

# 2010 ANNUAL DRINKING WATER QUALITY REPORT

We're pleased to present to you our 2010 Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. We are required by the Safe Drinking Water Act to prepare and deliver this report to you on an annual basis. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your drinking water. Our water comes from (2) two wells that draw from the Trinity (Antlers) Aquifer.

***I'm pleased to report that our drinking water is safe and meets federal and state requirements.***  
*If you have any questions about this report or any other issue concerning your water utility, please contact our General Manager, Ronny Young, at our office number (940) 668-8391. We want you to be informed about our water quality. If you want to learn more, please attend any of our regularly scheduled meetings. They are held at 9 a.m. on the second Wednesday of each month at the Kiowa Homeowners Water Supply Corporation Office, 133 Kiowa Dr S.*

*Kiowa Homeowners Water Supply Corporation routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of September 26<sup>th</sup>, 2007 through December 31<sup>st</sup>, 2010. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.*

Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons 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 their health care providers. 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 (800-426-4791). If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We 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>.

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

## **INFORMATION ABOUT SECONDARY CONTAMINATES**

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, secondary contaminants are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

A Source Water Susceptibility Assessment for your drinking water sources(s) 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 source water protection strategies.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following :<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/>

*In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:*

Non-Detects (ND) - Laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (µg/l) - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/l) - A measure of radioactivity.

Million Fibers per Liter (MFL) - Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

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

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal - The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) - The highest level of 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.

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

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.

## 2010 Regulated Contaminates Detected

### Coliform Bacteria

<i>MCLG</i>	<i>Total Coliform Maximum Level</i>	<i>Highest number positive samples</i>	<i>Fecal or e.Coli max level</i>	<i>Total positive e.coli or fecal</i>	<i>Violation</i>	<i>Likely Source of Contaminate</i>
0	1 positive monthly samples	none		0	none	Naturally present in the environment.

### Lead and Copper

<i>Lead and Copper</i>	<i>Date Sampled</i>	<i>MCGL</i>	<i>AL</i>	<i>90<sup>th</sup> percentile</i>	<i># Sites over AL</i>	<i>Units</i>	<i>Violation</i>	<i>Likely Source of Contamination</i>
Copper	9/26/2007	1.3	1.3	0.165		ppm	None	Erosion of natural deposits; Leaching from wood preservatives; corrosion of household plumbing systems.
Lead	9/26/2007	0	15	2.3		Ppb	None	Corrosion of household plumbing systems; Erosion of natural deposits

### Regulated Contaminates

<i>Disinfectants and disinfectant By-products</i>	<i>Collection Date</i>	<i>Highest Single Sample</i>	<i>Range of Levels</i>	<i>MCGL</i>	<i>MCL</i>	<i>Units</i>	<i>Violation</i>	<i>Likely Source of Contamination</i>
Haloacetic Acids (HASS) *	2010	Levels lower than detect level	0 - 0	No goal for total	60	ppb	None	Byproduct of drinking water disinfection.
Total Trihalomethenes (TThm) *	2010	5.9	2.7 - 5.9	No goal for total	80	Ppb	None	Byproduct 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

<i>Inorganic Contaminates</i>	<i>Collection Date</i>	<i>Highest Single Sample</i>	<i>Range of Levels</i>	<i>MCLG</i>	<i>MCL</i>	<i>Units</i>	<i>Violation</i>	<i>Likely Source of Contamination</i>
Antimony	12/8/2009	Levels lower than detect level	0 - 0	6	6	Ppb	N	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.
Arsenic	12/8/2009	Levels lower than detect level	0 - 0	0	10	Ppb	N	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics waste.
Barium	12/8/2009	0.0187	.0159 - .0187	2	2	Ppm	N	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits.
Beryllium	12/8/2009	Levels lower than detect level	0 - 0	4	4	Ppb	N	Discharge from metal refineries and coal burning factories; discharge from electrical, aerospace, and defense.
Cadmium	12/8/2009	Levels lower than detect level	0 - 0	100	100	Ppb	N	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride	9/24/2008	0.32	0.19 - 0.32	4	4	Ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum.
Mercury	12/8/2009	Levels lower than detect level	0 - 0	2	2	Ppb	N	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland.

Nitrate (measured as Nitrogen)	2010	Levels lower than detect level	0 – 0	10	10	Ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
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Nitrate Advisory – Nitrate in drinking water at levels above 10 pm 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.

Selenium	1/08/09	Levels lower than detect level	0 – 0	50	50	Ppb	N	Discharge from petroleum and metal Refineries; Erosion of natural deposits; Discharge from mines.
Thallium	12/08/09	Levels lower than detect level	0 – 0	0.5	2	Ppb	N	Discharge form electronics, glass, and leaching from ore- processing sites; drug factories.
Radioactive Contaminants	Collection Date	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	12/08/09	Levels lower than detect level	0 – 0	0	4	mrem/yr	N	Decay of natural and man- made deposits.
Gross alpha excluding radon and uranium	12/08/09	Levels lower than detect level	0 – 0	0	15	pCi/L	N	Erosion of natural deposits.
Synthetic organic contaminants including pesticides	Collection Date	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Alachlor	2010	Levels lower than detect level	0 – 0	0	2	Ppb	N	Runoff of herbicide used on row crops.
Atrazine	2010	Levels lower than detect level	0 – 0	3	3	Ppb	N	Runoff of herbicide used on row crops.
Benzo (a) pyrene	2010	Levels lower than detect level	0 – 0	0	200	Ppt	N	Leaching from linings of water storage tanks and distribution lines.
Chlordane	2010	Levels lower than detect level	0 – 0	0	2	Ppb	N	Residue of banned termiticide.
Dalapon	06/11/07	Levels lower than detect level	0 – 0	200	200	Ppb	N	Runoff from herbicide used on rights of way.
Di (2-ethylhexyl) adipate	2010	Levels lower than detect level	0 – 0	400	400	Ppb	N	Discharge form chemical factories.
Di (2-ethylhexyl) Phthalate	2010	Levels lower than detect	0 – 0	0	6	Ppb	N	Discharge from rubber and chemical factories.

		level						
Dibromochloropropane (DBCP)	03/22/2005	Levels lower than detect level	0 – 0	0	0	Ppt	N	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards.
Endrin	2010	Levels lower than detect level	0 – 0	2	2	Ppb	N	Residue of banned insecticide.
Ethylene dibromide	03/22/05	Levels lower than detect level	0 – 0	0	50	Ppt	N	Discharge from petroleum refineries.
Heptachlor	2010	Levels lower than detect level	0 – 0	0	400	Ppt	N	Residue of banned termiticide.
Heptachlor epoxide	2010	Levels lower than detect level	0 – 0	0	200	Ppt	N	Breakdown of heptachlor.
Hexachlorobenzene	2010	Levels lower than detect level	0 – 0	0	1	Ppb	N	Discharge from metal refineries and agricultural chemical factories.
Hexachlorocyclopentadiene	2010	Levels lower than detect level	0 – 0	50	50	Ppb	N	Discharge from chemical factories.
Lindane	2010	Levels lower than detect level	0 – 0	200	200	Ppt	N	Runoff/leaching from insecticide used on cattle, lumber, gardens.
Methoxychlor	2010	Levels lower than detect level	0 – 0	40	40	Ppb	N	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock.
Pentachlorophenol	2010	Levels lower than detect level	0 – 0	0	1	Ppb	N	Discharge from wood preserving factories.
Simazine	2010	Levels lower than detect level	0 – 0	4	4	Ppb	N	Herbicide runoff.
Toxaphene	2010	Levels lower than detect level	0 – 0	0	3	Ppb	N	Runoff/ leaching from insecticide used on cotton and cattle.
Volatile Organic Contaminants	Collection Date	Highest Single Sample	Range of Levels detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
1, 1, 1 – Trichloroethane	2010	Levels lower than detect	0 – 0	200	200	Ppb	N	Discharge from metal degreasing sites and other factories.

		level						
1, 1, 2 – Trichloroethane	2010	Levels lower than detect level	0 – 0	3	5	Ppb	N	Discharge from industrial chemical factories.
1, 1 – Dichloroethylene	2010	Levels lower than detect level	0 – 0	7	7	Ppb	N	Discharge from industrial chemical factories.
1, 2, 4 – Trichlorobenzene	2010	Levels lower than detect level	0 – 0	70	70	Ppb	N	Discharge from textile-finishing factories.
1, 2 – Dichloroethane	2010	Levels lower than detect level	0 – 0	0	5	Ppb	N	Discharge from industrial chemical factories.
1, 2 – Dichloropropane	2010	Levels lower than detect level	0 – 0	0	5	Ppb	N	Discharge from industrial chemical factories.
Benzene	2010	Levels lower than detect level	0 – 0	0	5	Ppb	N	Discharge from factories; Leaching from gas storage tanks and landfills.
Carbon Tetrachloride	2010	Levels lower than detect level	0 – 0	0	5	Ppb	N	Discharge from chemical plants and other industrial activities.
Chlorobenzene	2010	Levels lower than detect level	0 – 0	100	100	Ppb	N	Discharge from chemical and agricultural chemical factories
Dichloromethane	2010	Levels lower than detect level	0 – 0	0	5	Ppb	N	Discharge from pharmaceutical and chemical factories.
Ethylbenzene	2010	Levels lower than detect level	0 – 0	700	700	Ppb	N	Discharge from petroleum refineries.
Styrene	2010	Levels lower than detect level	0 – 0	100	100	Ppb	N	Discharge from rubber and plastic factories; Leaching from landfills.
Tetrachloroethylene	2010	Levels lower than detect level	0 – 0	0	5	Ppb	N	Discharge from factories and dry cleaners.
Toluene	2010	Levels lower than detect level	0 – 0	1	1	Ppm	N	Discharge from petroleum factories.
Trichloroethylene	2010	Levels lower than detect	0 – 0	0	5	Ppb	N	Discharge from metal degreasing sites and other factories.

		level						
Vinyl Chloride	2010	Levels lower than detect level	0 – 0	0	2	Ppb	N	Leaching from PVC piping; Discharge from plastic factories.
Xylenes	2010	Levels lower than detect level	0 – 0	10	10	Ppm	N	Discharge from petroleum factories; Discharge from chemical factories.
cis – 1, 2 - Dichloroethylene	2010	Levels lower than detect level	0 – 0	70	70	Ppb	N	Discharge from industrial chemical factories.
o – Dichlorobenzene	2010	Levels lower than detect level	0 – 0	600	600	Ppb	N	Discharge from industrial chemical factories.
p – Dichlorobenzene	2010	Levels lower than detect level	0 – 0	75	75	Ppb	N	Discharge from industrial chemical factories.
Trans – 1, 2 – Dichloroethylene	2010	Levels lower than detect level	0 – 0	100	100	Ppb	N	Discharge from industrial chemical factories.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

## 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, secondary constituents are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

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