

2011 Annual Drinking Water Quality Report

(Consumer Confidence Report)

BELL COUNTY WCID 1 PWS ID Number: TX0140016

SPECIAL NOTICE

Immuno-compromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; people with **HIV/AIDS** or other immune system disorders some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from your health care provider. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We cannot control the variety of material 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 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 for the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

FOR MORE INFORMATION REGARDING THIS REPORT CONTACT

Jerry Atkinson, General Manager

254-501-9243

This report is intended to provide you with important information about your drinking water and efforts made by Bell County Water Control & Improvement District No. 1 to provide safe drinking water.

INFORMATION ON WATER SOURCES

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals, and in some cases, radioactive material, and can pick up substances resulting from the presence of contaminants that may be present in source:

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

En Español

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

Where do we get our drinking water?

Our drinking water is obtained from a surface water source, Belton Lake. A Source Water Susceptibility Assessment for Belton Lake is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus our source water protection strategies. For more information about your source 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?wtsrc=>

Further details about sources and source water assessment are available in Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>.

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 (1-800-426-4791).

Secondary Constituents

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

About the Following Pages

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

DEFINITIONS

Maximum Contaminant Level (MCL)

The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG)

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

Maximum Residual Disinfectant Level (MRDL)

The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG)

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

ABBREVIATIONS

NTU – Nephelometric Turbidity Units

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

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

ppm – parts per million, or milligrams per liter (mg/L) – or one ounce in 7,350 gallons of water

ppb – parts per billion, or micrograms per liter (ug/L)- or one ounce in 7,350,000 gallons of water

ppt – parts per trillion, or nanograms per liter

ppq – parts per quadrillion, or picograms per liter.

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

na- not applicable

avg- regulatory compliance with some MCLs are based on running annual average of monthly samples

Inorganic Contaminants

Year or Range	Violation	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2008	N	Antimony	0.00	0.00	0.0	6	6	ppb	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
2008	N	Arsenic	0.0	0.0	0.0	10	0.0	ppb	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production waste.
2008	N	Barium	0.06	0.06	0.06	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2008	N	Beryllium	0.0	0.0	0.0	4	4	ppb	Discharge from metal refineries and coal burning factories; Discharge from electrical, aerospace and defense
2008	N	Cadmium	0.0	0.0	0.0	5	5	ppb	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from battery waste
2008	N	Chromium	0.0	0.0	0.0	100	100	ppb	Discharge from steel and pulp mills; erosion of natural deposits
2011	N	Fluoride	0.50	0.24	1.03	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2008	N	Mercury	0.0	0.0	0.0	2	2	ppb	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
2011	N	*Nitrate	0.22	0.22	0.23	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
<p>*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 periods of time because of rainfall or agriculture activity. If you are caring for an infant you should ask for advice from your health care provider.</p>									
2011	N	Selenium	0.0	0.0	0.0	50	50	ppb	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
2008	N	Thallium	0.0	0.0	0.0	2	.5	ppb	Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories

Radioactive Contaminants

Collection Date	Contaminant	Max. Level	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination
06/18/2009	Beta/photon emitters	5.5	4 – 5.5	0	4	mrem/yr	N	Decay of natural and man-made deposits

6/18/2009	Gross Alpha excluding radon and uranium	0.0	0.0	0	15	pCi/L	N	Erosion of natural deposits
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Synthetic Organic Contaminants Including Pesticides

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
2010	2,4,5-TP (Silvex)	0.0	0.0	0.0	50	50	ppb	N	Residue of banned herbicide
2010	2,4-D	0.0	0.0	0.0	70	70	ppb	N	Runoff from herbicide used on row crops
2010	Alachlor	0.0	0.0	0.0	2	0	ppb	N	Runoff from herbicide used on row crops
2011	Atrazine	0.13	0.13	0.14	3	3	ppb	N	Runoff from herbicide used on row crops
2010	Benzo (a) pyrene	0.0	0.0	0.0	200	0	ppt	N	Leaching from linings of water storage tanks and distribution lines
2010	Carbofuran	0.0	0.0	0.0	40	40	ppb	N	Leaching of soil fumigant used on rice and alfalfa
2011	Carbon tetrachloride	0.0	0.0	0.0	5	0	ppb	N	Discharge from chemical plants and other industrial activities
2010	Chlordane	0.0	0.0	0.0	2	0	ppb	N	Residue of banned termiticide
2010	Dalapon	0.0	0.0	0.0	200	200	ppb	N	Runoff from herbicide used on rights of way.
2010	Di (2-ethylhexyl) phthalate	0.0	0.0	0.0	400	400	ppb	N	Discharge from chemical factories
2010	Di (2-ethylhexyl) phthalate	0.0	0.0	0.0	6	0	ppb	N	Discharge from rubber and chemical factories
2010	Dibromochloropropane (DBCP)	0.0	0.0	0.0	0	0	ppt	N	Runoff/ leaching from soil fumigant used on soybeans, cotton, pine apples, and orchards
2010	Dibromochloropropane (DBCP)	0.0	0.0	0.0	0	0	ppt	N	Runoff/ leaching from soil fumigant used on soybeans, cotton, pine apples, and orchards
2010	Dinoseb	0.0	0.0	0.0	7	7	ppb	N	Runoff from herbicide used on soybeans and vegetables
2010	Endrin	0.0	0.0	0.0	2	2	ppb	N	Residue of banned insecticide
2010	Ethylene dibromide	0.0	0.0	0.0	50	0	ppt	N	Discharge from petroleum refineries
2010	Heptachlor	0.0	0.0	0.0	400	0	ppt	N	Residue of banned termiticide
2010	Heptachlor epoxide	0.0	0.0	0.0	200	0	ppt	N	Breakdown of heptachlor
2010	Hexachlorobenzene	0.0	0.0	0.0	1	0	ppb	N	Discharge from metal refineries and agriculture chemical factories
2010	Hexachlorocyclopentadiene	0.0	0.0	0.0	50	50	ppb	N	Discharge from chemical factories

2010	Lindane	0.0	0.0	0.0	200	200	ppt	N	Runoff/ leaching from insecticide used on cattle, lumber, gardens
2010	Methoxychlor	0.0	0.0	0.0	40	40	ppb	N	Runoff/ leaching from insecticide used on fruits, vegetables, alfalfa, livestock
2010	Oxamyl (Vydate)	0.0	0.0	0.0	200	200	ppb	N	Runoff/ leaching from insecticide used on apples, potatoes and tomatoes
2010	Pentachlorophenol	0.0	0.0	0.0	1	0	ppb	N	Discharge from wood preserving factories
2010	Picloram	0.0	0.0	0.0	500	500	ppb	N	Herbicide runoff
2010	Simazine	0.0	0.0	0.0	4	4	ppb	N	Herbicide runoff
2010	Toxaphene	0.0	0.0	0.0	3	0	ppb	N	Runoff/ leaching from insecticide used on cotton and cattle

Volatile Organic Contaminants

Year	Contaminant	Highest Single Sample	Range of levels Detected	MCLG	MCL	Unit of Measure	Violation	Source of Contaminant
2010	1,1,1-Trichloroethane	0	0	200	200	ppb	N	Discharge from metal degreasing sites and other factories
2010	1,1,2-Trichloroethane	0	0	3	5	ppb	N	Discharge from industrial chemical factories
2010	1,1-Dichloroethylene	0	0	7	7	ppb	N	Discharge from industrial chemical factories
2010	1,2,4-Trichlorobenzene	0	0	70	70	ppb	N	Discharge from textile-finishing factories
2010	1,2-Dichloroethane	0	0	0	5	ppb	N	Discharge from industrial chemical factories
2010	1,2-Dichloropropane	0	0	0	5	ppb	N	Discharge from industrial chemical factories
2010	Benzene	0	0	0	5	ppb	N	Discharge from factories. Leaching from gas storage tanks and landfills
2010	Chlorobenzene	0	0	100	100	ppb	N	Discharge from chemical and agriculture chemical factories
2010	Dichloromethane	0	0	0	5	ppb	N	Discharge from pharmaceutical and chemical factories
2010	Ethylbenzene	0	0	700	700	ppb	N	Discharge from petroleum refineries
2010	Styrene	0	0	100	100	ppb	N	Discharge from rubber and plastic factories; leaching from landfills
2010	Tetrachloroethylene	0	0	0	5	ppb	N	Discharge from factories and dry cleaners
2010	Toluene	0	0	1	1	ppb	N	Discharge from petroleum factories
2010	Trichloroethylene	0	0	0	5	ppb	N	Discharge from metal degreasing sites and other factories
2010	Vinyl Chloride	0	0	0	5	ppb	N	Leaching from PVC piping; discharge from plastic factories
2010	Xylenes	0	0	10	10	ppm	N	Discharge from petroleum factories; discharge from chemical factories
2010	Cis-1,2-Dichloroethylene	0	0	70	70	ppb	N	Discharge from industrial chemical factories

2010	o-Dichlorobenzene	0	0	600	600	ppb	N	Discharge from industrial chemical factories
2010	p-Dichlorobenzene	0	0	75	75	ppb	N	Discharge from industrial chemical factories
2010	Trans-1,2-Dichloroethylene	0	0	100	100	ppb	N	Discharge from industrial chemical factories

Maximum Residual Disinfectant Level

Systems must complete and submit disinfection data on the Surface Water Monthly Operations Report (SWMOR). On the CCR report, the system must provide disinfectant type, minimum, maximum and average levels.

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2011	Chloramines	3.07	2.4	3.7	4.0	< 4.0	ppm	Disinfectant used to control microbes.

Disinfection Byproducts *(Regulated Contaminants)

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2011	Total Haloacetic Acids*	09.6	4	12.9	60	ppb	Byproduct of drinking water disinfection.
2011	Total Trihalomethanes*	20.2	13.9	23.5	80	ppb	Byproduct of drinking water disinfection.

Unregulated Contaminants

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

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2011	Chloroform	5.9	4.6	6.6	ppb	Byproduct of drinking water disinfection.
2011	Bromoform	< .87	< 0.1	1.6	ppb	Byproduct of drinking water disinfection.
2011	Bromodichloromethane	7.7	5.8	8.8	ppb	Byproduct of drinking water disinfection.
2011	Dibromochloromethane	5.7	3.5	6.9	ppb	Byproduct of drinking water disinfection.

Lead and Copper

“If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. This water supply is responsible for providing high quality drinking water, but cannot control the variety of 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, tested methods, and steps you can do to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>”

Year	Contaminant	The 90 th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2009	Lead	2.4	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits
2009	Copper	0.208	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Turbidity

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
2011	Turbidity	0.26	100.00	0.3	NTU	Soil runoff.

Total Organic Carbon

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

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2011	Source Water	3.97	.59	12	ppm	Naturally present in the environment.
2009	Drinking Water	.14	.07	.28	ppm	Naturally present in the environment.
2009	Removal Ratio	53.51%	41%	66%	% removal*	NA

*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 Monitoring Information

Cryptosporidium is a microbial pathogen that may be found in water contaminated by feces. Although filtration removes Cryptosporidium, it cannot guarantee 100 percent removal nor can the testing methods 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.

BCWCID #1 completed its compliance schedule meeting the requirements of the Long Term 2 (LT2) Enhanced Surface Water Treatment Rule. Monitoring for cryptosporidium and E. Coli began in October 2006 and ended in September 2008. After 48 samples, no microbial pathogens were found.

Total Coliform Bacteria

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are harder than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Maximum Total Coliform Contaminant Goal	Highest Number of Positive Samples	Fecal Coliform or E. Coli Max. Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Source of Contamination
0	0	There were no TCR detections for this System in this CCR period	0	No	naturally present in the environment

* Two or more coliform found samples in any single month.

Fecal Coliform REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

Secondary and Other Constituents Not Regulated

(No associated adverse health effects)

Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2011	Bicarbonate	155	154	155	NA	ppm	Corrosion of carbonate rocks such as limestone.
2008	Calcium	52.4	49.6	53.9	NA	ppm	Abundant naturally occurring element.

2011		Chloride	21	18	23	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2013	2008	Copper	0.001	0	0.003	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2008		Hardness as Ca/Mg	174	168	177	NA	ppm	Naturally occurring calcium and magnesium.
2013	2008	Magnesium	10.5	10.3	10.8	NA	ppm	Abundant naturally occurring element.
2013	2008	Manganese	0.002	0.002	0.003	0.05	ppm	Abundant naturally occurring element.
2013	2008	Nickel	0.002	0.002	0.002	NA	ppm	Abundant naturally occurring element.
2011		Sodium	12.5	12.4	12.6	NA	ppm	Erosion of natural deposits; by-products of oil field activity.
2011		pH	7.5	7.4	7.6	>7.0	units	Measure of corrosivity of water.
2011		Sulfate	25	23	26	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2011		Total Alkalinity as CaCO ₃	127	126	128	NA	ppm	Naturally occurring soluble mineral salts.
2011		Total Dissolved Solids	221	190	221	1000	ppm	Total dissolved mineral constituents in water.

The Latest News for Bell County WCID #1

Last summer we experienced the hottest and driest summer every recorded and our water treatment plant never exceeded 64% of its total treatment capacity. This in measure is attributable to the excellent planning our member entities to ensure that each entity had an adequate water supply to meet their demands of their customers. Because of the recent rains received we are headed into this year better off than last year and do not foresee any problems meeting the demands of the entities we serve throughout 2012.