Substances Expected to be in Drinking Water:

To ensure that tap water is safe to drink; U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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 can acquire naturally occurring minerals, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban storm water 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 storm water runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of Industrial processes and petroleum production, and may also come from gas stations, urban storm water runoff, and septic systems,

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPS's Safe Drinking Water Hotline at (800) 426-4791

Lead in Drinking Water:

"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. Public Water Supply District #10 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 Safe Drinking Water Hotline or at http://www.eps.gov/safewater/lead"

Lead in Drinking Water On-Line Resources:

1. Missouri American Water
   "LEAD AND DRINKING WATER"
   https://amwater.com/moaw/water-quality/lead-and-drinking-water
2. United States Environmental Protection Agency
   "Lead"
   https://www.epa.gov/lead
3. United States Environmental Protection Agency
   "Basic Information about Lead in Drinking Water"
   https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water
4. National Safety Council
   "Lead Poisoning is Not Yesterday's News"
   https://www.nsc.org/home-safety/safety-topics/other-poisons/lead
5. DrinkTap.org
   "Lead in Water"
   https://drinktap.org/Water-Info/Whats-in-My-Water/Lead-In-Water
6. American Water Works Association
   "Lead"
   https://www.awwa.org/resources-tools/water-knowledge/lead.aspx
7. Centers for Disease Control and Prevention
   "Lead"
   https://www.cdc.gov/nceh/lead/
8. Mayo Clinic
   "Lead Poisoning"
   https://www.mayoclinic.org/diseases-conditions/lead-poisoning/symptoms-causes/syc-20354717
9. Department of Natural Resources
   "Lead in Drinking Water: Important Information on How to Protect Your Health"
   https://dnr.mo.gov/env/wpp/pdwb/docs/lead-custom-f.pdf

Please check "How to Check for Water Leaks" and how "Saving Water can Save You Money" on the Missouri Public Service Commission website:
https://psc.mo.gov/WaterSewer/WaterSewer_Consumer_Information_Fact_Sheets

IF YOU NEED TO REACH US:

We welcome your comments and questions at any time.

Public Water Supply District #10
P.O. Box 910
Imperial, MO 63052

Customer Service
(636) 467-6868 or (636) 464-8093
Monday through Friday
8:00 a.m. to 4:30 p.m.

Water Quality or Public Relations
(636) 467-6868 or (636) 464-8093
Monday through Friday
8:00 a.m. to 4:30 p.m.
Keith Flamm
District Manager

Report a Main Break
(636) 467-6868 or (636) 464-8093
Emergency
(314) 729-2859
Available 24 hours a day

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. Jefferson County PWSD 10 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 severals hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using the 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.eps.gov/drink/info/lead/index.cfm

You can also find sample results for all contaminates from both past and present compliance monitoring online at the Missouri DNR Drinking Water Watch website http://dnr.mo.gov/DWW/indesSearchDNR.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 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 JEFFERSON COUNTY PWSD 10 for your results.

KEITH FLAMM
Manager

PUBLIC WATER SUPPLY DISTRICT NO. 10 OF JEFFERSON CO.

P.O. Box 910 • Imperial, MO 63052
4215 Jeffco Blvd. • Arnold, MO 63010
Phone: (636) 467-6868 • (636) 464-8093
Website: pwsd1010.com

PUBLIC WATER SUPPLY DISTRICT NO. 10
2023 CONSUMER CONFIDENCE REPORT

M.D.N.R. #6024302

Public Water Supply District #10 was founded in 1966 and the Construction began in 1970. The District has purchased all of their water from Missouri American Water Company in St. Louis County since that time.

The District has one Booster Pump Station that is located on Telegraph Road, One Elevated Tank that holds 100,000 gallons of water located on Montebello Road, & One Ground Storage Tank that holds 1,000,000 gallons of water located on Waters Road.

The District has three water main sizes 6 inches, 8 inches, and 12 inches that feed the district. The District throttles down the butterfly valves daily to draw from the tanks. After 10 pm the Tanks begin to fill for the next day.

Missouri Department of Natural Resources requires the District to take water Samples (Total Coliform) from five different homes throughout the District. Ten samples are required per month. Every three years water samples are taken from twenty different homes for lead and copper testing. The District had 2,810 meter connections in 2023.

Every third Monday of each month is the Board Meeting, which starts at 6:30 pm at the District Office.

The Water Quality Report that follows is from Missouri American Water Company. If you have any questions, please feel free to call the office during business hours. Thank you.

REGULATED CONTAMINANTS

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range of Sampled Result(s) (low-high)	Unit	MCL	MCLG	Typical Source
(HAA5)	DBPDUAL-01	2023	26	8.12 - 46.4	ppb	60	0	By-product of drinking water disinfection
(HAA5)	DBPDUAL-02	2023	20	10.3 - 27	ppb	60	0	By-product of drinking water disinfection
TTHM	DBPDUAL-01	2023	51	23.8 - 92.8	ppb	80	0	By-product of drinking water disinfection
TTHM	DBPDUAL-02	2023	47	21.2 - 75.3	ppb	80	0	By-product of drinking water disinfection

Lead and Copper	Unit	90th Percentile: 90% of your water utility lvels were less than	Range of Sampled Results (low-high)	Unit	AL	Sites Over AL	Typical Source
Copper	2020 - 2022	0.00525	0 - 0.00714	ppm	1.3	0	Corrosion of household plumbing systems
Lead	2020 - 2022	2.41	0 - 9.89	ppb	15	0	Corrosion of household plumbing systems

Violations and Health Effects Information

During the 2022 year, we had the below violation(s) of drinking water regulations.

Compliance Period	Analyte	Type
No Violations Occurred in the Calendar Year of 2023		

KEITH FLAMM
DISTRICT MANAGER

MEMBERSHIP: AMERICAN WATER WORKS ASSOCIATION • JEFFERSON COUNTY WATER MANAGERS ASSOCIATION
MISSOURI WATER SEWERAGE CONFERENCE • MISSOURI RURAL WATER ASSOCIATION

JEFFERSON COUNTY PWSD 10

Public Water System ID Number: MO6024302

2023 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.

Attencion!

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

What is the source of my water?

The source of drinking water (both tap water and bottled water) includes rivers, lakes, streams, ponds, reservoirs, springs, and underground wells. As water travels over the surface of 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.

Out water comes from the following source(s):

Our drinking water is supplied from another water system through a Consecutive Connection (CC). To find out more about our drinking water sources and additional chemical sampling results, please contact our office at the number below.

Buyer Name	Seller Name
JEFFERSON COUNTY PWSD 10	MO AMERICAN • ST LOUIS • ST CHARLES COUNTIES

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 contamination 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 Natural Resources prescribes regulations which limit the amount of certain contaminants in water provided by public water systems.

Is our water 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 MO6024302 for the purposes of tracking our test results. Last year, we tested for a variety of contaminants. The detectable results of these test 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 636-467-6868 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 Hotline (800-426-4791).

Terms and Abbreviations

Population: 10000. 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 theses 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, them this number equals the Highest Test Result or 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-chloracetic 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/s: not applicable.
NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.
nd: not detectable at testing limits.

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. MCLGs allow for a margin of safety.
MCL: Maximum Contaminant Level, or the highest contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available technology.

Abbreviations:

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 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.
Level Found: is the average of all test results for a particular contaminant.
Range of Detections: Shows the lowest and highest levels found during a testing period, if only one sample was taken, then this number equals the Level Found.
MRLDG: Maximum Residual Disinfectant Level Goal, or the level of a drinking water disinfectant below which there is no known or expected risk to health.
MRDL: Maximum Residual Disinfectant Level, or the highest level of a disinfectant allowed in drinking water.

Reseller Contaminats

Rgulated Contaminants	Date Collected	Water System	Highest Sample Result	Range of Sampled Results (low-high)	Unit	MCL	MCLG	Typical Source
2,4-D	4/13/2023	MO American -St. Louis St. Charles Counties	0.2	0 - 0.2	ppb	70	70	Runoff from herbicide used on row crops
2-Methoxyethanol	9/12/2019	MO American -St. Louis St. Charles Counties	5.7	0 - 5.7				
Arsenic	4/13/2023	MO American -St. Louis St. Charles Counties	2	0 - 2	ppb	10	0	Erosion of natural deposits
Atrazine	7/11/2023	MO American -St. Louis St. Charles Counties	0.4	0 - 0.4	ppb	3	3	Runoff from herbicide used on row crops
Flouride	4/13/2023	MO American -St. Louis St. Charles Counties	0.69	0.62 - 0.69	ppm	4	4	Natural deposits: Water additive which promotes strong teeth
Nitrate-Nitrite	4/13/2023	MO American -St. Louis St. Charles Counties	1.25	0.24 - 1.25	ppm	10	10	Runoff from fertilizer use; Leaching from septics tabks, sewage; Erosion for natural deposits
Selenium	4/13/12023	MO American -St. Louis St. Charles Counties	2	0 - 2	ppb	50	50	Erosion of natural deposits

DISINFECTION BYPRODUCTS - Collected in the Distributiion System

Disindection Byproducts	Monitoring Period	Water System	Highest LRAA	Range of Sampled Results (low-high)	Unit	MCL	MCLG	Typical Source
(HAA5)	2023	MO American -St. Louis St. Charles Counties	30	6.9 - 81	ppb	60	0	Byproduct of drinking water disinfection
TTHM	2023	MO American -St. Louis St. Charles Counties	53	1.6 - 151.8	ppb	80	0	Byproduct of drinking water disinfection

REVISED TOTAL COLIFORM RULE - At least 300 samples collected each month in the distribution system

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Single Measurement	Highest No. of Positive Samples	Typical Source
Total Coliform[1]	2023	Yes	0	TT = Less than 5% ea. month	2	0.6%	Naturally present in the environment
E. Coli[2]	2023	Yes	0	MCL = No confirmed samples	0	0%	Human and animal fecal waste

NOTE: Coliforms are bacteria that are naturally present in the environment and are used as an indicator of the general bacteriological quality of the water. We are reporting the highest number and percentage of Total Coliform / E.Coli positive samples in any month for the year.

[1] The Treatment Technique for Total Coliforms requires that if the maximum percentage OR number of total coliform positive samples are exceeded a system assessment must be conducted , any sanitary defects identified, and corrective actions completed. Additional Level 1 Assessments or Level 2 Assessments are required depending on the circumstances.

[2] The Treatment Technique for E. Coli requires that for any total coliform positive routine sample with one or more total coliform positive check samples and an E. coli positive result for any of the samples a Level 2 Assessment must be conducted, any sanitary defects identified, and corrective actions completed. The E. Coli MCL is exceeded if routine and repeat samples are total coliform-positive and either is E. coli-positive, or the system fails to take repeat samples following an E. coli-positive routine sample, or the system fails to analyze total coliform-positive repeat samples for E. coli.

TOTAL COLIFORM RULE - At least 300 samples collected each month in the distribution system

REVISED TOTAL COLIFORM RULE - At least 300 samples collected each month in the distribution system							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest No. of Positive Samples	Highest Percent of Positive Samples	Typical Source
Total Coliform[1]	2022	Yes	0	TT = Less than 5% each month	3	0.9%	Naturally present in the environment
E. Coli[2]	2022	Yes	0	MCL = No confirmed samples	0	0%	Human and animal fecal waste

NOTE: Coliforms are bacteria that are naturally present in the envionment and are used as an indicator of the general bacteriological quality of water. We are reportiung the highest percentage of positive samples / highest number of positive samples in any month.

OTHER SUBSTANCES OF INTEREST - Collected at the Treatment Plant

Substances (with units)	Year Sampled	Missouri River Facilities		Meramec River Facilities		Typical Source
		Highest Result	Range Detected	Highest Result	Range Detected	
Boron (ppm)	2023	0.07	0.06 - 0.07	ND	ND	Naturally occuring
Calcium (ppm Ca^{+2})	2023	38	16 - 38	32	11 - 32	Naturally occuring
Chlorate (ppm)	2023	N/A	N/A	0.37	0.10 - 0.37	By-product of disinfectant manufacturing; Agricultural defoliant or desiccant; Used in production of chlorine dioxide
Chloride (ppm)[1]	2023	27	24 - 27	28	20 - 28	Cause salty taste
Magnesium (ppm Mg^{+2})	2023	18	14 - 18	14	13 - 14	Naturally occuring
pH (SU)[1]	2023	10.6	9.2 - 10.6	10.3	9.5 - 10.3	Lime softening Treatment
Potassium (ppm)	2023	6	5 - 6	ND	ND	Naturally occuring
Silica (ppm)	2023	11	10 - 11	ND	ND	Naturally occuring
Sodium (ppm)[2]	2023	43	37 - 43	14	9 - 14	Naturally occuring
Strontium (ppm)	2023	0.2	0.1 - 0.2	ND	ND	Naturally occuring; historically, commercial use of strongtium has been in the faceplate glass of CRT televisions to block x-ray emissions
Sulfate (ppm)[1]	2023	120	101	12	12	Cause salty taste
Total Dissolved Solids (ppm)[1]	2023	336	316 - 336	128	70 - 128	Can leave deposits
Total Hardness (ppm $CaCo_3$)	2023	226	82 - 226	150	66 - 150	Sum of Calcium and Magnesium

1 - Substances with Secondary MCLs do not have MCLGs: these limits are primarily established to address aesthetic concers.
2 - For healthy individuals the sodium intake from water is not important because much gretaer intake of sodium takes place from salt in the diet. However, sodium levels above recommended upper limit may be of concern to individuals on a sodium restricted diet.

Optional Monitoring (not required by EPA

Optional Contaminants

Reseller Secondary Contaminants	Collection Date	Water System Name	Highest Sample Result	Range of Sampled Results (low-high)	Unit	SMCL
Alkalinity, TOTAL	6/6/2023	MO American • St. Louis • St. Charles Counties	235	91 - 240	MG/L	
Bromide	3/12/2019	MO American • St. Louis • St. Charles Counties	0.06	0 - 0.06	MG/L	0.05
Calcium	4/13/2023	MO American • St. Louis • St. Charles Counties	22	0 - 0.06	MG/L	
Chlorate	7/11/2023	MO American • St. Louis • St. Charles Counties	0.37	13 - 22	MG/L	
Chloride	4/13/2023	MO American • St. Louis • St. Charles Counties	27.5	19.7 - 27.5	MG/L	250
Magnesium	4/13/2023	MO American • St. Louis • St. Charles Counties	18	13 - 18	MG/L	
Silica	4/13/2023	MO American • St. Louis • St. Charles Counties	11	0 - 11		
Sodium	4/13/2023	MO American • St. Louis • St. Charles Counties	42.5	9.2 - 42.5	MG/L	
Sulfate	4/13/2023	MO American • St. Louis • St. Charles Counties	119.5	11.6 - 119.5	MG/L	250

DISINFECTANATS - Collected in the Distibution System and at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MRDLG	MRDL	RESULT	RANGE DETECTED	Typical Source
Chloramines (ppm) Distribution System	2023	Yes	4	4	2.7[1]	0.6 - 3.5	Water additive used to control microbes
Chloramines (ppm) Distribution System	2023	Yes	NA	TT = Results >1.00	1.7[2]	1.7 - 3.4	Water additive used to control microbes

TURBIDITY - Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Single Measurement	Lowest Monthly % of Samples ≤ 0.3 NTU	Typical Source
Turbidity (NTU)	2023	Yes	NA	TT = Results >0.3 NTU	0.14	100%	Soil runoff