

City of White Oak 2012 Annual Drinking Water Quality Report

(Consumer Confidence Report)

PWS ID Number TX0920006

January 1 to December 31, 2012

OUR DRINKING WATER MEETS or EXCEEDS ALL FEDERAL (EPA) DRINKING WATER REQUIREMENTS

This report is a summary of the quality of the water we provided our customers for 2012. 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.

En Espanol

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono (903) 759-3936.

SPECIAL HEALTH INFORMATION!!

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immunocompromised persons such as those undergoing chemotherapy for cancer; 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 to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at (800) 426-4791.

City of White Oak
Water Treatment Plant
906 S. White Oak RD.
White Oak, TX 75693

How to Contact Us

Billing Questions or Water/Sewer Emergency: (903) 759-3936 ex.7019

Water Quality Questions call Wendell Basham: (903) 759-9212 ex.7036

You can also check our website at www.cityofwhiteoak.com

Public Participation Opportunities

Date: Second Tuesday Each Month

Time: 5:00 PM

Location: City Hall

Address: 906 S. White Oak Road

Phone No: (903) 759-3936

Water Sources: The sources of drinking water (both tap water and bottled water) include rivers, lakes streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals, and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

Where do we get our drinking water? Raw water is pumped from BIG SANDY CREEK into storage reservoirs at our water treatment plant. From there, the raw water is sent through the plant where it undergoes our treatment process, after which it's pumped into our distribution system, water tower and standpipe. TCEQ is updating a Source Water Susceptibility assessment of our source water. 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. This allows us to focus our source water protection strategies. We also purchase treated water from the City of Longview; their susceptibility report is included in this assessment. Some of this source water assessment information will be available later this year on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>. For more information on source water, refer to Source Water Assessment Viewer at the following URL: <http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=>

ALL drinking water may contain contaminants. When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of a Contaminant 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 EPA. These constituents are not causes for health concerns. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

REGULATED IN THE DISTRIBUTION SYSTEM:

Stage 1 Disinfection By-Products

Year	Constituent	Ave	Range	MCL	MCLG	Source
2011	Total Haloacetic Acids (ppb)	17	5.5 – 23.8	60	NA	By-product of drinking water disinfection
2011	Total Trihalomethanes (ppb)	45	16.4 – 57.1	80	NA	

REGULATED SUBSTANCES AT THE CUSTOMER'S TAP

Year	Constituent	The 90 th Percentile	# of Sites Exceeding Action level	Action Level	Source of Contaminant
2009	Lead (ppb)	1.29	0	15	Corrosion of household plumbing systems; Erosion of natural deposits.
2009	Copper (ppm)	0.0291	0	1.3	Corrosion of home plumbing; Natural deposits erosion; Leaching from wood preservatives.

The City of Longview is on a reduced sampling schedule for lead & copper, due to an excellent compliance history. The results listed above are distribution samples taken from the customer's tap. Lead and copper has not been detected in water leaving the water treatment facilities. The source of lead & copper is corrosion of household plumbing systems.

REGULATED AT THE CUSTOMER'S TAP

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present. Longview analyzes over 984 samples each year. All samples taken were negative and did not indicate the presence of coliform bacteria.

REGULATED AT THE TREATMENT PLANTS:

Year	Constituent	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Source of Contaminant
2012	Turbidity	0.28	100	0.3	Soil runoff

Turbidity has no health effects. However, it can interfere with disinfection & provide a medium for microbial growth. Turbidity is measured in Nephelometric Turbidity Units (NTU) & is measurement of water clarity.

UNREGULATED SUBSTANCES: (Stage 1 Disinfection By-Products) White Oak

Year	Constituent	Ave	Range	Source
2012	Chloroform (ppb)	123.3	123.3 – 123.3	By-product of drinking water chlorination.
2012	Dichlorobromomethane (ppb)	26.1	26.1 - 26.1	
2012	Dibromochloromethane (ppb)	7.75	7.75 – 7.75	
2012	Bromoform (ppb)	ND		

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 regulation is warranted.

REGULATED SUBSTANCES AT THE TREATMENT PLANTS:

Year	Constituent	Avg.	Range of Detected Levels	MCL	MCLG	Typical Source
2012	Chlorite	0.203	0.05 – 0.44	1	0.8	By-product of drinking water disinfection.
2012	Barium (ppm)	0.051	0.04 - 0.06	2	2	Discharge of drilling wastes, and metal refineries. Erosion of natural deposits.
2012	Fluoride (ppm)	0.48	0.37 - 0.63	4	4	Erosion of natural deposits; & additive promoting strong healthy teeth.
2012	Nitrate (ppm)	0.227	0.17- 0.31	10	10	Runoff from fertilizer use; Leaching from septic tanks, or sewage; Erosion of Natural deposits.
2012	Chloramines (ppm)	1.40	1.21 - 1.67	4	4	Disinfectant used to control microbes.
2012	Gross Beta particles & photon emitter (pCi/L)	1.37	0 - 4.1	50		Decay of natural & man-made deposits of certain minerals that are radioactive & may emit forms of radiation known as photons & beta radiation

The City of White Oak Had No Violations FOR THE YEAR 2012

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

TABLE DEFINITIONS

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. This is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.

Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow.

Action Level Goal (ALG) The level of a contaminate in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

- **pCi/L** – picecuries/liter (a measure of radioactivity).
- **NTU** – Nephelometric Turbidity Units (a measure of turbidity).
- **ppm** – Parts per million, or milligrams per liter (mg/l).
- **ppb** – Parts per billion, or micrograms per liter (µg/l).
- **ppt** – Parts per trillion, or nanograms per liter (ng/L).
- **ppq** – Parts per quadrillion, or picograms per liter (pg/L).
- **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.
- **ND** – Not detected at testing limits.



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.

Microbial contaminants, such as viruses and bacteria, 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, 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.

WHITE OAK LEAD AND COPPER

Year	Constituent	The 90 th %	Sites Exceeding Action level	Action Level	Source
2010	Lead (ppb)	.66	0	15	Corrosion of household plumbing; Erosion of natural deposits; Leaching from wood preservatives.
2010	Copper (ppm)	.00646	0	1.3	

"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, 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>."

How to contact us for more information

Billing questions	903-237-1030
Drinking water quality questions	903-237-2780
Water/sewer emergency, service interruptions	903-236-3030
Water conservation or to request a speaker	903-237-1034
Source Water Assessment Questions	903-291-5234

You can also find us on the internet @ www.CityofLongview.com

The City Council meets every 2nd and 4th Thursday of each month. Times vary. Call 903-237-1080 or check our website for more information. The Longview City Hall is located at 300 W. Cotton St. Offices are open from 8 a.m. to 5 p.m.

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono 903-237-1060, 903-237-1236, 903-232-0063, or 903-237-1199

Longview's Sources of Drinking Water:

Longview uses surface water from three sources: Lake Cherokee, Sabine River, and Lake O' the Pines. A source water assessment has been completed by the Texas Commission on Environmental Quality (TCEQ) for all three water sources and the report is available to review by calling us at 903-291-534 or 903-237-2780.

REGULATED SUBSTANCES AT THE TREATMENT PLANTS: Longview

Year	Total Organic Carbon (ppm)	Ave	Detected Range	Typical Source
2012	Source Water	5.87	3.41 - 10.30	Naturally present in The environment
2012	Drinking Water	3.37	2.01 - 4.77	
2012	TOC % Removal	40.91	18.04 - 78.83	The TOC removal ratio is the % of TOC removed by treatment divided by % of TOC required by TCEQ to be removed.

DID YOU KNOW....

- ✓ It takes **100,000 gallons** of water to manufacture **one car**.
- ✓ **122 gallons** of water are needed to produce **one loaf of bread**.
- ✓ It takes **50 glasses** of water to grow **1 glass of orange juice**.
- ✓ **97%** of all earth's water is salty; only **3%** is fresh water.
- ✓ A **20-minute shower** uses **16-20 gallons** of water.
- ✓ A **10-minute shower** uses **8-10 gallons** of water.
- ✓ A **5-minute shower** uses **4-5 gallons** of water.
- ✓ It takes **3 gallons** of water to flush just **one toilet**.
- ✓ It takes **30-40 gallons** of water for a **tub bath**.
- ✓ **10 gallons** of water is required to **hand wash dishes**.
- ✓ It takes **20-30 gallons** of water to run a **washing machine**.
- ✓ **The average home uses about 293 gallons of water each day**.
- ✓ It takes **2,500 gallons** of water to produce **1 pound of beef**.
- ✓ **The human body is about 70% water**.
 - Water makes up almost **80% of our brain**.
 - Water makes up **83% of our blood**.
 - Water makes up nearly **90% of our lungs**.

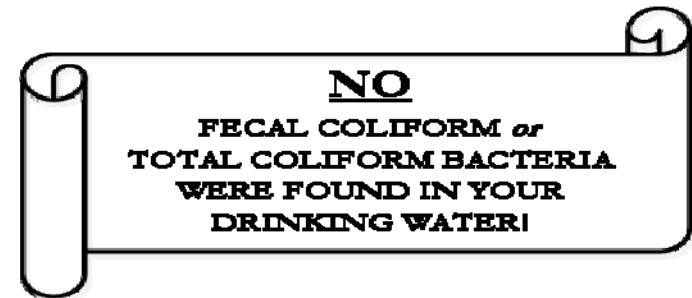
WHITE OAK MAXIMUM RESIDUAL DISINFECTANT LEVEL

Year	Constituent	Ave	Range	MCL	MCLG	Typical Source
2012	Chloramines	3.01	.8- 4.0	4		Disinfectant for microbe control

WHITE OAK Disinfection By-Products

Year	Constituent	Highest Level	Range	MCL	MCLG	Source
2012	Total Haloacetic Acids (ppb)	142	14.4 - 141.5	60	NA	By-product of drinking water disinfection
2012	Total Trihalomethanes (ppb)	181	17.3 - 180.9	80	NA	

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.



WHITE OAK TOTAL ORGANIC CARBON

Year	TOC (ppm)	Ave	Range	Typical Source
2012	Source Water	7.40	4.07 - 14.70	Naturally present in the environment
2012	Drinking Water	2.82	1.88 - 4.61	
2012	TOC % Removal	59.65	45.00 - 73.80	

WHITE OAK TURBIDITY

Year	Constituent	Highest Value	Lowest % of Samples Meeting Limits	Turbidity Limits	Source
2012	Turbidity	0.3	100	0.3	Soil runoff

Turbidity has no health effects. However, it can interfere with disinfection & provide a medium for microbial growth. Turbidity is measured in Nephelometric Turbidity Units (NTU) & is measurement of water clarity. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.

WHITE OAK INORGANIC CONTAMINANTS

Year	Constituent	Max	MCL	MCLG	Typical Source
2010	Antimony (ppm)	0.479	6	6	Discharge from petroleum refineries, fire retardants, ceramics, electronics
2011	Nitrite (ppm)	0.01	1	1	Fertilizer use runoff; Septic tanks leaching; Erosion of natural deposits.
2010	Arsenic (ppm)	0.457	10	0	Erosion of deposits, Runoff from orchards or glass & electronics waste.
2012	Barium (ppm)	0.0351	2	2	Discharge of drilling wastes, metal refineries. Erosion of natural deposits
2011	Chromium (ppb)	.557	100	10	Discharge from steel and pulp mills; Erosion of natural deposits.
2012	Fluoride	.1	4.0	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum.
2012	Nitrate (ppm)	.25	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
2011	Selenium (ppb)	1.84	50	50	Discharge of petroleum & metal refineries. Erosion of natural deposits.
2012	Thallium (ppb)	.04	2	.5	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.

Total Organic Carbon (TOC) has no adverse health effects. The disinfection can combine with TOC to form disinfection by-products. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Total organic carbon provides a medium for the formation of disinfection by-products when water is disinfected. By-products of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

The City of White Oak purchased treated water from the City of Longview for 27 days in August 2012 to meet the demand of White Oak customers.

If my water tastes or smells different, is it still safe to drink?

The City of White Oak, like many other water suppliers, occasionally experiences changes in taste and odor. Algae & bacteria naturally found in surface waters can produce different types of tastes & odors. Geosmin & 2-Methylisoborneol (MIB) have been identified as odor-causing compounds & are detectable at levels as low as five parts per trillion. When conditions are favorable (changes in temperature, excessive rainfall, flooding, drought, or dry weather conditions), the bacteria & certain blue-green algae produce a musty or earthy taste & odor. Although these contaminants impart an unpleasant taste and odor, they do not have an established Maximum Contaminant Level (MCL) nor pose any known health risks. Water stored in pipes for long periods of time, especially during warm weather, may also develop an odor.

Additional Parameters: This chart lists other items for which the water is tested. These items do not relate to public health but rather to the aesthetic quality. These parameters may be important to industrial water users or customers with special needs

Constituent	Units	Longview	White Oak	MCL
Aluminum	ppm	0.17 - 0.54	0.730	0.2
Manganese	ppm	0.009-0.0019	0.00119	0.05
Nickle	ppm	0.0013-0.0014	0.00120	0.1
Zinc	ppm	0.0052-0.0092	0.00390	5
Chloride	ppm	13.5 - 41.6	25.6	300
Sulfate	ppm	33.7 - 52.6	55.9	300
pH	pH units	8.7 – 9.4	9.2	8.5
Conductivity	umhos/cm	225 - 306	266	
Total Alkalinity as CaCO ₃	ppm	21 - 32	12	
Bicarbonate	ppm	20 - 32	51	
Dissolved solids	ppm	129 - 186	161	1,000
Calcium	ppm	18.3 – 24.9	9.20	
Magnesium	ppm	3.33 – 4.69	3.51	
Sodium	ppm	11.3 – 26.6	27.9	20,000
Total Hardness as CaCO ₃	ppm	69.2 – 82.6	37.4	

The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confident Report. For more information on source water assessments and protection efforts at our system, contact the City of White Oak Water Treatment Plant.

