.60	ppb	By-product of drinking water disinfection.

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

Unregulated Contaminant Monitoring Rule 2 (UCMR2)

Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
N-nitrosodimethlyamine (NDMA)	2009	0.0023	0 - 0.0023	ppb	By-product of manufacturing process.

NOTE: Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.

Secondary and Other Constituents Not Regulated

Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
Bicarbonate	2013	102	82-102	ppm	Corrosion of carbonate rocks such as limestone.
Calcium	2013	53.2	50.3-53.2	ppm	Abundant naturally occurring element.
Chloride	2013	36.5	32.9-36.5	ppm	Abundant naturally occurring element; used in water purification; by-product of oil field activity.
Hardness as Ca/Mg	2013	146	142-146	ppm	Naturally occurring calcium and magnesium.
Iron	2013	Levels lower than detect level	0.00-0.00	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
Magnesium	2013	4.07	3.99-4.07	ppm	Abundant naturally occurring element.
Manganese	2013	0.006	0.0011-0.006	ppm	Abundant naturally occurring element.
Nickel	2013	0.01	0.00-0.01	ppm	Erosion of natural deposits.
pH	2013	8.68	7.69-8.68	units	Measure of corrosivity of water.
Sodium	2013	44.4	34.6-44.4	ppm	Erosion of natural deposits; by-product of oil field activity.
Sulfate	2013	94	85.3-94	ppm	Naturally occurring; common industrial by-product; by-product of oil field activity.
Total Alkalinity as CaCO3	2013	149	82-149	ppm	Naturally occurring soluble mineral salts.
Total Dissolved Solids	2013	317	302-317	ppm	Total dissolved mineral constituents in water.
Total Hardness as CaCO3	2013	146	142-146	ppm	Naturally occurring calcium.
Zinc	2013	0.01	0.00-0.01	ppm	Moderately abundant naturally occurring element used in the metal industry.

NTMWD Tawakoni Water Treatment Plant - Water Quality Data

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	0	0	0	No	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)	2013	15.7	15.7-15.7	No goal for the total	60	ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2013	52.6	52.6-52.6	No goal for the total	80	ppb	No	By-product of drinking water disinfection.
Bromate	2013	Levels lower than detect level	0-0	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.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Antimony	2013	Levels lower than detect level	0-0	6	6	ppb	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; and test addition.
Arsenic	2013	1.12	1.12-1.12	0	10	ppb	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium	2013	0.0494	0.0494-0.0494	2	2	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Beryllium	2013	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	2013	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	2013	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride	2013	0.458	0.458-0.458	4	4	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Mercury	2013	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)	2013	0.222	0.222-0.222	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
Selenium	2013	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	2013	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/photon emitters	12/12/2012	Levels lower than detect level	0 - 0	0	50	pCi/L	No	Decay of natural and man-made deposits.
Gross alpha excluding radon and uranium	12/12/2012	Levels lower than detect level	0 - 0	0	15	pCi/L	No	Erosion of natural deposits.
Radium	12/12/2012	Levels lower than detect level	0 - 0	0	5	pCi/L	No	Erosion of natural deposits.

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)	2012	Levels lower than detect level	0 - 0	50	50	ppb	No	Residue of banned herbicide.
2, 4 - D	2012	Levels lower than detect level	0 - 0	70	70	ppb	No	Runoff from herbicide used on row crops.
Alachlor	2012	Levels lower than detect level	0 - 0	0	2	ppb	No	Runoff from herbicide used on row crops.
Atrazine	2012	Levels lower than detect level	0 - 0	3	3	ppb	No	Runoff from herbicide used on row crops.
Benzo (a) pyrene	2012	Levels lower than detect level	0 - 0	0	200	ppt	No	Leaching from linings of water storage tanks and distribution lines.
Carbofuran	2012	Levels lower than detect level	0 - 0	40	40	ppb	No	Leaching of soil fumigant used on rice and alfalfa.
Chlordane	2012	Levels lower than detect level	0 - 0	0	2	ppb	No	Residue of banned termiticide.
Dalapon	2012	Levels lower than detect level	0 - 0	200	200	ppb	No	Runoff from herbicide used on rights of way.
Di (2-ethylhexyl) adipate	2012	Levels lower than detect level	0 - 0	400	400	ppb	No	Discharge from chemical factories.
Di (2-ethylhexyl) phthalate	2012	Levels lower than detect level	0 - 0	0	6	ppb	No	Discharge from rubber and chemical factories.
Dibromochloropropane (DBCP)	2012	Levels lower than detect level	0 - 0	0	0	ppt	No	Runoff / leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards.
Dinoseb	2012	Levels lower than detect level	0 - 0	7	7	ppb	No	Runoff from herbicide used on soybeans and vegetables.
Endrin	2012	Levels lower than detect level	0 - 0	2	2	ppb	No	Residue of banned insecticide.
Ethylene dibromide	2012	Levels lower than detect level	0 - 0	0	50	ppt	No	Discharge from petroleium refineries.
Heptachlor	2012	Levels lower than detect level	0 - 0	0	400	ppt	No	Residue of banned termiticide.
Heptachlor epoxide	2012	Levels lower than detect level	0 - 0	0	200	ppt	No	Breakdown of heptachlor.
Hexachlorobenzene	2012	Levels lower than detect level	0 - 0	0	1	ppb	No	Discharge from metal refineries and agricultural chemical factories.
Hexachlorocyclopentadiene	2012	Levels lower than detect level	0 - 0	50	50	ppb	No	Discharge from chemical factories.
Lindane	2012	Levels lower than detect level	0 - 0	200	200	ppt	No	Runoff / leaching from insecticide used on cattle, lumber, and gardens.
Methoxychlor	2012	Levels lower than detect level	0 - 0	40	40	ppb	No	Runoff / leaching from insecticide used on fruits, vegetables, alfalfa, and livestock.
Oxamyl [Vydate]	2012	Levels lower than detect level	0 - 0	200	200	ppb	No	Runoff / leaching from insecticide used on apples, potatoes, and tomatoes.
Pentachlorophenol	2012	Levels lower than detect level	0 - 0	0	1	ppb	No	Discharge from wood preserving factories.
Simazine	2012	Levels lower than detect level	0 - 0	4	4	ppb	No	Herbicide runoff.
Toxaphene	2012	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	2013	Levels lower than detect level	0 - 0	200	200	ppb	No	Discharge from metal degreasing sites and other factories.
1, 1, 2 - Trichloroethane	2013	Levels lower than detect level	0 - 0	3	5	ppb	No	Discharge from industrial chemical factories.
1, 1 - Dichloroethylene	2013	Levels lower than detect level	0 - 0	7	7	ppb	No	Discharge from industrial chemical factories.
1, 2, 4 - Trichlorobenzene	2013	Levels lower than detect level	0 - 0	70	70	ppb	No	Discharge from textile-finishing factories.
1, 2 - Dichloroethane	2013	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from industrial chemical factories.
1, 2 - Dichloropropane	2013	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from industrial chemical factories.
Benzene	2013	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from factories; leaching from gas storage tanks and landfills.
Carbon Tetrachloride	2013	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from chemical plants and other industrial activities.
Chlorobenzene	2013	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from chemical and agricultural chemical factories.
Dichloromethane	2013	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from pharmaceutical and chemical factories.
Ethylbenzene	2013	Levels lower than detect level	0 - 0	0	700	ppb	No	Discharge from petroleum refineries.
Styrene	2013	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from rubber and plastic factories; leaching from landfills.
Tetrachloroethylene	2013	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from factories and dry cleaners.
Toluene	2013	Levels lower than detect level	0 - 0	1	1	ppm	No	Discharge from petroleum factories.
Trichloroethylene	2013	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from metal degreasing sites and other factories.
Vinyl Chloride	2013	Levels lower than detect level	0 - 0	0	2	ppb	No	Leaching from PVC piping; discharge from plastics factories.
Xylenes	2013	Levels lower than detect level	0 - 0	10	10	ppm	No	Discharge from petroleum factories; discharge from chemical factories.
cis - 1, 2 - Dichloroethylene	2013	Levels lower than detect level	0 - 0	70	70	ppb	No	Discharge from industrial chemical factories.
o - Dichlorobenzene	2013	Levels lower than detect level	0 - 0	600	600	ppb	No	Discharge from industrial chemical factories.
p - Dichlorobenzene	2013	Levels lower than detect level	0 - 0	75	75	ppb	No	Discharge from industrial chemical factories.
trans - 1, 2 - Dicholoroethylene	2013	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from industrial chemical factories.

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.3 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

Chemical Used	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)	2013	3.59	1.3	4.9	4.0	<4.0	ppm	Disinfectant used to control microbes.
Chlorine Dioxide	2013	N/A	N/A	N/A	0.8	0.8	ppm	Disinfectant.
Chlorite	2013	N/A	N/A	N/A	1.0	N/A	ppm	Disinfectant.

Total Organic Carbon

	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
Source Water	2013	6.44	5.49-6.44	ppm	Naturally present in the environment.
Drinking Water	2013	4.02	3.11-4.02	ppm	Naturally present in the environment.
Removal Ratio	2013	44.6%	32.1-44.6%	% 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.

Lead and Copper

Lead and Copper	Date Sampled	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2013	1.3	0.09	0	ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead	2013	15	Levels lower than detect level	0	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits.

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. The NTMWD 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.

Cryptosporidium And Giardia

Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
Cryptosporidium	2013	0	0 - 0	(Oo) Cysts/L	Human and animal fecal waste.
Giardia	2013	0	0 - 0	(Oo) Cysts/L	Human and animal fecal waste.

NOTE: Taken on samples of raw water.

Unregulated Contaminants

Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
Chloroform	2013	31.90	31.9-31.9	ppb	By-product of drinking water disinfection.
Bromoform	2013	Levels lower than detect level	0 - 0	ppb	By-product of drinking water disinfection.
Bromodichloromethane	2013	13.90	13.9-13.9	ppb	By-product of drinking water disinfection.
Dibromochloromethane	2013	6.74	6.74-6.74	ppb	By-product of drinking water disinfection.

NOTE: Bromoform, chloroform, dichlorobromomethane, 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
Bicarbonate	2013	68.4	68.4-68.4	ppm	Corrosion of carbonate rocks such as limestone.
Calcium	2013	42.9	32.7-42.9	ppm	Abundant naturally occurring element.
Chloride	2013	11.6	11.6-11.6	ppm	Abundant naturally occurring element; used in water purification; by-product of oil field activity.
Hardness as Ca/Mg	2013	138	101-138	ppm	Naturally occurring calcium and magnesium.
Iron	2013	0.28	0.092-0.280	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
Magnesium	2013	3.6	3.02-3.60	ppm	Abundant naturally occurring element.
Manganese	2013	0.004	0.004-0.004	ppm	Abundant naturally occurring element.
Nickel	2013	0.001	0.001-0.001	ppm	Erosion of natural deposits.
pH	2013	8.17	7.50-8.17	units	Measure of corrosivity of water.
Sodium	2013	21.2	15.4-21.2	ppm	Erosion of natural deposits; by-product of oil field activity.
Sulfate	2013	38	38-38	ppm	Naturally occurring; common industrial by-product; by-product of oil field activity.
Total Alkalinity as CaCO3	2013	68.4	68.4-68.4	ppm	Naturally occurring soluble mineral salts.
Total Dissolved Solids	2013	200	200-200	ppm	Total dissolved mineral constituents in water.
Total Hardness as CaCO3	2013	98.4	98.4-98.4	ppm	Naturally occurring calcium.
Zinc	2013	0.002	0.002-0.002	ppm	Moderately abundant naturally occurring element used in the metal industry.