



Public Water System ID Number MO1010415

2020 Annual Consumer Confidence Report

This report is intended to provide important information about your drinking water and 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, 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 sources:

Source Name	Type
Missouri River	Surface Water
Well # 1, 2, 3, 4, 5, 6, 7, 8, 9, 10,11, 12, 13, and 14	Ground Water

A very small amount of our drinking water is supplied from another water system through a Consecutive Connection (CC). Results from those sources are provided in this report under “Reseller Contaminants”.

Buyer Name	Seller Name
KANSAS CITY PWS	JACKSON COUNTY PWSD 2
JACKSON COUNTY PWSD 2	INDEPENDENCE PWS

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. 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 at <https://drinkingwater.missouri.edu>. 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 MO1010415 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.

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.



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Contaminants Report

During the 2020 calendar year, no violations of drinking water regulations occurred.

KC Water will provide a printed hard copy of the CCR upon request. To request that a copy of this report be mailed, please call 816-513-7000. The CCR also can be found at www.kcwater.us/about-us/reports. 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. No data older than five years is included. If more than one sample is collected during the monitoring period, the Range of Sampled Results will show the lowest and highest tested results. The Highest Test Result, Highest LRAA, or Highest Value must be below the maximum contaminant level (MCL) or the contaminant has exceeded the level of health based standards and a violation is issued to the water system.

Regulated Contaminants	Collection Date	Highest Test Result	Range of Sampled Results (low-high)	Unit	MCL	MCLG	Typical Source
Atrazine	5/29/2020	2.35	ND – 2.35	ppb	3	3	Runoff from herbicide used on row crops
Barium	7/24/2020	0.0382	0.006 – 0.0382	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cyanide	3/4/2020	0.0058	ND-0.0058	ppm	0.2	0.2	Discharge from steel/metal factories; discharge from plastic and fertilizer; factories
Fluoride	7/5/2020	1.05	0.132 - 1.05	ppm	4	4	Natural deposits; water additive which promotes strong teeth
Nitrate	5/29/2020	3.95	ND – 3.95	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite	7/25/2020	0.438	ND - 0.438	ppm	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	4/27/2020	3.5	ND - 3.5	ppb	50	50	Erosion of natural deposits

Disinfectant	Collection Date		Highest	Range of Sampled Result(s) (low – high)	Unit	MRDL	MRDLG	Typical Source
Total Chlorine	9/3/2020		3.5	ND – 3.5	ppm	4	4	Disinfectant to control microbes
Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range of Sampled Result(s) (low – high)	Unit	MCL	MCLG	Typical Source
Total Haloacetic Acids	DBPDUAL-01	2020	22	10.5 - 15.2	ppb	60	0	Byproduct of drinking water disinfection
	DBPDUAL-02	2020	16	11.2 - 18.6	ppb	60	0	Byproduct of drinking water disinfection
	DBPDUAL-03	2020	22	11.3 - 17.8	ppb	60	0	Byproduct of drinking water disinfection
	DBPDUAL-04	2020	21	10.7 - 16.7	ppb	60	0	Byproduct of drinking water disinfection
	DBPDUAL-05	2020	19	11 - 16.1	ppb	60	0	Byproduct of drinking water disinfection
	DBPDUAL-06	2020	23	11.2 - 13.9	ppb	60	0	Byproduct of drinking water disinfection
Total Trihalomethanes	DBPDUAL-01	2020	10	5.3 - 12.2	ppb	80	0	Byproduct of drinking water disinfection
	DBPDUAL-02	2020	9	5.1 - 10	ppb	80	0	Byproduct of drinking water disinfection
	DBPDUAL-03	2020	11	4.1 - 9.7	ppb	80	0	Byproduct of drinking water disinfection
	DBPDUAL-04	2020	11	6.1 - 11.3	ppb	80	0	Byproduct of drinking water disinfection
	DBPDUAL-05	2020	9	5.4 - 10.9	ppb	80	0	Byproduct of drinking water disinfection
	DBPDUAL-06	2020	9	6 - 9.4	ppb	80	0	Byproduct of drinking water disinfection

Unregulated Contaminant Monitoring Rule (UCMR)	Monitoring Period	Federal Level Recommended	Average Value	Range of Sampled Result(s)	Unit
Manganese	2019	NA	0.7	ND – 0.7	ppm
Total HAA5	2019	NA	14.9	7.4 – 33.1	ppm
Total HAA6 Br	2019	NA	1.85	1.0 – 3.2	ppm
Total HAA9	2019	NA	16.8	8.5 – 34.8	ppm

Unregulated contaminant monitoring helps the EPA determine where certain contaminants occur and whether the Agency should consider regulating those contaminants in the future. HAA5 includes dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid, trichloroacetic acid. HAA6Br includes: bromochloroacetic acid, bromodichloroacetic acid, dibromoacetic acid, dibromochloroacetic acid, monobromoacetic acid, tribromoacetic acid. HAA9 includes: bromochloroacetic acid, bromodichloroacetic acid, chlorodibromoacetic acid, dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid, tribromoacetic acid, trichloroacetic acid.

TOC	Collection Date	Highest Value	Range of Sampled Result(s) (low – high)	Unit	TT	Typical Source
TOTAL ORGANIC CARBON	6/1/2020	3.29	1.94 - 3.29	ppm	0	Naturally present in the environment



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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. KC Water 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 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 <http://water.epa.gov/drink/info/lead/index.cfm>.

You can find sample results for all contaminants from both past and present compliance monitoring on the Missouri DNR Drinking Water Watch website, <https://dnr.mo.gov/DWW>.

Lead and Copper	Date	90th Percentile (90% of results below level indicated)	Range of Sampled Result(s) (low – high)	Unit	AL	Sites Over AL	Typical Source
Copper	2019	0.004	ND - 0.022	ppm	1.3	0	Corrosion of household plumbing
Lead	2019	2.1	ND – 35.8	ppb	15	0	Corrosion of household plumbing

Turbidity						
<i>Turbidity is a measure of cloudiness of water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system.</i>						
% of samples in compliance with standard	Months Occurred	Monitoring Violation	Highest Single Measurement (NTU)	Month Occurred	Sources	In Compliance
100	12	NO	0.13	October and December	Soil Runoff	Yes

Microbiological	Result	MCL	MCLG	Typical Source
Total Coliform Rule (TCR)	In the month of November, 0.45% of samples returned positive	5%	0	Naturally present in the environment

Optional Monitoring (not required by EPA)
Optional Constituents and Constituents having Secondary MCL (SMCL)

Secondary standards are non-enforceable guidelines for constituents 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.

Secondary Constituents	Collection Date	Your Water System Highest Sampled Result	Range of Sampled Result(s) (low - high)	Unit	SMCL
Alkalinity, Total	12/11/2020	53	19 - 53	ppm	NA
Aluminum	7/24/2020	0.601	ND – 0.061	ppm	NA
Boron	12/4/2020	0.0717	ND - 0.0717	ppm	NA
Bromide	2/21/2020	2.54	ND – 2.54	ppm	NA
Calcium	3/31/2020	56.4	31.7 - 56.4	ppm	NA
Chloride	1/29/2020	34.5	15.1 – 34.5	ppm	250
Copper	12/7/2020	4.04	ND - 4.04	ppb	NA
Iron	7/24/2020	0.154	ND – 0.154	ppm	0.3
Magnesium	9/17/2020	10	2.29 – 10	ppm	NA
Manganese	7/24/2020	0.0062	ND - 0.0062	ppm	NA
Nickel	7/24/2020	0.0059	ND – 0.0059	ppm	NA
pH	-	10	9.99 – 10	SU	8.5
Potassium	3/31/2020	8.64	6.08 - 8.64	ppm	NA
Silicon	1/31/2020	4.48	2.8 - 4.48	ppm	NA
Sodium	10/7/2020	81.9	48.2 - 81.9	ppm	NA
Strontium	6/30/2020	0.271	0.271 - 0.205	ppm	NA
Sulfate	4/13/2020	229	111 - 229	ppm	250
Total Dissolved Solids	10/17/2020	463	200 - 463	ppm	500
Total Hardness	4/10/2020	176	98.6 - 176	ppm	NA
Zinc	5/12/2020	0.001	ND - 0.001	ppm	5



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Terms and Abbreviations

Population: 495,327 (2019 Estimate, U.S. Census Bureau). This is the equivalent residential population served, including non-bill paying customers.
 AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

LRAA: Locational Running Annual Average, or the locational average of sample analytical results for samples taken during the previous four calendar quarters.

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.

MRDL: Maximum residual disinfectant level, or the maximum level of a disinfectant added for water treatment that may not be exceeded without an unacceptable possibility of adverse health effects.

MRDLG: Maximum Residual Disinfectant Level Goal, or the level of a drinking water disinfectant below which there is no known or expected risk to health.

NA: not applicable.

ND: not detectable at testing limits.

NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.

ppb: parts per billion or micrograms per liter.

ppm: parts per million or milligrams per liter.

RAA: Running Annual Average, or the average of sample analytical results for samples taken during the previous four calendar quarters.

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 Test Result or Highest Value.

SU: Standard Units for pH

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.

TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

TTHM: Total Trihalomethanes (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) as a group.

Reseller Contaminants

Regulated Contaminants	Collection Date	Water System	Highest Sample Result	Range of Sampled Result(s) (low – high)	Unit	MCL	MCLG	Typical Source
BARIUM	6/5/2018	INDEPENDENCE PWS	0.0416	0.0416	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	6/5/2018	INDEPENDENCE PWS	0.19	0.19	ppm	4	4	Natural deposits; Water additive which promotes strong teeth
NITRATE-NITRITE	5/18/2020	INDEPENDENCE PWS	0.319	0.319	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits



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Reseller Contaminants

Disinfection Byproducts	Monitoring Period	Water System	Highest LRAA	Range of Sampled Result(s) (low – high)	Unit	MCL	MCLG	Typical Source
(HAA5)	2020	JACKSON COUNTY PWSD 2	17	1.95 - 42.3	ppb	60	0	Byproduct of drinking water disinfection
(HAA5)	2020	INDEPENDENCE PWS	7	1.81 - 4	ppb	60	0	Byproduct of drinking water disinfection
TTHM	2020	INDEPENDENCE PWS	3	1.04 - 2.51	ppb	80	0	Byproduct of drinking water disinfection
TTHM	2020	JACKSON COUNTY PWSD 2	8	1.65 - 15	ppb	80	0	Byproduct of drinking water disinfection

Reseller Violations and Health Effects Information

During the 2020 calendar year, the water system(s) that we purchase water from had the below noted violation(s) of drinking water regulations.

Water System	Type	Category	Analyte	Compliance Period
No Violations Occurred in the Calendar Year of 2020				

There are no additional required health effects notices.