

**PWSD #5 OF GREENE COUNTY  
2018 ANNUAL WATER QUALITY REPORT  
(Consumer Confidence Report)**

**MO5024230**

This report is intended to provide you with important information about your drinking water and the efforts made to provide safe drinking water.

**What is the source of my water?**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, 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.

**Our water comes from Ground Water –Three Deep Water Wells.**

**Source Water Assessment:** The Department of Natural Resources conducted a source water assessment to determine the susceptibility of our water source to potential contaminants. This process involved the establishment of source water area delineations for each well of surface water intake and then a contaminant inventory was performed within those delineated areas to assess potential threats to each source. Assessment maps and summary information sheets are available on the internet at <http://drinkingwater.missouri.edu/swip/swipmaps/pwssid.htm>. To access the maps for your water system you will need the State-assigned identification code, which is printed at the top of this report. The Source Water Inventory Project maps and information sheets provide a foundation upon which a more comprehensive source water protection plan can be developed.

**Why are there contaminants in my water?**

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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Contaminants that may be present in 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 stormwater 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 stormwater 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 stormwater runoff, and septic systems.
- E. Radioactive contaminants, which 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, the Department of Health regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

In order to ensure that tap water is safe to drink, the Department of Natural Resources prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Department of Health regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

**Is our water system meeting other rules that govern our operation?**

The Missouri Department of Natural Resources regulates our water system and requires us to test our water on a regular basis to ensure its safety. Our system has been assigned the identification number MO5024230 for the purpose of tracking our test results. Last year, we tested for a variety of contaminants. The detectable results of these tests are on the following pages of this report. Any violations of state requirements or standards will be further explained later in this report.

**How might I become actively involved?**

If you would like attend a Water Board meeting, or if you have any further questions about your drinking water report, please call us at 417-759-7066 to inquire about scheduled meetings or contact persons. Water Board meetings are the second Monday of each month (unless otherwise posted) at the Water Supply office 113 S. Orchard in Fair Grove at 7:00 pm.

**Do I need to take any special precautions?**

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).

**Terms and Abbreviations**

**Population: 1575.** This is the equivalent residential population served including non-bill paying customers. **MCLG:** Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCGLs allow for a margin of safety. **MCL:** Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCGLs as feasible using the best available treatment technology. **SMCL:** Secondary Maximum Contaminant Level, or the secondary standards that are non-enforceable guidelines for contaminants and may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water. EPA recommends these standards but does not require water systems to comply. **AL:** Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. **TT:** Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water. **90<sup>th</sup> Percentile:** For lead and copper testing. 10% of the test results are above this level and 90% are below this level. **Range of Results:** Shows the lowest and highest levels found during a testing period, if only one sample was taken, then this number equals the highest value. **Range of Results:** Shows the lowest and highest levels found during a testing period. If only one sample was taken, then this number equals the Highest Value. **RAA:** Running Annual Average, or the average of sample analytical results for samples taken

during the previous four calendar quarters. **LRAA:** Locational Running Annual Average, or the locational average of sample analytical results for samples taken during the previous four calendar quarters. **TTHM:** Total Trihalomethanes (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) as a group. **HAA5:** Haloacetic Acids (mono-, di- and tri-chloroacetic acid, and mono- and di-bromoacetic acid) as a group. **ppb:** parts per billion or micrograms per liter. **ppm:** parts per million or milligrams per liter. **n/a:** not applicable. **NTU:** Nephelometric Turbidity Unit, used to measure cloudiness in drinking water. **nd:** not detectable at testing limits.

### **CONTAMINANTS REPORT**

GREENE CO PWS 5 will provide a printed hard copy of the CCR upon request. To request a copy of this report to be mailed, please call **417-759-7066**. The CCR can also be found on the internet at [www.dnr.mo.gov/ccr/MO5024230.pdf](http://www.dnr.mo.gov/ccr/MO5024230.pdf).

*The state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Records with a sample year more than one year old are still considered representative.*

### **REGULATED CONTAMINANTS**

<b>Regulated Contaminants</b>	<b>Collection Date</b>	<b>Highest Value</b>	<b>Range of results</b>	<b>Unit</b>	<b>MCL</b>	<b>MCGL</b>	<b>Typical Source</b>
Barium	5/18/2016	0.126	0.113-0.126	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	8/7/2013	4.16	2.92 – 4.16	ppb	100	100	Discharge from steel & pulp mills.
Nitrate-Nitrate	5/18/2018	0.56	0-0.56	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks; sewage; erosion of natural deposits.
Xylenes	5/18/2016	0.00344	0-0.00344	ppm	10	10	Discharge from Petroleum factories; Discharge from chemical factories

<b>Disinfection Byproducts</b>	<b>Sample Point</b>	<b>Monitoring Period</b>	<b>Highest LRAA</b>	<b>Range of Sampled Results (low-high)</b>	<b>Unit</b>	<b>MCL</b>	<b>MCLG</b>	<b>Typical Source</b>
(HAA5)	DBPDUAL-01	2018	0	0-0	ppb	60	0	Byproduct of drinking Water disinfection.
TTHM	DBPDUAL-01	2018	0	0-0	ppb	80	0	Same as above.

Lead & Copper	Date	90 <sup>th</sup> Percentile	Range of results	Unit	AL	Sites over AL	Typical source
Copper	2016-2018	0.0368	0.00469-0.059	ppm	1.3	0	Corrosion of plumbing household systems
Lead	2016-2018	4.59	1.04-10.2	ppb	15	0	Corrosion of household plumbing systems

Radionuclides	Collection Date	Highest Value	Range of Sampled Result(s)	Unit	MCL	MCGL	Typical Source
COMBINED RADIUM (-226 & -228)	1-13-2015	1.2	1.2	pCi/l	5		Erosion of natural deposits
RADIUM -228	1-13-2015	1.2	1.2	pCi/l	5	0	

Microbiological	Result	MCL	MCGL	Typical Source
NO VIOLATIONS OCCURRED IN THE CALENDAR YEAR OF 2018				

#### Violations and Health Effects Information

#### NO VIOLATIONS OCCURRED IN THE CALENDAR YEAR OF 2018.

**Special Lead and Copper Notice:** 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 used with service lines and home plumbing. PWS#5 of Greene Co. is responsible for providing high quality drinking water, but 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 (800-426-4791) or at <http://water.epa.gov/drink/info/lead/index.cfm>.

You can also find sample results for all contaminants from both past and present compliance monitoring online at the Missouri DNR Drinking Water Watch website <http://dnr.mo.gov/DWW/indexSearchDNR.jsp>. To find Lead and Copper results for your system, type your water system name in the box titled Water System Name and select Find Water Systems at the bottom of the page the new screen will show you the water system name and number, select and click the Water System Number. At the top of the next page, under the Help column find. Other Chemical Results by Analyte, select and click on it. Scroll down alphabetically to Lead and click the blue Analyte Code (1030). The Lead and Copper locations will be displayed under the heading Sample Comments. Scroll to find your location and click on the Sample No. for the results. If your house was selected by the water system and you assisted in taking a Lead and Copper sample from your home but cannot find your location in the list, please contact GREENE COUNTY PWS#5 for your results.

**Water Hardness:** We are often asked about the hardness of the water in Fair Grove. As is the case in most of southwest Missouri, our water is classified as “very hard”. Based on the 2017 MoDNR test results, our calculated hardness is 218.6 mg/l CaCO<sub>3</sub> (Calcium Carbonate) equivalent or 12.8 grains per gallon. DNR also reported 47.3 mg/l Calcium and 24.4 mg/l Magnesium.

We at PWSD #5 of Greene County, the employees and your Board of Directors, work hard to provide top quality water to every tap. We ask all of our customers to help us protect our water sources, which are the heart of our community, our way of life and our children’s future. If you see something suspicious near any of our facilities, please alert our office or the local authorities. This report will not be mailed to each customer, but the complete report will be available upon request at the Water Supply’s office at 113 S. Orchard in Fair Grove, or call 417-759-7066 for more information or go to the Water Supply’s website at [www.fairgrovewater.com](http://www.fairgrovewater.com), or the DNR website at <https://dnr.mo.gov/ccr/MO5024230.pdf>

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