



**Washington County Rural Water #2
Annual Water Quality Report
For January 1 to December 31, 2013**

This report is intended to provide you with important information about your drinking water and the efforts made by the Washington County Rural Water #2 System to provide safe drinking water.

Para Clientes Que Hablan Español: Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

For more information regarding this report, contact:

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If you would like to observe, or participate, in the processes that affect drinking water quality, please contact us. The District 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

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 (800-426-4791).

Source Water Assessment Availability:

The Nebraska Department of Environmental Quality (NDEQ) has completed the Source Water Assessment. Included in the assessment are 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 the person named above on this report or the NDEQ at (402) 471-6988 or go to www.deq.state.ne.us

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.

Sources of Drinking Water:

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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.

The source of water used by Washington Co Rural Water 2 is purchased surface water. Our drinking water is supplied from another water system through a Consecutive Connection (CC). To find out more about our drinking water sources and additional chemical sampling results, please contact our office at the number provided above.

Buyer Name	Seller Name
Washington Co Rural Water 2	City Of Blair

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.

Drinking Water Health Notes:

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

Infants, young children, and pregnant women are typically more vulnerable to lead in drinking water than the general population. 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 30 seconds to 2 minutes before using your 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 DHHS/Division of Public Health/Office of Drinking Water (402-471-2541).

The Washington Co Rural Water 2 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, Endothall, 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-Dichloropropane, 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), Radium 226 plus Radium 228, Sulfate, Chloroform, Bromodichloromethane, Chlorodibromomethane, Bromoform, Chlorobenzene, m-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, Carbaryl, Dicamba, Dieldrin, 3-Hydroxycarbofuran, Methomyl, Metolachlor, Metribuzin, Propachlor.

How to Read the Water Quality Data Table:

The EPA and State Drinking Water Program establish the safe drinking water regulations that limit the amount of contaminants allowed in drinking water. The table shows the concentrations of detected substances in comparison to the regulatory limits. Substances not detected are not included in the table. 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 older than one year.

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.

MRDL (Maximum Residual Disinfectant Level) – The highest level of a disinfectant allowed in drinking water.

MRDLG (Maximum Residual Disinfectant Level Goal) – The level of disinfectant in drinking water below which there is no known or expected risk to health.

N/A – Not applicable.

Units in the Table:

ND – Not detectable.

ppm (parts per million) = mg/L (milligrams per liter) – One ppm or one mg/L corresponds to 1 gallon of water in 1,000,000 gallons of water.

ppb (parts per billion) – One ppb corresponds to 1 gallon of water in 1,000,000,000 gallons of water.

pCi/L (Picocuries per liter) – Radioactivity concentration unit.

ug/L (micrograms per liter) – Measurement of radioactivity.

NTU (Nephelometric Turbidity Units) – A measure of water clarity.

QRAA (Quarterly Running Annual Average) – An ongoing annual average calculation of data from the most recent four quarters.

90th Percentile – Represents the highest value found out of 90% of the samples taken in a representative group. If the 90th percentile is greater than the action level, it will trigger a treatment or other requirements that a water system must follow.

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

Microbiological	Highest No. of Positive Samples	MCL	MCLG	Likely Source Of Contamination	Violations Present
No Detected Results were Found in the Calendar Year of 2013					

Lead and Copper	Monitoring Period	90 th Percentile	Range	Unit	AL	Sites Over AL	Likely Source Of Contamination
COPPER, FREE	2011 - 2013	0.625	0.0295 - 0.715	ppm	1.3	0	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing.
LEAD	2011 - 2013	8.61	1.39 - 19.4	ppb	15	1	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing.

Disinfection Byproducts	Monitoring Period	Highest RAA	Range	Unit	MCL	MCLG	Likely Source Of Contamination
TOTAL HALOACETIC ACIDS (HAA5)	1/1/2013 - 12/31/2013	22.8	19.5 - 28.8	ppb	60	0	By-product of drinking water disinfection.
TTHM	7/1/2012 - 6/30/2013	92.775	84.1 - 101	ppb	80	0	By-product of drinking water disinfection.

During the 2013 calendar year, we had the below noted violation(s) of drinking water regulations.

Type	Category	Analyte	Compliance Period
MCL, AVERAGE	Maximum Contaminant Level Violation	TTHM	01/01/2013 - 03/31/2013
MCL, AVERAGE	Maximum Contaminant Level Violation	TTHM	04/01/2013 - 06/30/2013
MCL, AVERAGE	Maximum Contaminant Level Violation	TTHM	07/01/2013 - 09/30/2013

The Washington Co Rural Water 2 has taken the following actions to return to compliance with the Nebraska Safe Drinking Water Act:

Higher than normal water temperatures and organic matter in the Missouri River this past year may have been a contributing factor to the trihalomethane concentration. All other water quality standards have been met. In June of 2013, the City of Blair (our water supplier) made a change in their water treatment process that has had a positive impact on reducing TTHM levels. During the period of 10/1/2013 thru 12/31/2013, TTHM test results were lower, which resulted in an MCL average that is within compliance.

Some or all of our drinking water is supplied from another water system. The table below lists all of the drinking water contaminants, which were detected during the 2013 calendar year from the water systems that we purchase drinking water from.

Regulated Contaminants	Collection Date	Water System	Highest Value	Range	Unit	MCL	MCLG	Likely Source Of Contamination
ATRAZINE	07/08/2013	City Of Blair	0.648	0.083 - 0.648	ppb	3	3	Runoff from herbicide used on row crops
BARIUM	07/15/2013	City Of Blair	0.0196	0.0196	ppm	2	2	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
CHROMIUM	07/15/2013	City Of Blair	1.58	1.58	ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
FLUORIDE	07/15/2013	City Of Blair	0.953	0.953	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; Fertilizer discharge.
HEPTACHLOR EPOXIDE	04/01/2013	City Of Blair	400	400	ppt	200	0	Breakdown of heptachlor
NITRATE-NITRITE	02/12/2013	City Of Blair	0.489	0.489	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Unregulated Water Quality Data	Collection Date	Water System	Highest Value	Range	Unit	Secondary MCL
ALKALINITY, CARBONATE	12/09/2013	City Of Blair	200	168 - 200	mg/L	
ALKALINITY, TOTAL	01/11/2010	City Of Blair	204	188 - 204	mg/L	
BUTACHLOR	04/01/2013	City Of Blair	0.163	0.163	ug/L	
CARBON, TOTAL	07/08/2013	City Of Blair	4.9	2.7 - 4.9	ppm	
METOLACHLOR	07/08/2013	City Of Blair	0.125	0.125	ppb	
NICKEL	07/08/2013	City Of Blair	0.00161	0.00161	mg/L	0.1
SULFATE	07/08/2013	City Of Blair	232	232	mg/L	250

During the 2013 calendar year, the water systems that we purchase water from had NO noted violation(s) of drinking water regulations.

Additional Required Health Effects Language:

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.

Infants and children are typically more vulnerable to lead in drinking water than the general population. 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 and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4761).