BURLINGTON CITY OF 2015 Drinking Water Quality Report For Calendar Year 2014

Public Water System ID: CO0132005

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact BOB HINES at 719-342-1176 with any questions about the Drinking Consumer Confidence Rule (CCR) or for public participation opportunities that may affect the water quality.

General Information

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 (1-800-426-4791) or by visiting http://water.epa.gov/drink/contaminants.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

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 animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants: viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants: salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides: may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
- Radioactive contaminants: can be naturally occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. 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. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit http://wqcdcompliance.com/ccr. The report is located under "Source Water Assessment Reports", and then "Assessment Report by County". Select KIT CARSON County and find 132005; BURLINGTON CITY OF or by contacting BOB HINES at 719-342-1176. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that *could* occur. It *does not* mean that the contamination *has or will* occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Consumer Confidence Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

Our Water Sources

<u>Source</u>	Source Type	<u>Water Type</u>	Potential Source(s) of Contamination
WELL NO 1	Well	Groundwater	Above ground, underground and leaking storage tank sites, another is agriculture products applied to the land
WELL NO 11 RUDI WELL	Well	Groundwater	
WELL NO 2	Well	Groundwater	
WELL NO 5	Well	Groundwater	
WELL NO 6	Well	Groundwater	
WELL NO 7	Well	Groundwater	
WELL NO 8	Well	Groundwater	
WELL NO 9	Well	Groundwater	
WELL NO 10 CEMETERY	Well	Groundwater	

WELL NO 4	Well	Groundwater

Terms and Abbreviations

- Maximum Contaminant Level (MCL) The highest level of a contaminant allowed in drinking water.
- Treatment Technique (TT) A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL) The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- Maximum Residual Disinfectant Level (MRDL) 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.
- Maximum Contaminant Level Goal (MCLG) 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 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 contaminants.
- Violation (No Abbreviation) Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- Variance and Exemptions (V/E) Department permission not to meet a MCL or treatment technique under certain conditions.
- Gross Alpha (No Abbreviation) Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** Measure of the radioactivity in water.
- Nephelometric Turbidity Unit (NTU) Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average** (**x-bar**) Typical value.
- Range (R) Lowest value to the highest value.
- Sample Size (n) Number or count of values (i.e. number of water samples collected).
- Parts per million = Milligrams per liter (ppm = mg/L) One part per million corresponds to one minute in two years or a single penny in \$10,000.
- Parts per billion = Micrograms per liter (ppb = ug/L) One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Not Applicable (N/A) Does not apply or not available.

Detected Contaminants

BURLINGTON CITY OF routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2014 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

	Lead and Copper Sampled in the Distribution System											
Contaminant Name	Time Period	90 th Percentile	Sample Size	Unit of Measure	90 th Percentile AL	Sample Sites Above AL	90 th Percentile AL Exceedance	Typical Sources				
Copper	08/14/2013 to 08/28/2013	0.21	20	ppm	1.3		No	Corrosion of household plumbing systems; Erosion of natural deposits				
Lead	08/14/2013 to 08/28/2013	1.8	20	ppb	15		No	Corrosion of household plumbing systems; Erosion of natural deposits				

	Disinfection Byproducts Sampled in the Distribution System											
Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	Highest Compliance Value	MCL Violation	Typical Sources		
Total Haloacetic Acids (HAA5)	2014	0.85	0 to 1.7	2	ppb	60	N/A		No	Byproduct of drinking water disinfection		
Total Trihalomethanes (TTHM)	2014	3.25	2.2 to 4.3	2	ppb	80	N/A		No	Byproduct of drinking water disinfection		

Radionuclides Sampled at the Entry Point to the Distribution System										
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources	

	Radionuclides Sampled at the Entry Point to the Distribution System											
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources			
Gross Alpha	2012	5.07	1.96 to 9.62	9	pCi/L	15	0	No	Erosion of natural deposits			
Combined Radium	2012	0.88	0.4 to 1.4	9	pCi/L	5	0	No	Erosion of natural deposits			
Combined Uranium	2012	12	10 to 14	9	ppb	30	0	No	Erosion of natural deposits			

		In	organic Contamir	ants Sample	d at the Entr	y Point to	the Distrib	ıtion System	
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Antimony	2013	0.17	0 to 1.5	9	ppb	6	6	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic	2013	4.84	3.7 to 5.9	9	ppb	10	0	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	2013	0.17	0.13 to 0.21	9	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2013	1.19	1.1 to 1.4	9	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Mercury	2013	0.01	0 to 0.1	9	ppb	2	2	No	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nitrate	2014	10.21	1 to 23.2	244	ppm	10	10	Yes	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	2013	5.17	0.86 to 8.1	9	ppb	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

Inorganic Contaminants Sampled at the Entry Point to the Distribution System										
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources	

Arsenic: while your drinking water <u>meets the EPA's standard for arsenic, it does contain low levels of arsenic</u>. The EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The 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.

Nitrate: <u>Nitrate in drinking water at levels above 10 ppm</u> 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.

Synthetic Organic Contaminants Sampled at the Entry Point to the Distribution System										
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources	
Picloram	2012	0.09	0 to 0.3	6	ppb	500	500	No	Herbicide runoff	

Violations, Significant Deficiencies, and Formal Enforcement Actions

		Violations			
Name	Category	Time Period	Health Effects	Compliance Value	TT Level or MCL
NITRATE	MCL, AVERAGE - MAXIMUM CONTAMINANT LEVEL	10/01/2014 - 12/31/2014	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.	18 MG/L	10 MG/L
NITRATE	MCL, AVERAGE - MAXIMUM CONTAMINANT LEVEL	04/01/2014 - 06/30/2014	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if	17.9 MG/L	10 MG/L

			untreated, may die. Symptoms include shortness of breath and blue baby syndrome.		
NITRATE	MCL, SINGLE SAMPLE - MAXIMUM CONTAMINANT LEVEL	04/01/2014 - 06/30/2014	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.	16.4 MG/L	10 MG/L
NITRATE	MCL, AVERAGE - MAXIMUM CONTAMINANT LEVEL	10/01/2014 - 12/31/2014	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.	15 MG/L	10 MG/L
NITRATE	MCL, AVERAGE - MAXIMUM CONTAMINANT LEVEL	07/01/2014 - 09/30/2014	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.	15 MG/L	10 MG/L
NITRATE	MCL, AVERAGE - MAXIMUM CONTAMINANT LEVEL	07/01/2014 - 09/30/2014	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.	14.9 MG/L	10 MG/L
NITRATE	MCL, AVERAGE - MAXIMUM CONTAMINANT LEVEL	01/01/2014 - 03/31/2014	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.	13.95 MG/L	10 MG/L
NITRATE	MCL, AVERAGE - MAXIMUM CONTAMINANT LEVEL	10/01/2014 - 12/31/2014	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if	13.1 MG/L	10 MG/L

			untreated, may die. Symptoms include shortness of breath and blue baby syndrome.		
NITRATE	MCL, AVERAGE - MAXIMUM CONTAMINANT LEVEL	01/01/2014 - 03/31/2014	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.	12.8 MG/L	10 MG/L
NITRATE	MCL, AVERAGE - MAXIMUM CONTAMINANT LEVEL	04/01/2014 - 06/30/2014	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.	12.7 MG/L	10 MG/L
NITRATE	MCL, AVERAGE - MAXIMUM CONTAMINANT LEVEL	04/01/2014 - 06/30/2014	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.	12.1 MG/L	10 MG/L
NITRATE	MCL, AVERAGE - MAXIMUM CONTAMINANT LEVEL	07/01/2014 - 09/30/2014	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.	11.9 MG/L	10 MG/L
NITRATE	MCL, AVERAGE - MAXIMUM CONTAMINANT LEVEL	10/01/2014 - 12/31/2014	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.	11.8 MG/L	10 MG/L
NITRATE	MCL, AVERAGE - MAXIMUM CONTAMINANT LEVEL	07/01/2014 - 09/30/2014	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if	11.7 MG/L	10 MG/L

			untreated, may die. Symptoms include shortness of breath and blue baby syndrome.		
NITRATE	MCL, AVERAGE - MAXIMUM CONTAMINANT LEVEL	04/01/2014 - 06/30/2014	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.	11.7 MG/L	10 MG/L
NITRATE	MCL, AVERAGE - MAXIMUM CONTAMINANT LEVEL	07/01/2014 - 09/30/2014	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.	11.3 MG/L	10 MG/L
NITRATE	MCL, AVERAGE - MAXIMUM CONTAMINANT LEVEL	04/01/2014 - 06/30/2014	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.	10.6 MG/L	10 MG/L
NITRATE	MONITORING, ROUTINE MAJOR - MONITORING & REPORTING	07/01/2014 - 09/30/2014	N/A	N/A	N/A
NITRATE	MONITORING, CONFIRMATION/CHECK MAJOR - MONITORING & REPORTING	04/01/2014 - 06/30/2014	N/A	N/A	N/A
GROSS ALPHA	MONITORING, ROUTINE MAJOR - MONITORING & REPORTING	01/01/2014 - 12/31/2014	N/A	N/A	N/A
COMBINED URANIUM	MONITORING, ROUTINE MAJOR - MONITORING & REPORTING	01/01/2014 - 12/31/2014	N/A	N/A	N/A

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COMBINED RADIUM	MONITORING, ROUTINE MAJOR - MONITORING & REPORTING	01/01/2014 - 12/31/2014	N/A	N/A	N/A
		Additional Violation Inform	ation		,
inadequately treated. Inadequately tre cramps, diarrhea, and associated head nitrates. We have purchased 2 new v	eated water may contain disease-causidaches. Explanation of the violation wells to pump water to town. We are	ng organisms. These organisms in s) and the steps taken to resolve the working on the funding for that.	or have had a failure of such equipment or punclude bacteria, viruses, and parasites, which nem: Nitrate violation: We have done publicated we are also working with an engineering fir f 2015 and we are back in compliance.	can cause sympton can cause sympton	ms such as nausea, we have high

Significant Deficiencies			
Date Identified	Deficiency Description	Steps Taking to Correct and Progress To Date	Estimated Completion Date
06/05/2014	T160 - CHEMICAL SAFETY; Gas chlorine facility safety features and other chemical safety issues. DCPWS 6.1.19 - 6.1.45, 7.22;		
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06/05/2014	T160 - CHEMICAL SAFETY; Gas chlorine facility safety features and other chemical safety issues. DCPWS 6.1.19 - 6.1.45, 7.22;		

06/05/2014	T160 - CHEMICAL SAFETY; Gas chlorine facility safety features and other		
	chemical safety issues. DCPWS 6.1.19 - 6.1.45, 7.22;		
06/05/2014	T160 - CHEMICAL SAFETY; Gas chlorine facility safety features and other		
	chemical safety issues. DCPWS 6.1.19 - 6.1.45, 7.22;		
06/05/2014	T160 - CHEMICAL SAFETY; Gas chlorine facility safety features and other		
	chemical safety issues. DCPWS 6.1.19 - 6.1.45, 7.22;		
06/05/2014	T160 - CHEMICAL SAFETY; Gas chlorine facility safety features and other		
	chemical safety issues. DCPWS 6.1.19 - 6.1.45, 7.22;		
06/05/2014	T160 - CHEMICAL SAFETY; Gas chlorine facility safety features and other		
	chemical safety issues. DCPWS 6.1.19 - 6.1.45, 7.22;		
06/05/2014	T160 - CHEMICAL SAFETY; Gas chlorine facility safety features and other		
	chemical safety issues. DCPWS 6.1.19 - 6.1.45, 7.22;		
06/05/2014	T160 - CHEMICAL SAFETY; Gas chlorine facility safety features and other		
	chemical safety issues. DCPWS 6.1.19 - 6.1.45, 7.22;		
	Additional Deficiency Informat	tion	
Explanation of the def	iciencies and the steps taken to correct them: After our sanitary survey by the State Heal	Ith Department in June 2014, they said that we are not m	
	instructed to put in an alarm system that would let us know if we had a chlorine gas leak		

Formal Enforcement Actions

Status Date	Description	Associated Contaminants		
12/31/2014	SFL - State Administrative Order/Compliance Order issued without penalty. An order issued by the Executive branch of the State government that orders the PWS to come into compliance or to undertake remedial actions. No penalty is assessed. (FRDS-DED 1/93)	NITRATE		
	Additional Enforcement Information			
Explanation of the enforcement and the steps taken to resolve: We are working with an engineering firm and the State Health Department to come into compliance with our nitrate problems. It will take a little time to accomplish this task.				