

Lake Palo Pinto Area WSC

2014 Annual Drinking Water Quality Report

(Consumer Confidence Report)

Phone # 940-769-3345

PWS # 1820069

Compiled June 2015

What is this document about?

This report is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. The analysis presented in the following pages was made by using the data from the most recent U.S. EPA and TCEQ required tests. We are committed to providing you with this information because informed customers are our best allies.

SPECIAL NOTICE (Required language for ALL community public water supplies)

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, immune compromised persons such as those undergoing chemotherapy for cancer, persons who have undergone organ transplants, those who are undergoing treatment with steroids, people with HIV/AIDS or other immune system disorders, 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 at 1-800-426-4791.

WATER SOURCES:

The sources of drinking water (both tap and bottled) 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 include:

---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.

Where does my water come from?

Our drinking water is obtained from SURFACE water sources. It comes from Lake Palo Pinto. A Source Water Susceptibility Assessment for our drinking water source has been completed by the Texas Commission on Environmental Quality. The results indicate the susceptibility of our water source to certain contaminants. The sampling requirements for our system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in the Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, please contact Mark at the listings on the bottom of page 3.

Why are there contaminants in my drinking water?

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 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 at 1-800-426-4791.

Unregulated Contaminants

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 EPA has not established drinking water standards for these. The purpose for monitoring these is to assist the EPA in determining their occurrence in water and whether future regulations are warranted. 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.

How can I get involved?

Date: The board meets on the second Monday of every month.

Time: 6:00 PM

Location: Lake Palo Pinto Area WSC Office

Phone #: 940-769-3345

To learn about future public meeting concerning your drinking water please call us.

About the following pages.

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

In a water loss audit submitted to the Texas Water Development Board for the time period of Jan. – Dec. 2014, our system lost an estimated 637,095 gallons of water. If you have any questions about the water loss audit you can contact Mark with the contacts on the next page.

Unit Descriptions	
Term	Definition
NTU	Nephelometric Turbidity Units
MFL	Million fibers per liter (a measure of asbestos)
mg/L	Number of milligrams of substance in one liter of water
ppm	Parts per million, or milligrams per liter (mg/L) <i>1 Ounce in 7,350 gals. of water.</i>
ppb	Parts per billion or micrograms per liter (µg/L) <i>1 Ounce in 7,350,000 gals. of water</i>
pCi/L	Picocuries per liter (a measure of radioactivity)
ppt	Parts per trillion, or nanograms per liter
ppq	Parts per quadrillion, or picograms per liter
NA	Not applicable
ND	Not detected
NR	Monitoring not required, but recommended.

Important Drinking Water Definitions	
Term	Definition
MCLG	Maximum Contaminant Level Goal: 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.
MCL	Maximum Contaminant Level: 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.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

MRDL	Maximum residual disinfectant level. 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.
MRDLG	Maximum residual disinfection level goal. 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.
MNR	Monitored Not Regulated
MPL	State Assigned Maximum Permissible Level
RAA or AVG	Regulatory compliance with some MCL's are based on running annual average of monthly samples

For more information please contact:

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Water Quality Data Table

The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. There were no violations in the following.

<u>Contaminants</u>	<u>MCLG</u> or <u>MRDLG</u>	<u>MCL,</u> <u>TT, or</u> <u>MRDL</u>	<u>Your</u> <u>Water</u>	<u>Range</u>		<u>Sample</u> <u>Date</u>	<u>Unit of</u> <u>Measure</u>	<u>Violation / Typical Source</u>
				<u>Low</u>	<u>High</u>			
<u>Inorganic Contaminants</u>								
Arsenic	0	10	1.4	1.4	1.4	2014	ppb	None / Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	2	2	0.11	0.11	0.11	2014	ppm	None / Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium	.01	.01	.009	.009	.009	2014	ppm	None / Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride	4	4	0.198	0.198	0.198	2014	ppm	None / Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Mercury	.002	.002	<.00007	<.00007	<.00007	2014	ppm	None / Erosion of natural deposits, discharge from refineries, runoff from landfills and cropland
Selenium	0.05	0.05	<.001	<.001	<.001	2014	ppm	None / Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Antimony	.006	.006	<.0002	<.0002	<.0002	2014	ppm	None / Discharge from petroleum refineries, fire retardants, ceramics, electronics, solder.
Thallium	0.0005	0.002	<.0002	<.0002	<.0002	2014	ppm	None / Leaching from ore processing sites; discharge from electronics, glass and drug factories.
Beryllium	0.004	0.004	<.0002	<.0002	<.0002	2014	ppm	None / Discharge from metal refineries, coal burning factories, electrical, aerospace and defense
Cadmium	0.005	0.005	<.0004	<.0004	<.0004	2014	ppm	None / Corrosion of galvanized pipe erosion of natural deposits, discharge from metal refineries, runoff from waste batteries
Aluminum	0.05	0.2	1.2	1.2	1.2	2014	ppm	None/Erosion of natural deposits And water treatment techniques
Cyanide	.2	.2	.00637	.00637	.00637	2014	ppm	None/Discharge from plastics fertilizer and steel/metal factories
Nitrate [measured as Nitrogen]	10	10	.018	.018	.018	2014	ppm	None / Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

<p>Nitrate Advisory: Nitrates 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.</p>

<u>Radioactive Contaminants</u>								
Gross Beta	0	50	5.5	5.5	5.5	2012	pCi/L	None / Decay of natural and man-made deposits. (The current MCL for Beta is 4 millirems/yr. Smoking a cigarette is = to 14 mrems)
Gross Alpha	0	15	<2.0	<2.0	<2.0	2012	pCi/L	EPA considers 50 pCi/L the level of concern
Radium (combined 226/228)	0	5	<1.0	<1.0	<1.0	2012	pCi/L	None / Erosion of natural deposits

<u>Contaminants</u>	<u>The 90th Percentile</u>	<u>AL</u>	<u>MCLG</u>	<u>Sample Date</u>	<u># Samples Exceeding AL</u>	<u>Unit of Measure</u>	<u>Violation / Typical Source</u>
<u>Inorganic Contaminants</u>							
Copper	0.019	1.3	0	8/12/2009	0	ppm	None / Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Lead	0.00053	0.015	0	8/12/2009	0	ppb	None / Corrosion of household plumbing systems; Erosion of natural deposits

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 City of Gordon 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>.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water</u>	<u>Range</u>		<u>Sample Date</u>	<u>Unit of Measure</u>	<u>Typical Source</u>
				<u>Low</u>	<u>High</u>			
<u>Synthetic Organic Contaminants including Pesticides</u>								
2, 4, 5-TP (Silvex)	50	50	<.200	<.200	<.200	2013	ppb	None / Residue of banned herbicide
2, 4-D	70	70	<.10	<.10	<.10	2013	ppb	None / Runoff from herbicide used on row crops
Alachlor	0	2	<0.1	<0.1	<0.1	2014	ppb	None / Runoff from herbicide used on row crops
Atrazine	3	3	<0.08	<0.08	<0.08	2014	ppb	None / Runoff from herbicide used on row crops
Benzo (a) pyrene	0	0.2	<0.02	<0.02	<0.02	2014	ppb	None / Leaching from linings of water storage tanks and distribution lines
Carbofuran	40	40	<.90	<.90	<.90	2013	ppb	None / Leaching of soil fumigant used on rice and alfalfa
Chlordane	0	2	<0.16	<0.16	<0.16	2014	ppb	None / Residue of banned termiticide
Dalapon	200	200	<1.00	<1.00	<1.00	2013	ppb	None / Runoff from herbicide used on rights of way

Di(2-ethylhexyl)adipate	400	400	<0.5	<0.5	<0.5	2014	ppb	None / Discharge from chemical factories.
Di(2-ethylhexyl)phthalate	0	6	<0.5	<0.5	<0.5	2014	ppb	None / Discharge from rubber and chemical factories.
Dibromochloropropane (DBCP)	0	0.2	<.01	<.01	<.01	2013	ppb	None / Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples and orchards
Dinoseb	7	7	<.20	<.20	<.20	2013	ppb	None / Runoff from herbicide used on soybeans and vegetables
Endrin	2	2	<0.01	<0.01	<0.01	2014	ppb	None / Residue of banned insecticide
Ethylene dibromide (EDB)	0	0.05	<.01	<.01	<.01	2013	ppb	None / Discharge from petroleum refineries
Heptachlor	0	0.4	<0.04	<0.04	<0.04	2014	ppb	None / Residue of banned termiticide
Heptachlor epoxide	0	0.2	<0.02	<0.02	<0.02	2014	ppb	None / Breakdown of heptachlor
Hexachlorobenzene	0	1	<0.08	<0.08	<0.08	2014	ppb	None / Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene	50	50	<0.08	<0.08	<0.08	2014	ppb	None / Discharge from chemical factories
Lindane (BHC-Gamma)	0.2	0.2	<0.02	<0.02	<0.02	2014	ppb	None / Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor	40	40	<0.08	<0.08	<0.08	2014	ppb	None / Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Oxamyl (Vydate)	200	200	<1.0	<1.0	<1.0	2013	ppb	None / Runoff/leaching from insecticide used on apples, potatoes, and tomatoes
Pentachlorophenol	0	1	<0.04	<0.04	<0.04	2014	ppb	None / Discharge from wood preserving factories
Picloram	500	500	<.10	<.10	<.10	2013	ppb	None / Herbicide runoff
Simazine	4	4	<0.05	<0.05	<0.05	2014	ppb	None / Herbicide runoff
Toxaphene	0	3	<.5	<.5	<.5	2014	ppb	None / Runoff/leaching from insecticide used on cotton and cattle

<u>Contaminants</u>	<u>MCLG</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water</u>	<u>Range</u>		<u>Sample Date</u>	<u>Unit of Measure</u>	<u>Violation / Typical Source</u>
	<u>or MRDLG</u>			<u>Low</u>	<u>High</u>			
<u><i>Volatile Organic Contaminants</i></u>								
1, 1, 1-Trichloroethane	200	200	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from metal degreasing sites and other factories
1, 1, 2-Trichloroethane	3	5	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from industrial chemical factories
1, 1-Dichloroethylene	7	7	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from industrial chemical factories
1, 2, 4-Trichlorobenzene	70	70	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from textile finishing factories
1, 2-Dichloroethane	0	5	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from industrial chemical factories

1, 2-Dichloropropane	0	5	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from industrial chemical factories
Benzene	0	5	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from factories, leaching from gas storage tanks and landfills
Carbon Tetrachloride	0	5	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from chemical plants and other industrial activities
Mono-Chlorobenzene	100	100	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from chemical and agricultural chemical factories
Dichloromethane (methylene chloride)	0	5	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from pharmaceutical and chemical factories
Ethylbenzene	700	700	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from petroleum refineries
Styrene	100	100	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from rubber and plastic factories, leaching from landfills
Tetrachloroethylene	0	5	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from factories and dry cleaners
Toluene	1000	1000	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from petroleum factories
Trichlorethylene	0	5	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from metal degreasing sites and other factories
Vinyl Chloride	0	2	<0.50	<0.50	<0.50	2014	ppb	None / Leaching from PVC pipes, discharge from plastics factories
Xylenes (total)	10,000	10,000	<0.63	<0.63	<0.63	2014	ppb	None / Discharge from petroleum factories and chemical factories
cis-1, 2-Dichloroethylene	70	70	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from industrial chemical factories
1-2 Dichlorobenzene	600	600	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from industrial chemical factories
1-4 Dichlorobenzene	75	75	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from industrial chemical factories
trans-1, 2-Dichloroethylene	100	100	<0.50	<0.50	<0.50	2014	ppb	None / Discharge from industrial chemical factories

Turbidity Level

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

<u>Year</u>	<u>Contaminant</u>	<u>Highest Single Measurement</u>	<u>Lowest Monthly % of Samples Meeting Limits</u>	<u>MCL</u>	<u>Unit of Measure</u>	<u>Source of Contaminant</u>
2014 (11-15)	Turbidity	0.15	100	0.3	NTU	Soil runoff

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 chemical used, disinfectant type, minimum, maximum and average levels. We use a combination of sodium hypochlorite and liquid ammonium sulfate.

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source
2014	Chloramines	2.58	.50	5.5	4.0	<4.0	ppm	Disinfectant used to control microbes

<u>Contaminants</u>	<u>Unit of Measure</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water (Avg)</u>	<u>Range</u>		<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
				<u>Low</u>	<u>High</u>			
<u>Disinfection By-Products</u> (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)								
Haloacetic Acids (HAA5)	ppb	60	37.08	24.9	57.4	2014	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes]	ppb	80	58.78	38.8	73.5	2014	No	By-product of drinking water chlorination

Total Organic Carbon (TOC) has 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 (HAAs) which are reported elsewhere in this report.

Total Organic Carbon (TOC)

<u>Year</u>	<u>Contaminant</u>	<u>Average level</u>	<u>Minimum level</u>	<u>Maximum level</u>	<u>Unit of Measure</u>	<u>Source of Contaminant</u>
2014	Source water	6.87	5.88	8.02	ppm	Naturally present in the environment
2014	Drinking water	6.41	5.3	7.6	ppm	Naturally present in the environment
2014	Removal ratio	.27	.12	.47	% removal*	NA

* Removal ratio is the % of TOC removed by the treatment process divided by the % of TOC required by the TCEQ to be removed. Our required removal ratio is usually 25%. Compliance is sometimes met by alternate methods. LPPAW has complied by results from monthly SUVA testing of source water.

Total Coliform: REPORTED MONTHLY TESTS FOUND NO COLIFORM BACTERIA.
Fecal Coliform: REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA.

Naturally found in the environment; Samples are taken and tested monthly by an accredited Lab. The maximum total coliform contaminant level is ONE POSITIVE monthly sample.

Lake Palo Pinto Area WSC
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