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"

2. United States Environmental Protection Agency

https://www.epa.gov/lead

3. United States Environmental Protection Agency Basic Information about Lead in Drinking Wate

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

https://drinktap.org/Water-Info/Whats-in-My-Water/Lead-In-Water

6. American Water Works Association

https://www.cdc.gov/nceh/lead/

https://www.awwa.org/resources-tools/water-knowledge/lead.aspx

Please check "How to Check for Water Leaks" and how "Saving Water can Save You Money" on the Missouri Public Service Commission website:

7. Centers for Disease Control and Prevention

https://psc.mo.gov/WaterSewer/WaterSewer Consumer Information Fact Sheets

"Lead Poisoning"

https://www.mayoclinic.org/diseases-conditions/lead-poisoning/symptoms-causes/syc-20354717

"Lead in Drinking Water: Important Information on How to Protect Your Health" https://dnr.mo.gov/env/wpp/pdwb/docs/lead-custom-f.pdf

BOARD OF DIRECTORS

ALAN HERRELL, President BOB MORROW, Vice President WILLIAM TODD, Director VICKI HERRELL, Director , Director



IF YOU NEED TO REACH US:

JUDY HORNE, Treasurer

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 healt oblems, especially for pregnant women and young children. Lead in drinking water is primarily fron 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.isp. 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.

PUBLIC WATER SUPPLY DISTRICT NO. 10 2019 CONSUMER CONFIDENCE REPORT

P.O. Box 910 • Imperial, MO 63052

4215 Jeffco Blvd. • Arnold, MO 63010 Phone: (636) 467-6868 • (636) 464-8093

Fax: (636) 464-3897

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 2,678 meter connections in 2019.

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.

Violations and Health Effects Information

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range of Sampled Result(s) (low-high)	Unit	MCL	MCLG	Typical Source
(HAA5)	DBPDUAL-01	2019	21	0 - 29.3	ppb	60	0	Byproduct of drinking water disinfection
(HAA5)	DBPDUAL-02	2019	26	16.9 - 40	ppb	60	0	Byproduct of drinking water disinfection
TTHM	DBPDUAL-01	2019	49	27.9 - 77.1	ppb	80	0	Byproduct of drinking water disinfection
TTHM	DBPDUAL-02	2019	47	28 - 75.1	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 Result(s) (low-high)	Unit	AL	Sites Over AL	Typical Source
Copper	2017 - 2019	0.00877	0.00125 - 0.0578	ppm	1.3	0	Corrosion of household plumbing systems
Lead	2017 - 2019	4.7	0 - 8.24	ppb	15	0	Corrosion of household plumbing systems

Violations and Health Effects Information

During the 2019 year, we had the below violation(s) of drinking water regulations.

d,	Compliance Period	Analyte	Type	
ie	No Violations Occurred in the Calendar Year of 2019			

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 2019 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

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

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

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 evel 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

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

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 dioacetic acid) as a group.

ppb: parts per billion or micrograms per liter

ppm: parts per million or milligrams per liter.

NTU: Nephelonetric Turbidity Unit, used to measure cloudiness in drinking

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

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 Contaminants

Regulated Contaminants	Collection Date	Water System	Highest Sample Result	Range of Sampled Result(s) (low-high)	Unit	MCL	MCLG	Typical Source
2.4-D (ppb)	4/9/2019	MO AMERICAN ST LOUIS ST CHARLES COUNTIES	0.2	0 - 0.2	ppb	70	70	Runoff from herbicide used on row crops
ATRAZINE	7/10/2019	MO AMERICAN ST LOUIS ST CHARLES COUNTIES	0.7	0 - 0.7	ppb	3	3	Runoff from herbicide used on row crops
FOURIDE	4/9/2019	MO AMERICAN ST LOUIS ST CHARLES COUNTIES	0.69	0.6 - 0.69	ppm	4	4	Natural deposits; Water additive which promotes strong teeth
NITRATE NITRITE	4/9/2019	MO AMERICAN ST LOUIS ST CHARLES COUNTIES	1.67	0.35 - 1.67	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural desposits
SELENIUM	4/9/2019	MO AMERICAN ST LOUIS ST CHARLES COUNTIES	2	0 - 2	ppb	50	50	Erosion of natural deposits

Disinfection Byproducts	Monitoring Period	Water System	Highest LRAA	Range of Sampled Result(s) (low-high)	Unit	MCL	MCLG	Typical Source
(HAA5)	(HAA5)	MO AMERICAN ST LOUIS ST CHARLES COUNTIES	27	8.1 - 39.9	ppb	60	0	Byproduct of drinking water disinfection
TTHM	TTHM	MO AMERICAN ST LOUIS ST CHARLES COUNTIES	55	2.8 - 87	ppb	80	0	Byproduct of drinking water disinfection

Reseller Violations and Health Effects Information

During the 2019 calendar year, the water system(s) that we purchase water from had the below noted violation(s) of drinking water regulations.

Water System	Туре	Category	Analyte	Compliance Perion
No Violations Occured in the Calendar Year	of 2019			

Turbidity - A Measure of the Clarity of the Water (Water Leaving the Treatment Facility)

Substance (units)	Year Sampled	MCL	MCLG	Missouri River Highest Single Measurement	Meramec River Highest Single Measurement	Compliance Achieved	Typical Source
(HAA5)	2019	TT	NA	.039	.16	Yes	Soil runoff

Bacterial Results (in the Distribution System)

Substance (units)	Year Sampled	MCL	MCLG	Highest Percentage Detected	Compliance Achieved	Typical Source
E. Coli	2019	TT	0	0.3%	Yes	Human and animal fecal waste
Total Coliform	2019	TT	NA	.09%	Yes	Naturally present in the environment

Regulated Substances (In the Distribution System)

	Year	Missou	ri River	Merame	c River	
Substances (units)	Sampled	Highest Result	Range Low-High	Highest Result	Range Low-High	Typical Source
Chloramines (ppm)	2019	26	25 - 26	18	15 - 18	Naturally occuring
Chlorate (ppm)	2019	NA	NA	0.32	0.17 - 0.32	By-product of dsinfection process; Agricultural defoliant or desiccant; Used in the production of chlorine dioxide
Chloride (ppm)	2019	20	18 - 20	38	30 - 38	Naturally occuring; Runoff from road de-icing, fertilizers septic tanks, industrial use
Magnesium (ppm)	2019	13	10 - 13	11	10 - 11	Naturally occuring
Potassium (ppm)	2019	8	8	ND	ND	Naturally occuring
Silica (ppm)	2019	10	10	ND	ND	Naturally occuring
Sodium (ppm)	2019	18	16 - 18	12	12	Naturally occuring
Strontium (ppb)	2019	100	100	ND	ND	Naturally occuring element; Historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions
Sulfate (ppm)	2019	86	76 - 86	12	11 - 12	Naturally occuring; Mining or industrial waste
Total Dissolved Solids (ppm)	2019	236	210 - 236	158	152 - 158	Naturally occuring
Vanadium (ppb)	2019	5	4 - 5	ND	ND	Naturally occuring elemental metal; Used as vavadium pentoxide which is a chemical intermediate and a catalyst

Unregulated Contaminants (Water Leaving the Treatment Facility)

	Year	Missouri River		Meramec River			
Substances (units)	Sampled	Highest Result	Range Low-High	Results	Range Low-High	Typical Source	
2-Methoxyethanol (ppb)	2019	5.7	0.4 - 5.7	ND	ND	Used in synthetic cosmetics, perfumes, fragrances, hair preparations and skin lotions	
Manganese (ppb)	2019	4.9	0.5 - 4.9	0.5	0.5	Naturally-occuring element; Used in steel production, fertilizer, batteries and fireworks; essential nutrient	