

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 and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Our water comes from the Metropolitan Utilities District (M.U.D.), which draws water from the Platte and Missouri Rivers. Chloramine is added to your water supply in precise amounts to destroy bacteria, and is a vital step in ensuring the health of our community. Your Washington County Rural Water system presently has about 38 miles of pipeline, providing service to over 460 rural residences and to the City of Ft. Calhoun.

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 7:00 p.m., on the second Thursday of every month at 8091 S. 154th Street, Omaha, NE. For a copy of the agenda, call the District at (402) 444-6222 or visit the District's web site at:

www.papionrd.org

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.

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

What you should know: Contaminants found in your drinking water

In order to ensure that tap water is safe to drink, the Environmental Protection Agency 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.

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 **EPA'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.

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 your service lines and home plumbing. We cannot control the variety of materials used in plumbing components. When water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for ½ to 2 minutes before using the 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>

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, or visit the web site at: www.epa.gov/safewater

How to read the report

The table on the back page shows substances detected in your water from January 1 to December 31, 2009.

Maximum Contaminant Level (MCL) Highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. **Maximum Contaminant Level Goal (MCLG)** 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. **N/A** means not applicable. **NTU** means nephelometric turbidity units. **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 measure of radiation)
< means less than. > means more than.

2009 WATER QUALITY REPORT - WASHINGTON COUNTY RURAL WATER #1

Microbiological Contaminants (collected by Wash. Co. RW #1)

MCLG	Total Coliform MCL	Highest # of Positive Coliform Samples in 1 month	Violation	Fecal Coliform or E. Coli MCL	Total # of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	0	NO	Fecal or E. Coli MCL: a routine sample and a repeat sample are total coliform positive, and 1 is also fecal coliform or E. Coli positive	0	NO	Naturally present in the environment

Cryptosporidium

Our water supplier, the Metropolitan Utilities District (M.U.D.), has tested for Cryptosporidium (Crypto) every month in 2009. No Crypto was found in any raw river or treated water samples. The testing was conducted by M.U.D. and the Underwriters Laboratory.

Crypto, a protozoan parasite and a one celled animal, is too small to be seen without a microscope. It is common in surface waters (rivers & lakes), especially when these waters contain sewage or animal waste. Crypto must be ingested to cause infection. Symptoms include diarrhea, nausea & abdominal cramps. Most healthy individuals can overcome the infection within a few weeks.

We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Crypto may be spread through means other than drinking water.

Regulated Inorganic Contaminants (collected by M.U. D.)

Contaminant	Collection Date	Violation	Highest Level Detected	Range of Levels Detected	Unit of Measurement	MCLG	MCL	Likely Source of Contamination
Arsenic	2009	NO	5.44	<2 - 5.44	PPB	0	10	Runoff from orchards; natural deposits; runoff from glass & electronic production wastes
Barium	2009	NO	.09	.05 - .09	PPM	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	2009	NO	7.11	1.81 - 7.11	PPB	100	100	Discharge from steel & pulp mills; erosion of natural deposits
Fluoride	2009	NO	1.04	.37 - 1.04	PPM	4	4	Erosion of natural deposits; water additive to promote strong teeth; fertilizer discharge
Selenium	2009	NO	7.88	<5.0 - 7.88	PPB	50	50	Discharge from petroleum & metal refineries; erosion of natural deposits
Nitrate & Nitrite Total	2009	NO	1.8	.27 - 1.8	PPM	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium	2009	NO	73	22 - 73	PPM	N/A	500	Element of the alkali metal group found in nature, soil and rocks
Turbidity	2009	NO	.36	N/A	NTU	N/A	1	Soil runoff

Radioactive Contaminants (collected by M.U.D.)

Gross Alpha, excludes Radon & Uranium	2009	NO	7.3	3.3 - 7.3	pCi/l	0	15	Erosion of natural deposits
Radium (Ra 226 + Ra 228)	2009	NO	0.9	0 - 0.9	pCi/l	0	5	Erosion of natural deposits

Synthetic Organic Contaminants (including pesticides & herbicides - collected by M.U.D.)

Atrazine	2009	NO	.84	<.08 - .84	PPB	3	3	Runoff from herbicide use on row crops
Simazine	2009	NO	.125	<.10 - .125	PPB	4	4	Herbicide runoff
Dibromochloropropene	2007	NO	10	<10 - 10	PPT	200	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapple and orchards

Disinfectants & Disinfection By-Products (collected by Wash. County RW #1)

Total Haloacetic Acids (HAA5)	1/09, 5/09, 8/09, 12/09	NO	31	12.4 - 47.5	PPB	No Goal for the Total	60	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs)	1/09, 5/09, 8/09, 12/09	NO	46	32.74 - 77.53	PPB	No Goal for the Total	80	By-product of drinking water chlorination

Not all sample results may be 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.

Lead & Copper (collected by Wash. Co. RW #1 in 2009)

Lead MCLG	Lead Action Level (AL)	Lead 90 th Percentile	Sites Over Lead AL	Violation	Copper MCLG	Copper Action Level (AL)	Copper 90 th Percentile	Sites Over Copper AL	Violation	Likely Source of Contamination
0 PPB	15 PPB	2.1 PPB	0	NO	1.3 PPM	1.3 PPM	.0165 PPM	0	NO	Erosion of natural deposits; corrosion of household plumbing

2009 WATER QUALITY REPORT – WASHINGTON COUNTY RURAL WATER #1

Mineral Analysis (collected by M.U.D. - 2009)

	Unit	Average Level Detected	Range of Levels
pH	(in pH units)	8.80	8.34 – 9.09
Alkalinity	ppm	113	68 - 152
Aluminum	ppm	.06	<.02 - .31
Calcium	ppm	46	39 - 52
Chloride	ppm	26	17 - 52
Color (in cobalt platinum units)	ppm	2	1 - 4
Dissolved Solids (total, calculated)	ppm	417	349 - 519
Hardness (total) as CaCO ₃	grains per gallon	10	8 - 13
Iron	ppm	.03	<.02 - .09
Manganese	ppm	<0.02	<0.02 - .022
Phosphate	ppm	.16	<.05 - .38
Silica	ppm	28.2	6.5 - 81.2
Spec. Conductance @ 25 Deg.C	umhos	532	423 - 740
Temperature degrees	Celsius	14.4	2.5 – 25.9
Zinc	ppm	<0.02	<.002

Unregulated Water Quality Data (collected by M.U.D.- 2009)

Tested & Detected	Unit	Average Level Detected	Range of Levels
Nickel	ppb	2.10	1.67 – 2.41
Sulfate	ppm	116	64 - 210
Total Organic Carbon	ppm	3.02	2.33 – 14.4

The percentage of total organic carbon (TOC) was measured each month and the system met all TOC removal requirements set.

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.

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.