2017
Annual Drinking Water Quality Report
Rural Water District No. 5 Wagoner County

We're very pleased to provide you with this year's Annual Quality Water Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. Our water source is surface water drawn from the Verdigris River. In emergency situations we purchase water from Wagoner County RWD #4. This report shows our water quality and what it means.

If you have any questions about this report or concerning your water utility, please contact Denette Hughes at 918-486-5458. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our monthly Board Meetings. They are held on the first Tuesday night of each month at 7:00 p.m. in our office building located at 15078 South 305TH East Avenue in Coweta.

Rural Water District No. 5 routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2017. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose 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).

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 including: 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 storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming. Pesticides and Herbicides-comes from a variety of sources such as agriculture, urban storm water runoff, and residential uses. Organic Chemical Contaminants-includes 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-can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink EPA prescribes regulations that limit the amount of certain contaminants in the water provided by public water systems. The Food and Drug Administration (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. 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).

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. We 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.

The table below lists all the drinking water contaminants we detected during the calendar year of this report. Some of our data may be more than one year old because the EPA or the State allows us to monitor for some contaminants less often than once per year because the concentrations of these contaminants do not change frequently. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the date presented in the table is from the testing done in the calendar year of the report. In the table below, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the definitions below the table.

We have a source water protection plan available in our office that provides more information such as potential sources of contamination.

Rural Water District No. 5 Wagoner County

Annual Water Quality Data Table 2017

Inorganic Contaminants

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	UNITS	Violation Y/N	Likely Source of Contamination
Barium	3/25/2013	0.0457	0.0457 - 0.0457	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	3/25/2013	0.2	0.2 – 0.2	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.

Disinfectants and Disinfection By-Products

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	UNITS	Violation Y/N	Likely Source of Contamination
Chlorine	2017	2	1 - 2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Chlorite	2017	0.756	0.194-0.756	0.8	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)	2017	30	14.3-47.9	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2017	44	17-64.6	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Not all sample results may have been 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 and Copper

Contaminant	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	UNITS	Violation Y/N	Likely Source of Contamination
Copper	2017	1.3	1.3	0.309	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Total Organic Carbon – The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

For more information contact
Denette Hughes
P.O. Box 835 Coweta, OK 74429
Phone: 918-486-5458 Fax: 918-486-1440
Email: info@ruralwater5.com
Website: www.ruralwater5.com

Wagoner County RWD #4
Annual Water Quality Data Table 2017

Disinfectants and Disinfectant By-Products							
Contaminant	**MCLG or MRDLG**	**MCL, TT or MRDL**	**Your Water**	**Range Low/High**	**Sample Date**	**Violation**	**Typical Source**
Haloacetic Acids (HAA5) (ppb)	NA	60	24	9.39/51	2017	N	By-product of drinking water chlorination
Chlorine (as C12) (ppm)	4	4	4	1/4	2017	N	Water additive used to control microbes
TTHMs (Total Trihalomethanes) (ppb)	NA	80	61	23.9/106	2017	N	By-product of drinking water disinfection

Inorganic Contaminants							
Contaminant	**MCLG or MRDLG**	**MCL, TT or MRDL**	**Your Water**	**Range Low/High**	**Sample Date**	**Violation**	**Typical Source**
Barium (ppm)	2	2	.0481	.0481/.0481	2013	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	.25	.25/.25	2013	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen) (ppm)	10	10	1	.53/.53	2017	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Inorganic Contaminants							
Contaminant	**MCLG**	**AL**	**Your Water**	**Sample Date**	**# Samples Exceeding AL**	**Exceeds AL**	**Typical Source**
Copper-action level at consumer taps (ppm)	1.3	1.3	1.18	2015	1	N	Corrosion of household plumbing systems; Erosion of natural deposits
Lead-action level at consumer taps (ppb)	0	15	0	2015	1	N	Corrosion of household plumbing systems; Erosion of natural deposits

Abbreviations and Definitions

Avg (Average)
Regulatory compliance with some MCLs are based on running annual average of monthly samples.

AL (Action Level)
The concentration of a contaminant that, if exceeded triggers treatment or other requirements that a system must follow.

MCL (Maximum Contaminant Level)
The highest level of a contaminant 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.

MRDL (Maximum Residual Disinfectant Level)
The highest level of a disinfectant allowed in the drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant 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.

NA (Not applicable)

ND (Not detected)

NR (Monitoring not required, but recommended)

NTU (Nephelometric Turbidity Units)
Measurement of the clarity, or turbidity, or water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppm (Parts per million) or milligrams per liter (mgpl)
One-part substance per million parts water.

ppb (Parts per billion) or micrograms per liter (UG/L)
One-part substance per billion parts water.

pCi/L (pico curies per liter)
A measure of radioactivity.

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

mrem/yr (Millirems per year)
A measure of radiation absorbed by the body

SU (Standard Units)
LRAA (Locational Running Annual Average)
Average

LT2ESWTR
Long Term 2 Enhanced Surface Water Treatment Rule

Stage 2 DBPR
Stage 2 Disinfection By-Product Rule

UCMR2
Unregulated Contaminants Monitoring Rule 2

MNR (Monitored not regulated)

MPL (State assigned Maximum Permissible Level)

Variances and Exemptions
State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Level 1 Assessment
A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment
A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.