

City of Ashland, Missouri

2015 Annual Water Quality Report



Growing Forward



Frequently Asked Questions

Where does the City of Ashland get its water from?

All of the water supplied to the City of Ashland comes from deep limestone wells. The City of Ashland currently has two deep wells. One well is located at 508 N. Henry Clay Blvd, and another at 102 W. Redtail Drive.

Are there any contaminants in my water?

Drinking water is reasonably expected to contain small amounts of contaminants. However, having a small amount of these contaminants does not necessarily indicate a health risk. For more information you can contact the Environmental Protection Agency's Safe Drinking Water



Dear Water Customer:

We are pleased to present the Annual Water Quality Report for 2015. This report is designed to inform you about the quality of water and services we deliver to you everyday. Our goal is to provide you with a safe and dependable supply of drinking water 24 hours per day, 365 days per year. We are pleased to report that we are meeting this goal and exceeding the minimum water quality requirements of the Environmental Protection Agency and Missouri Department of Natural Resources.

Our water sources include two deep wells, one located at 508 N. Henry and one located at 102 W. Red Tail Drive. We have two elevated storage tanks located on-site with the Henry Clay and Red Tail wells. One tower has the capacity to hold 300,000 gallons of water and the newest tower has the capacity to hold 500,000 gallons. We currently have an average usage of 260,000 gallons of water per day.

This annual water quality report is a requirement of the Environmental Protection Agency's safe drinking water act. However, if you have any questions or concerns, please do not hesitate to contact your Public Works Department at (573) 657-2091. The Ashland Board of Aldermen meets on the first and third Tuesdays of each month at 7:00 p.m. at 815 East Broadway.

Respectfully Submitted,
The City of Ashland Missouri



Remember, before you dig, call 1-800-344-7483.

***The current year CCR is also available at:
www.dnr.mo.gov/ccr/MO3010033.pdf***

ASHLAND

Public Water System ID Number: MO3010033 2015 Annual Water Quality Report (Consumer Confidence Report)

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

Atención!

Este informe contiene información muy importante. Tradúscalo o pregúntele a alguien que lo entienda bien.
[Translated: This report contains very important information. Translate or ask someone who understands this very well.]

What is the source of my 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.

Our water comes from the following source(s):

Source Name	Type
WELL # 6	GROUND WATER
OLD HWY 63 N - WELL # 5	GROUND WATER

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 or 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://maproom.missouri.edu/swipmaps/pwsid.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:

- 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 stormwater 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 stormwater runoff, and residential uses.
- Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- 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 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 operations?

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 MO3010033 for the purposes 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 to observe the decision-making process that affect drinking water quality or if you have any further questions about your drinking water report, please call us at [573-657-2091](tel:573-657-2091) to inquire about scheduled meetings or contact persons.

Do I need to take any special precautions?

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 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:** 3707. 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. MCLGs 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 MCLGs 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.
- 90th percentile:** For lead and Copper testing. 10% of 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.
- 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.
- THM:** Total Trihalomethanes (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) as a group.
- HAAS:** 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.



ASHLAND
Public Water System ID Number: MO3010033
2015 Annual Water Quality Report
(Consumer Confidence Report)
Contaminants Report

ASHLAND will provide a printed hard copy of the CCR upon request. To request a copy of this report to be mailed, please call us at **573-657-2091**. The CCR can also be found on the internet at www.dnr.mo.gov/ccr/MO3010033.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

Regulated Contaminants	Collection Date	Highest Test Result	Range of Sampled Result(s) (low - high)	Unit	MCL	MCLG	Typical Source
BARIUM	1/6/2015	0.116	0.111 - 0.116	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	1/6/2015	0.88	0.47 - 0.88	ppm	4	4	Natural deposits; Water additive which promotes strong teeth

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range of Sampled Result(s) (low - high)	Unit	MCL	MCLG	Typical Source
(HAA5)	DBPDUAL-01	2015	0	0 - 0	ppb	60	0	Byproduct of drinking water disinfection
TTHM	DBPDUAL-01	2015	14	13.5 - 13.5	ppb	80	0	Byproduct of drinking water disinfection

Lead and Copper	Date	90th Percentile: 90% of your water utility levels were less than	Range of Sampled Results (low - high)	Unit	AL	Sites Over AL	Typical Source
COPPER	2013 - 2015	0.18	0.0134 - 0.605	ppm	1.3	0	Corrosion of household plumbing systems
LEAD	2013 - 2015	3.92	1 - 9.81	ppb	15	0	Corrosion of household plumbing systems

Radionuclides	Collection Date	Highest Value	Range of Sampled Result(s)	Unit	MCL	MCLG	Typical Source
COMBINED RADIUM (-226 & -228)	7/2/2013	2	1.4 - 2	pCi/l	5		Erosion of natural deposits
COMBINED URANIUM	10/8/2013	1.59	1.5 - 1.59	µg/l	30		Erosion of natural deposits
GROSS ALPHA PARTICLE ACTIVITY	7/2/2013	11.2	6.9 - 11.2	pCi/l			Erosion of natural deposits
GROSS ALPHA, EXCL. RADON & URANIUM	7/2/2013	9.7	5.4 - 9.7	pCi/l	15	0	Erosion of natural deposits
RADIUM-226	7/2/2013	2	1.4 - 2	pCi/l	5	0	

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2015				

Violations and Health Effects Information

During the 2015 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Type
No Violations Occurred in the Calendar Year of 2015		

Additional Required Health Effects Language:

Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

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 and components associated with service lines and home plumbing. ASHLAND 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 ASHLAND for your results.

Thursday, March 10, 2016

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Optional Monitoring (not required by EPA)
 Optional Contaminants

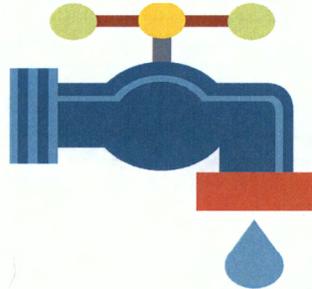
Monitoring is not required for optional contaminants.

Secondary Contaminants	Collection Date	Your Water System Highest Sampled Result	Range of Sampled Result(s) (low - high)	Unit	SMCL
ALKALINITY, CaCO3 STABILITY	1/6/2015	345	339 - 345	MG/L	
CALCIUM	1/6/2015	64	48.7 - 64	MG/L	
CHLORIDE	1/6/2015	15	5.39 - 15	MG/L	250
HARDNESS, CARBONATE	1/6/2015	297	237 - 297	MG/L	
IRON	1/6/2015	0.106	0.0242 - 0.106	MG/L	0.3
MAGNESIUM	1/6/2015	33.4	28 - 33.4	MG/L	
MANGANESE	1/6/2015	0.00415	0.00242 - 0.00415	MG/L	0.05
PH	1/6/2015	7.5	7.48 - 7.5	PH	8.5
POTASSIUM	1/6/2015	2.49	1.44 - 2.49	MG/L	
SODIUM	1/6/2015	20.6	12.6 - 20.6	MG/L	
SULFATE	1/6/2015	20.8	18.2 - 20.8	MG/L	250
TDS	1/6/2015	349	337 - 349	MG/L	500
ZINC	1/6/2015	0.00216	0.00118 - 0.00216	MG/L	5

Secondary standards are non-enforceable guidelines for contaminants that 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.

WATER USAGE

How much water does your home use?



Clothes Washing Machine	25-50 gallons per load
Hand Washing Dishes	10-20 gallons
Brushing Teeth	2-5 gallons
Dish Washing Machine	12-20 gallons per load
Bathtub	20-40 gallons per use
Shower (3-5 gallons/minute)	25-50 gallons
Toilet	3-5 gallons
Garden Hose	3-5 gallons per minute 90-150 gallons in a 30 minute period.
Faucet	2-3 gallons per minute
Garbage Disposal	5 gallons per minute
Car Washing	10-30 Gallons
Lawn Sprinkling	400-1,000 gallons per hour

If your water consumption increased on your last billing, you may have a leak. Common places to check for leaks are toilets, water softener or outside faucets.

WATER CONSERVATION TIPS

Water is considered to be a non – renewable resource. Of all the worlds water supply, 97% is not readily available for human consumption. This means only 3% is available as fresh water. Let's imagine the total amount of fresh water available is 10 gallons. After we take out the ocean water that is too salty for drinking and agriculture uses this leaves only 4.5 cups. Of this amount 3.5 cups lies too far under the earths surface and is tied up in glacier caps and can not be extracted by conventional means. This leaves about one cup of available water. After this we take out the water that is too polluted and expensive to mine, and we now have only 10 drops of fresh water for the world's population to survive with.

Not only is it wise to conserve water because it is a limited resource, but also to save money and preserve it for future generations. The City has included several conservation tips for you to practice everyday and hopefully for the rest of your life.



Tips for Indoors:

- Toilets should be seen, not heard! If you hear the water in your toilet running long after you flush, you could be wasting hundreds of gallons a day!
- Wash only full loads in your dishwasher and washing machine.
- Do not use the toilet as a trash can.
- Take shorter showers and shallower baths. This can save as much as 25 gallons.
- Reduce the number of toilet flushes per day. Each flush can use up to 5 gallons.
- Use non-phosphate detergent and save laundry water for lawns and plants.

Tips for Outdoors:

- Water before 10:00 a.m. to prevent evaporation, which occurs during the hottest part of the day.
- Water only when lawn shows signs of wilt. Grass that springs back when stepped on does not need water.
- Do not let the sprinkler run longer than necessary. In one hour a sprinkler can use 600 gallons of water.
- Position sprinklers to water the lawn, not the pavement.
- Aerate lawns by punching holes 6 inches apart.



BOONE CO CONS PWSID 1

Public Water System ID Number: MO3024055
2015 Annual Water Quality Report
(Consumer Confidence Report)

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

Attention!

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 [Translated: This report contains very important information. Translate or ask someone who understands this very well.]

What is the source of my 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.

Our water comes from the following source(s):

Pressure Zone	Sources	Source Type
2	3 WELLS	GROUND WATER
4	3 WELLS	GROUND WATER
6	5 WELLS	GROUND WATER
7	2 WELLS	GROUND WATER

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 or 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://maproom.missouri.edu/swjmaps/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 byproducts 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 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 operations?

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 MO3024055 for the purposes 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 to observe the decision-making process that affect drinking water quality or if you have any further questions about your drinking water report, please call us at **573-449-9324** to inquire about scheduled meetings or contact persons.

Do I need to take any special precautions?

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 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:** 21500. This is the equivalent residential population served including non-billing paying customers.
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