

CITY OF ASHLAND, MISSOURI 2011 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 Hotline at 1-800-426-4791.



Dear Water Customer:

We are pleased to present the Annual Water Quality Report for 2011. 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 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. Redtail Drive. We have two elevated storage tanks located on-site with the Henry Clay and Redtail 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 109 East Broadway.

Respectfully Submitted,



The City of Ashland Missouri

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

MO3010033

Ashland
2011 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.

Atencion!

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
Broadway - Well # 2	Out of Service
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/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 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 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).

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>.

CITY OF ASHLAND, MISSOURI
ANNUAL WATER QUALITY REPORT 2011
STATE TESTING RESULTS

IF YOU HAVE ANY QUESTIONS CONTACT CITY HALL (573) 657-2091

REGULATED CONTAMINANTS

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
BARIUM	01-22-2009	.18	.105-0.18	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLOURIDE	01-22-2009	.88	.51-.88	ppm	4	4	Natural deposits; Water additive which promotes strong teeth

Disinfection Byproducts	Monitoring Period	RAA	Range	Unit	MCAL	MCLG	Typical Source
Trihalomethanes (TTHM)	2008-2010	10	8.39	ppb	80	0	Chlorination

Lead and Copper	Date	90th Percentile	Range	Unit	AL	Sites Over AL	Typical Source
COPPER	2008-2010	0.147	0.0407-0.238	ppm	1.3	0	Corrosion of household plumbing systems
LEAD	2008-2010	5.62	1.9-14.8	ppb	15	0	Corrosion of household plumbing systems

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar year of 2010				

Radionuclide	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
GROSS ALPHA PARTICLE ACTIVITY, TOTAL	4-9-2009	3.3	3.3	pCi/l	5		Erosion of natural deposits
RADIUM, COMBINED (226,228)	4-9-2009	4.2	4.2	pCi/l			Erosion of natural deposits
RADIUM—226	4-9-2009	1.8	1.8	pCi/l	5	0	
RADIUM—228	4-9-2009	1.5	1.5	pCi/l	5	0	

STATE TESTING RESULTS REPORT FOR CALENDAR YEAR 2011

VIOLATIONS AND HEALTH EFFECTS INFORMATION

Type	Category	Analyte	Compliance Period
No Violations Occurred the Calendar Year of 2011.			

OPTIONAL MONITORING (NOT REQUIRED BY EPA)

Secondary Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ALKALINITY, TOTAL	1-22-2009	370	349-370	MG/L			
ALKALINITY, CaCO ₃ STABILITY	1-22-2009	370	349-370	MG/L			
CALCIUM	1-22-2009	77.3	68.3-77.3	MG/L			
CHLORIDE	1-22-2009	16.9	14.1-16.9	MG/L	250		
HARDNESS, CARBONATE	1-22-2009	329	318-329	MG/L			
IRON	1-22-2009	.896	0.0647-0.896	MG/L	0.3		
MAGNESIUM	1-22-2009	35.9	32.9-35.9	MG/L			
MAGANESE	1-22-2009	0.0117	0.00301-0.0117	MG/L	0.05		
PH	1-22-2009	7.28	7.24-7.28	PH	8.5		
POTASSIUM	1-22-2009	3.8	3.74-3.8	MG/L			
SODIUM	1-22-2009	25.2	24.4-25.2	MG/L		20	
SULFATE	1-22-2009	16.9	15.2-16.9	MG/L	250		
TDS	1-22-2009	421	367-421	MG/L	500		

Definitions:

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. MCLG's allow for a margin of safety.

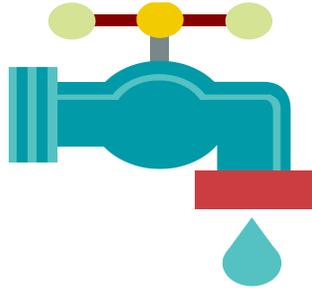
MCL - Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

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.

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

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.

