

## A word from your water supplier

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. We hope this report looks familiar to you. Every year we plan to mail a copy of this report to each customer.

The sources of drinking water, both tap & bottled, include rivers, lakes, ponds, reservoirs, streams, springs and wells. As water travels over the surface of the land, or through the ground, it dissolves naturally occurring minerals (in some cases radioactive material) and can pick up substances resulting from the presence of animals or human activity.

Our water source is derived and purchased from the Village of Pender, which draws groundwater from its wells. Chlorine is added to your water supply in precise amounts through an automatic feeder. Chlorine destroys bacteria and is a vital step in ensuring the health of our community.

All District employees responsible for operating and maintaining the system are trained and licensed by the State. The District welcomes your comments; the Board of Directors meets at 7 p.m. on the second Thursday of every month at 8091 S. 154th Street, Omaha, NE. For a copy of the agenda, call the NRD at (402) 444-6222 or visit the NRD's web site at:

[www.papionrd.org](http://www.papionrd.org)

Para Clientes Que Habla Español:

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

## About this Report

This report is meant to show substances that were detected in your water during the past calendar year. The U.S. Congress revised the Safe Drinking Water Act in 1996, requiring public water systems to send annual water quality reports to all customers served, or by advertising in a local paper. This report is paid by water customers through current water rates. If you have any questions about your water quality, contact Dick Sklenar, Project Manager, (402) 315-1706.

## What you should know: Contaminants found in your drinking water

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. Some people may be more vulnerable to contaminants in drinking water than the general population.

All drinking water, including bottled water, may reasonably be expected to contain naturally occurring minerals and 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.

Contaminants that may be present in the source water include:

- A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- B) 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.
- C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- D) 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.
- E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

## Source Water Assessment Availability

The Nebraska Dept. of Environmental Quality (NDEQ) has completed the Source Water Assessment. Included in the assessment is a Wellhead Protection Area map, potential contaminant source inventory, vulnerability rating, and source water protection information. To view the Source Water Assessment, or for more information, please contact NDEQ at 402-471-6988.

## Notice to immuno-compromised persons

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, those 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. The EPA and Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Test Results (Collected in 2010 unless noted) **THURSTON COUNTY RURAL WATER SYSTEM – 2010 WATER QUALITY REPORT**

Microbiological Contaminants*					
Type	Highest # of Positive Samples	MCL	MCLG	Likely Source of Contamination	Violations Present
Coliform	In the month of May, one sample was positive	MCL: Systems that collect less than 40 samples per month – No more than 1 positive monthly sample	0	Naturally present in the environment	NO

**Lead & Copper\* - (7/28/09)**

Lead MCLG	Lead Action Level (AL)	Lead 90 <sup>th</sup> Percentile	Sites Over Lead AL	Range	Copper MCLG	Copper Action Level (AL)	Copper 90 <sup>th</sup> Percentile	Sites Over Copper AL	Range	Likely source of Contamination
0 PPB	15 PPB	5.30 PPB	0	1.14 – 7.81	1.3 PPM	1.3 PPM	.672 PPM	0	.080 - .984	Erosion of natural deposits; corrosion of household plumbing systems

Copper is an essential nutrient, but some people who drink water containing copper in excess of the Action Level (AL) over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the Action Level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their doctor.

Infants & young children are typically more vulnerable to lead in drinking water. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Flushing your tap for 1/2 to 2 minutes before using the tap water will clear the line of any lead that may have leached into the water while the line was idle. Additional information is available from the Safe Drinking Water Hotline (800-426-4791) or the Dept. of Health & Human Services/Division of Public Health/Office of Drinking Water (402-471-2541)

**Regulated Contaminants**

Contaminant	Violation	Highest Level Detected	Range of levels detected	Unit of measurement	MCLG	MCL	Likely source of Contamination
Fluoride (1/24/06)	NO	.34	.34	PPM	4	4	Water additive which promotes strong teeth; discharge from fertilizer; erosion of natural deposits
Nitrate-Nitrite (11/8/10)	NO	8.55	7.46 – 8.55	PPM	10	10	Runoff from fertilizer; leaching from sewage; erosion of natural deposits
Barium (1/24/06)	NO	.105	.105 - .105	PPM	2	2	Discharge of drilling wastes, metal refineries. Erosion of natural deposits.
Chromium (1/24/06)	NO	1.56	1.56 – 1.56	PPB	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
Selenium (1/24/06)	NO	18.4	18.4 – 18.4	PPB	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits.

**Unregulated Contaminants**

Contaminant	Highest Value	Range of level detected	Unit	Secondary MCL
Sulfate (2/5/07)	62	62	MGL	250

**Disinfection By-Products\***

Contaminant	Violation	Highest Level Detected	Range	Unit of measurement	MCLG	MCL	Likely Source of Contamination
Total Haloacetic Acids (HAA5) (1/1/10 to 12/31/10)	NO	1.39	1.39	PPB	No goal for the total	60	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs) (1/1/10 to 12/31/10)	NO	6.22	6.22	PPB	No goal for the total	80	By-product of drinking water chlorination

\* = Collected by Thurston County Rural Water. All others by Village of Pender

**Note:** The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

The Thurston County Rural Water system has taken the following actions to return to compliance with the Nebraska Safe Drinking Water Act: Additional bacteriological water sampling has proven to be negative.

Coliforms are bacteria that are naturally present in the environment & are used as an indicator that other potentially harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

During the 2010 calendar year, we had the below noted violation(s) of drinking water regulations:

TYPE	CATEGORY	ANALYTE	COMPLIANCE PERIOD
No violations occurred during calendar year 2010			

**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. **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. **AL (Action Level):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. **PPM (Parts per million)** **PPB (Parts per billion)** **PPT (Parts per trillion)** **pCi/l (picoCuries per liter – a measurement of radioactivity).**

The Thurston County Rural Water system is required to test for the following contaminants: Coliform Bacteria, Antimony, Arsenic, Asbestos, Barium, Beryllium, Cadmium, Chromium, Copper, Cyanide, Fluoride, Lead, Mercury, Nickel, Nitrate, Nitrite, Selenium, Sodium, Thallium, Alachlor, Atrazine, Benzo(a)pyrene, Carbofuran, Chlordane, Dalapon, Di(2-ethylhexyl)adipate, Dibromochloropropane, Dinoseb, Di(2-ethylhexyl)phthalate, Diquat, 2,4-D, Endothal, Endrin, Ethylene Dibromide, Glyphosate, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, Oxamyl (Vydate), Pentachlorophenol, Picloram, Polychlorinated biphenyls, Simazine, Toxaphene, Dioxin, Silvex, Benzene, Carbon Tetrachloride, o-Dichlorobenzene, Para-Dichlorobenzene, 1,2-Dichloroethane, 1,1-Dichloroethylene, Cis-1,2-Dichloroethylene, Trans-1,2-Dichloroethylene, Dichloromethane, 1,2-Dichloromethane, Ethylbenzene, Monochlorobenzene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1-1,2-Trichloroethane, Trichloroethylene, Vinyl Chloride, Styrene, Tetrachloroethylene, Toluene, Xylenes (total) Gross Alpha (minus Uranium & Radium 226), Radkum 226 plus Radium 228, Sulfate, Chloroform, Bromodichloromethane, Chlorodibromomethane, Bromoform, Chloroform, Bromodichloromethane, Chlorodibromomethane, Bromoform, Chlorobenzene, m-Dichlorobenzene, 1,1-Dichloropropene, 1,1-Dichloroethane, 1,1,2,2-Tetrachloroethane, 1,2-Dichlorobenzene, 1,1-Dichloropropene, 1,1-Dichloroethane, 1,1,2,2-Tetrachloroethane, 1,2-Dichloropropane, Chloromethane, Bromomethane, 1,2,3-Trichloropropane, 1,1,1,2-Tetrachloroethane, Chloroethane, 2,2-Dichloropropane, o-Chlorotoluene, p-Chlorotoluene, Bromobenzene, 1,3-Dichloropropene, Aldrin, Butachlor, Carbarryl, Dicamba, Dieldrin, 3-Hydroxycarbofuran, Methonyl, Metolachlor, Metribuzin, Propachlor.