



# 2013 Annual Drinking Water Quality Report

(Consumer Confidence Report)

Customer Service: 817-297-2201

Emergency - Nights & Weekends: 817-297-2276

### Special Notice

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immunocompromised 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 for infections. You should seek advice about drinking water from your Physician or health care providers. Additional guidelines for appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at (800) 426-4791.

### **Public Participation Opportunities**

**Date:** City Council meetings are the 1<sup>st</sup> and 3<sup>rd</sup> Thursday of each month

**Time:** 7:00 pm

**Location:** City Hall, Council Chambers

**Phone No:** 817-297-2201

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us or check our website at [www.ci.crowley.tx.us](http://www.ci.crowley.tx.us).

### **Where do we get our drinking water?**

Our drinking water is obtained from Ground (minimal) and Purchased Surface (majority) water sources. It comes from the following Lake/River/Reservoir/Aquifer: Ground Water is from the Trinity AND Trinity/Paluxy Aquifers; Surface Water is purchased from the City of Fort Worth (Lake Worth, Eagle Mountain Lake, Lake Bridgeport, Richland Chambers Reservoir, Cedar Creek Reservoir, Lake Benbrook and Clear Fork Trinity River). A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by 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 source water protection strategies.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <http://gis2.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=>

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

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.

### **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. The constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

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

### **OUR DRINKING WATER IS REGULATED**

Annual Water Quality Report is for the period of January 1 to December 31, 2013.

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.

**SOURCES OF DRINKING WATER:** The sources of drinking water (both tap 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 be 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 EPAs Safe Drinking Water Hotline at (800)426-4791.

Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacterial, which may come from sewage 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, and residential uses.
- **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.

### ***En Espanol***

Este informe incluye informacion importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en espanol, favor de llamar al tel. (817)297-2201-para hablar con una persona bilingue en espanol.

### **About The Following Pages**

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

#### **DEFINITIONS**

#### **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 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 disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Avg:** Regulatory compliance with some MCLs is based on running annual average of monthly samples.

**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

**na:** Not applicable

**Abbreviations:**

**NTU** – Nephelometric Turbidity Units (a measure of water turbidity or clarity) **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 **ppt** – parts per trillion or nanograms per liter **ppq** – parts per quadrillion, or picograms per liter

**Inorganic Contaminants**

Collection Date	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Source of Contaminant
2013	Nitrate [measured as Nitrogen]*	0.875	0.68 – 0.875	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2013	Nitrite [measured as Nitrogen]	0.195	0 – 0.195	1	1	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

\*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.

**Synthetic Organic Contaminants Including Pesticides**

Collection Date	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Source of Contaminant
2013	Alachlor	Levels lower than the detect levels	0 - 0	0	.1	ppb	N	Runoff from herbicide used on row crops.
2013	Atrazine	0.14	0.13 – 0.14	3	3	ppb	N	Runoff from herbicide used on row crops.
2013	Benzo (a) pyrene	Levels lower than the detect levels	0 - 0	0	200	ppt	N	Leaching from linings of water storage tanks and distribution lines.
2013	Chlordane	Levels lower than the detect levels	0 - 0	0	2	ppb	N	Residue of banned termiticide.
2013	Di (2-ethylhexyl) adipate	Levels lower than the detect levels	0 - 0	400	400	ppb	N	Discharge from chemical factories.
2013	Di (2-ethylhexyl) phthalate	Levels lower than the detect levels	0 - 0	0	6	ppb	N	Discharge from rubber and chemical factories.
2013	Endrin	Levels lower than the detect levels	0 - 0	2	2	ppb	N	Residue of banned insecticide.
2013	Heptachlor	Levels lower than the detect levels	0 - 0	0	400	ppt	N	Residue of banned termiticide.
2013	Heptachlor epoxide	Levels lower than the detect levels	0 - 0	0	200	ppt	N	Breakdown of heptachlor.
2013	Hexa-chlorobenzene	Levels lower than the detect levels	0 - 0	0	1	ppb	N	Discharge from metal refineries and agricultural chemical factories.
2013	Hexachloro-cyclopentadiene	Levels lower than the detect levels	0 - 0	50	50	ppb	N	Discharge from chemical factories.
2013	Lindane	Levels lower than the detect levels	0 - 0	200	200	ppt	N	Runoff/leaching from insecticide used on cattle, lumber, gardens.
2013	Methoxychlor	Levels lower than the detect levels	0 - 0	40	40	ppb	N	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock.
2013	Pentachloro-phenol	Levels lower than the detect levels	0 - 0	0	1	ppb	N	Discharge from wood preserving factories.
2013	Picloram	Levels lower than the detect levels	0 - 0	500	500	ppb	N	Herbicide runoff.
2013	Simazine	Levels lower than the detect levels	0 - 0	4	4	ppb	N	Herbicide runoff.
2013	Toxaphene	Levels lower than the detect levels	0 - 0	0	3	ppb	N	Runoff/leaching from insecticide used on cotton and cattle.

**Volatile Organic Contaminants**

Collection Date	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Likely source of Contamination
2013	1, 1, 1 – Tri-chloroethane	Levels lower than the detect levels	0 - 0	200	200	ppb	N	Discharge from metal degreasing sites and other factories.
2013	1, 1, 2-Tri-chloroethane	Levels lower than the detect levels	0 - 0	3	5	ppb	N	Discharge from industrial chemical factories.
2013	1, 1-Dichloro-ethylene	Levels lower than the detect levels	0 - 0	7	7	ppb	N	Discharge from industrial chemical factories.
2013	1,2,4-Trichloro-benzene	Levels lower than the detect levels	0 - 0	70	70	ppb	N	Discharge from textile-finishing factories.
2013	1,2-Dichloroethane	Levels lower than the detect levels	0 - 0	0	5	ppb	N	Discharge from industrial chemical factories.

2013	1,2-Dichloropropane	Levels lower than the detect levels	0 - 0	0	5	ppb	N	Discharge from industrial chemical factories.
2013	Benzene	Levels lower than the detect levels	0 - 0	0	5	ppb	N	Discharge from factories; leaching from gas storage tanks and landfills.
2013	Carbon Tetrachloride	Levels lower than the detect levels	0 - 0	0	5	ppb	N	Discharge from chemical plants and other industrial activities.
2013	Chlorobenzene	Levels lower than the detect levels	0 - 0	100	100	ppb	N	Discharge from chemical and agricultural chemical factories.
2013	Dichloromethane	Levels lower than the detect levels	0 - 0	0	5	ppb	N	Discharge from pharmaceutical and chemical factories.
2013	Ethylbenzene	Levels lower than the detect levels	0 - 0	700	700	ppb	N	Discharge from petroleum refineries.
2013	Styrene	Levels lower than the detect levels	0 - 0	100	100	ppb	N	Discharge from rubber and plastic factories; Leaching from landfills.
2013	Tetrachloroethylene	Levels lower than the detect levels	0 - 0	0	5	ppb	N	Discharge from factories and dry cleaners.
2013	Toluene	Levels lower than the detect levels	0 - 0	1	1	ppm	N	Discharge from petroleum factories.
2013	Trichloroethylene	Levels lower than the detect levels	0 - 0	0	5	ppb	N	Discharge from metal degreasing sites and other factories.
2013	Vinyl Chloride	Levels lower than the detect levels	0 - 0	0	2	ppb	N	Leaching from PVC piping; discharge from plastics factories.
2013	Xylenes	Levels lower than the detect levels	0 - 0	10	10	ppm	N	Discharge from petroleum factories; Discharge from chemical factories.
2013	cis-1,2-Dichloroethylene	Levels lower than the detect levels	0 - 0	70	70	ppb	N	Discharge from industrial chemical factories.
2013	o-Dichlorobenzene	Levels lower than the detect levels	0 - 0	600	600	ppb	N	Discharge from industrial chemical factories.
2013	p-Dichlorobenzene	Levels lower than the detect levels	0 - 0	75	75	ppb	N	Discharge from industrial chemical factories.
2013	trans-1,2-Dichloroethylene	Levels lower than the detect levels	0 - 0	100	100	ppb	N	Discharge from industrial chemical factories.

#### Disinfectants and Disinfection By-products

Collection Date	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Source of Contaminant
2013	Total Haloacetic Acids*	9.8	2.8 – 9.8	No goal for the total	60	ppb	N	By-product of drinking water chlorination.
2013	Total Trihalomethanes*	13.5	9.0 – 13.5	No goal for the total	80	ppb	N	By-product of drinking water chlorination.

\*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.

#### Unregulated Contaminants

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

Collection Date	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2013	Chloroform	5.29	2.43	12.9	ppb	Byproduct of drinking water chlorination.
2013	Bromoform	0	0	0	ppb	Byproduct of drinking water chlorination.
2013	Bromodichloromethane	3.89	2.10	7.92	ppb	Byproduct of drinking water chlorination.
2013	Dibromochloromethane	2.08	1.00	3.73	ppb	Byproduct of drinking water chlorination.

Contaminant	Measure	MRDL	2013 Level	Range of Detects	MRDLG	Common Sources of Substance in Drinking Water
Chlorine	ppm	1.6	0.6	0.2 to 1.6	4	Water additive used to control microbes

#### Lead and Copper

The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type	Violation Begin	Violation End	Violation Explanation
Follow-up or Routine Tap M/R (LCR)	10/01/2013	2013	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
Lead Consumer Notice (LCR)	12/30/2013	2013	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.

Lead and Copper re-sampling for the proper number of sites will begin after June 1, 2014, ending by September 30, 2014. Results will be provided to the consumers at the sample site locations within 30 days after results have been received from the approved sampling laboratory.

#### Coliform Bacteria/E. coli

Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

Maximum Contaminant Level	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.	There were no TCR detections for this CCR period	0	1	Y*	Naturally present in the environment.

Violation Type*	Violation Begin	Violation End	Violation Explanation
Monitor GWR Triggered/Additional, Major	05/01/2013	05/31/2013	We failed to collect follow-up samples within 24 hours of learning of the total coliform-positive sample. These needed to be tested for fecal indicators from all sources that were being used at the time the positive sample was collected.
<b>*Follow-up samples were taken at the sample source, 1001 W. Main St. All follow-up samples were negative for total coliform.</b>			

The City of Crowley's water loss as reported on the Water Loss Audit for 2013 was 29,782,358 gallons of water.

### Fort Worth Drinking Water Year 2013 Results

Contaminant	Measure	MCL	2013 Level	Range of Detects	MCLG	Common Sources of Substance in Drinking Water
Alpha particles <sup>1</sup>	pCi/l	15	2.8	0.0 to 2.8	N/A	Erosion of natural deposits.
Gross Beta emitters <sup>1</sup>	pCi/L	50	7.5	0 to 7.5	N/A	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beat radiation
Radium 228 <sup>1</sup>	pCi/L	5	1.1	0 to 1.1	0	Erosion of natural deposits
Arsenic	ppb	10	4.48	1.33 to 4.48	0	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Atrazine	ppb	3	0.087	0.04 to 0.22	3	Runoff from herbicide used on row crops
Barium	ppm	2	0.06	0.05 to 0.06	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (Total)	ppb	100	2.12	1.28 to 2.12	100	Discharge from steel and pulp mills, erosion of natural deposits
Fluoride	ppm	4	0.65	0.23 to 0.65	4	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	ppm	10	0.78	0.46 to 0.78	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (measured as Nitrogen)	ppm	1	0.03	0.01 to 0.03	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	ppb	50	3.98	2.92 to 3.98	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Bromate	ppb	10	0.08	0 to 0.08	0	Byproduct of drinking water disinfection
Haloacetic Acids	ppb	60	12.5	6.5 to 12.5	N/A	Byproduct of drinking water disinfection
Total Trihalomethanes	ppb	80	22.1	5.8 to 22.1	N/A	Byproduct of drinking water disinfection
Total Coliforms (including fecal coliform & E. coli)	% of positive samples	Presence in 5% or more of monthly samples	Presence in 2.2% of monthly samples	0 to 2.2%	0	Coliforms are naturally present in the environment as well as feces; fecal Coliforms and E. coli only come from human and animal fecal waste
Turbidity <sup>2</sup>	NTU	TT	0.38 Highest single Result 99.4% Lowest monthly % of samples ≤ 0.3 NTU	N/A	N/A	Soil Runoff
Contaminant	Measure	MRDL	2013 Level	Range of Detects	MRDLG	Common Sources of Substance in Drinking Water
Chloramines	ppm	4	3.0	0.5 to 4.2	4	Water additive used to control microbes
Contaminant	High	Low	Average	MCL	MCGL	Common Sources of Substance in Drinking water
Total Organic Carbon <sup>3</sup>	1	1	1	TT = % removal	N/A	Naturally occurring

<sup>1</sup> Because Fort Worth historically has had low levels of radionuclides in its water, TCEQ has Fort Worth on a reduced monitoring schedule. The test results shown are from 2011 through 2013.

<sup>2</sup> Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

<sup>3</sup> Total Organic Carbon is used to determine disinfection by-product precursors. Fort Worth was in compliance with all monitoring and treatment technique requirements for disinfection by-product precursors.

### Unregulated Contaminants

Contaminants	unit	Range of Detections	2013 Level	MCL	MCLG	Common Sources of Substance in Drinking Water
Chloral Hydrate	ppb	0.3 to 0.68	0.68	Not Regulated	None	By-product of drinking water disinfection
Bromoform	ppb	0 to 2.8	2.8	Not Regulated	None	By-products of drinking water disinfection; not regulated individually; included in Total Trihalomethanes
Bromodichloromethane	ppb	1.4 to 9.6	9.6	Not Regulated	None	
Chloroform	ppb	2 to 14.2	14.2	Not Regulated	70	
Dibromochloromethane	ppb	0.0 to 6.9	6.9	Not Regulated	60	
Monochloroacetic Acid	ppb	0 to 3.8	3.8	Not Regulated	70	By-products of drinking water disinfection; not regulated individually; included in Haloacetic Acids
Dichloroacetic Acid	ppb	3.5 to 7.3	7.3	Not Regulated	None	
Trichloroacetic Acid	ppb	0 to 1.6	1.6	Not Regulated	20	
Monobromoacetic Acid	ppb	1.5 to 2.7	2.7	Not Regulated	None	
Dibromoacetic Acid	ppb	0 to 1.8	1.8	Not Regulated	None	

<p><b>TCEQ accesses raw water supplies</b></p> <p>TCEQ completed an assessment of Fort Worth's source water and the results indicate some of the sources are susceptible to certain contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this water quality report.</p> <p>For more information on our source water assessments and protection efforts at Fort Worth's system, contact the Fort Worth laboratory at 817-392-5900.</p> <p>Some of this source water assessment information is available on Texas Drinking Water Watch at <a href="http://www.tceq.texas.gov/gis/swaview">www.tceq.texas.gov/gis/swaview</a>.</p> <p>For more information on the source water assessments, please contact us.</p>	Secondary Constituents		
	This chart lists other items for which the water is tested. These items do not relate to public health but rather to the aesthetic effects. These items are often important to industrial users.		
	Item	Measure	2012 Range
	Bicarbonate	ppm	88 to 114
	Calcium	ppm	31 to 42
	Chloride	ppm	10 to 26
	Conductivity	µmhos/m	264 to 360
	pH	units	7.7 to 8.3
	Magnesium	ppm	3 to 6
	Sodium	ppm	17 to 27
	Sulfate	ppm	22 to 36
	Total Alkalinity as CaCO <sub>3</sub>	ppm	88 to 114
Total Dissolved Solids	ppm	150 to 244	
Total Hardness as CaCO <sub>3</sub>	ppm	92 to 122	
Total Hardness in Grains		5 to 7	

### Microorganism testing shows low detections

TRWD monitors the raw water at all intake sites for *Cryptosporidium*, *Giardia Lambia* and viruses. The source is human and animal fecal waste in the watershed.

No viruses were detected, but *Cryptosporidium* and *Giardia Lambia*, microbial parasites common in surface water, were detected at very low levels.

The *Cryptosporidium* testing methods cannot determine if the parasite is dead and inactive or alive and capable of causing cryptosporidiosis. This is an abdominal infection that causes nausea, diarrhea and abdominal cramps after indigestion.

The drinking water treatment process is designed to remove *Cryptosporidium* and *Giardia Lambia* through filtration.

### Data gathering to determine if more regulation needed

Water utilities in the United States monitor for more than 100 contaminants and must meet 91 regulations for water safety and quality.

But should other contaminants be regulated? The 1996 Safe Drinking Water Act amendments require that once every five years EPA issue a new list of no more than 30 unregulated contaminants to be monitored by public water systems. This monitoring provides a basis for future regulatory actions to protect public health.

The first Unregulated Contaminant Monitoring Rule (UCMR 1) was published on Sept. 17, 1999, the second (UCMR 2) was published on Jan. 4, 2007 and the third (UCMR 3) was published on May 2, 2012. Fort Worth did not detect any of the contaminants in the UCMR1 and UCMR 2 testing.

The third unregulated Contaminant Monitoring Rule includes assessment for 21 chemical contaminants, 7 hormones and two viruses. The virus testing did not impact Fort Worth. This testing was limited to small groundwater systems that do not disinfect.

UCMR benefits the environment and public health by providing EPA and other interested parties with scientifically valid data on the occurrence of these contaminants in drinking water. Health information is necessary to know whether these contaminants pose a health risk.

Public water systems will sample for these contaminants for four consecutive quarters from 2013 to 2015. For Worth's sampling occurred from June 2013 through March 2014. The results shown are for the first three quarters of sampling. The final quarter's results will appear in next year's annual water quality report.

### UCMR3

Fort Worth's testing detected only six of the 21 chemical contaminants and none of the seven hormones.

Contaminant	Measure	Range of Detects	2013 Level	MRL	Common Sources of Substance
Bromochloromethane (Halon 1011)	ppb	0 to 0.25	0.25	0.06	Used as a fire-extinguishing fluid, an explosive suppressant, and as a solvent in the manufacturing of pesticides
Vanadium	ppb	0.56 to 1.6	1.6	0.2	Naturally-occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst
Molybdenum	ppb	1.6 to 2.5	2.5	1	Naturally-occurring element found in ores and present in plants, animals and bacterial; commonly used form molybdenum trioxide used as a chemical reagent
Strontium	ppb	260 to 330	330	0.3	Naturally-occurring element; historically, commercial use of strontium has been in the faceplate class of cathode-ray tube televisions to block x-ray emissions
Chromium <sup>1</sup>	ppb	0 to 0.4	0.4	0.2	Naturally-occurring element; used in making steel and other alloys; chromium-3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation
Chromium-6	ppb	0 to 0.14	0.14	0.03	
Chlorate	ppb	0 to 720	720	20	Agricultural defoliant or desiccant; disinfection byproduct; and used in production of chlorine dioxide

<sup>1</sup>Total Chromium, the sum of chromium in all its valence states, is already regulated in drinking water. As part of the UCMR3, EPA requires testing for Total Chromium in the same samples used to test for Chromium 6, which is on the UCMR3 list. The value differs from what is listed in the table on Page 5 because of different sampling periods. The MCL for EPA's current total chromium regulation was determined based upon the health effects of Chromium 6.

### UCMR3 contaminants not detected

Chemicals	Hormones
1,2,3-trichloropropane	17-B-estradiol
1,3-butadiene	17-α-ethynylestradiol
chloromethane (methyl chloride)	estriol
1,1-dichloroethane	equilin
bromomethane	estrone
chlorodifluoromethane (HCFC-22)	testosterone
1,4-dioxane	4-androstene-3,17-dione
cobalt	

### Effective April 17, 2014: Current Watering Restrictions were made permanent.

MONDAY: **NO** Watering allowed

TUESDAY & FRIDAY: Non-residential sites (apartments, businesses, parks, common areas)

WEDNESDAY & SATURDAY: Residential addresses ending in 0, 2, 4, 6, 8

THURSDAY & SUNDAY: Residential addresses ending in 1, 3, 5, 7, 9

For additional information, please go to the City of Crowley's website at [www.ci.crowley.tx.us](http://www.ci.crowley.tx.us)