

AUBURN LAKE PWS

Public Water System ID Number: MO6031409

2020 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 prequentele a alguien que lo entienda bien.

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 # 1	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://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 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 MO6031409 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 **1-866-945-3920** 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:** 220. This is the equivalent residential population served including non-bill paying customers.
- 90th percentile:** For Lead and Copper testing. 10% of test results are above this level and 90% are below this level.
- AL:** Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- HAAS:** Haloacetic Acids (mono-, di- and tri-chloroacetic acid, and mono- and di-bromoacetic acid) as a group.
- 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.
- n/a:** 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.
- 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.



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Contaminants Report

AUBURN LAKE PWS 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 **1-866-945-3920**.

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 5 years need be 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

Regulated Contaminants	Collection Date	Highest Test Result	Range of Sampled Result(s) (low – high)	Unit	MCL	MCLG	Typical Source
ALUMINUM	03/25/2020	BDL	BDL	ppm	0.05	0.05	
ANTIMONY, TOTAL	03/25/2020	BDL	BDL	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
ARSENIC	03/25/2020	BDL	BDL	ppm	0.01	0	Erosion of natural deposits; runoff from orchards; runoff from glass & electronics production wastes
BARIUM	03/25/2020	0.0219	0.0219	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
BERYLLIUM, TOTAL	03/25/2020	BDL	BDL	ppb	4	4	Discharge from metal refineries & coal-burning factories; discharge from electrical, aerospace, & defense industries
CADMIUM	03/25/2020	BDL	BDL	ppb	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries & paints
CHLORIDE	03/25/2020	48.1	48.1	ppm	250	250	Erosion of natural deposits & runoff from manufacturing
CHROMIUM	03/25/2020	BDL	BDL	ppm	1	1	Discharge from steel & pulp mills; erosion of natural deposits
CYANIDE	03/25/2020	BDL	BDL	ppm	0.2	0.2	Discharge from steel/metal factories; discharge from plastic & fertilizer factories
FLUORIDE	03/25/2020	1.46	1.46	ppm	4	4	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer & aluminum factories
MERCURY	03/25/2020	BDL	BDL	ppb	2	2	Erosion of natural deposits; discharge from refineries & factories; runoff from landfills & croplands
NITRATE-NITRITE	03/25/2020	BDL	BDL	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
SELENIUM	03/25/2020	BDL	BDL	ppm	0.05	0.05	Discharge from petroleum & metal refineries; erosion of natural deposits; discharge from mines
SILVER	03/25/2020	BDL	BDL	ppm	0.1	0.1	
THALLIUM, TOTAL	03/25/2020	BDL	BDL	ppb	2	0.5	Leaching from ore-processing sites; discharge from electronics, glass, & drug factories

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Regulated Contaminants	Collection Date	Highest Test Result	Range of Sampled Result(s) (low – high)	Unit	MCL	MCLG	Typical Source
2,4-D	03/17/2020	BDL	BDL	ppm	0.07	0.07	Runoff from herbicide used on row crops
2,4,5-TP	03/17/2020	BDL	BDL	ppm	0.05	0.05	Residue of banned herbicide
ATRAZINE	03/17/2020	BDL	BDL	ppb	3	3	Runoff from herbicide used on row crops
BHC-GAMMA	03/17/2020	BDL	BDL	ppb	0.2	0.2	Runoff/leaching from insecticide used on cattle, lumber, & gardens
CHLORDANE	03/17/2020	BDL	BDL	ppb	2	2	Residue of banned termiticide
DALAPON	03/17/2020	BDL	BDL	ppm	0.2	0.2	Runoff from herbicide used on highways
DINOSEB	03/17/2020	BDL	BDL	ppb	7	7	Runoff from herbicide used on soybeans & vegetables
ENDRIN	03/17/2020	BDL	BDL	ppb	2	2	Residue of banned insecticide
HEPTACHLOR	03/17/2020	BDL	BDL	ppb	0.4	0.4	Residue of banned termiticide
HEPTACHLOR EPOXIDE	03/17/2020	BDL	BDL	ppb	0.2	0.2	Breakdown of heptachlor
LASSO	03/17/2020	BDL	BDL	ppb	2	0	Runoff from herbicide used on row crops
METHOXYCHLOR	03/17/2020	BDL	BDL	ppm	0.04	0.04	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, & livestock
PENTACHLOROPHENOL	03/17/2020	BDL	BDL	ppb	1	1	Discharge from wood-preserving factories
PICLORAM	03/17/2020	BDL	BDL	ppm	0.5	0.5	Herbicide runoff
SIMAZINE	03/17/2020	BDL	BDL	ppb	4	4	Herbicide runoff
TOXAPHENE	03/17/2020	BDL	BDL	ppb	3	3	Runoff/leaching from insecticide used on cotton & cattle

Regulated Contaminants	Collection Date	Highest Test Result	Range of Sampled Result(s) (low – high)	Unit	MCL	MCLG	Typical Source
1,1,1-TRICHLOROETHANE	03/25/2020	BDL	BDL	ppm	0.2	0.2	Discharge from metal degreasing sites & other factories
1,1,2-TRICHLOROETHANE	03/25/2020	BDL	BDL	ppb	5	3	Discharge from industrial chemical factories
1,1-DICHLOROETHYLENE	03/25/2020	BDL	BDL	ppb	7	7	Discharge from industrial chemical factories
1,2,4-TRICHLOROBENZENE	03/25/2020	BDL	BDL	ppm	0.07	0.07	Discharge from textile finishing factories
1,2-DICHLOROETHANE	03/25/2020	BDL	BDL	ppb	5	0	Discharge from industrial chemical factories
1,2-DICHLOROPROPANE	03/25/2020	BDL	BDL	ppb	5	0	Discharge from industrial chemical factories
BENZENE	03/25/2020	BDL	BDL	ppb	5	0	Discharge from factories; leaching from gas storage tanks & landfills
BROMODICHLOROMETHANE	03/25/2020	1	1	ppb	100	100	Byproduct of chlorination of water containing organic materials & bromide
BROMOFORM	03/25/2020	1.57	1.57	ppb	100	100	Discharge from chemical plants & other industrial activities
CARBON TETRACHLORIDE	03/25/2020	BDL	BDL	ppb	5	0	Discharge from chemical plants & other industrial activities
CHLOROBENZENE	03/25/2020	BDL	BDL	ppm	0.1	0.1	Discharge from chemical & agricultural chemical factories
CIS-1,2-DICHLOROETHYLENE	03/25/2020	BDL	BDL	ppm	0.07	0.07	Discharge from industrial chemical factories
DIBROMOCHLOROMETHANE	03/25/2020	1.94	1.94	ppb	100	100	Byproduct of chlorination of water containing organic materials & bromide
DICHLOROMETHANE	03/25/2020	BDL	BDL	ppb	5	0	Discharge from industrial chemical factories
ETHYLBENZENE	03/25/2020	BDL	BDL	ppm	0.7	0.7	Discharge from petroleum refineries
O-DICHLOROBENZENE	03/25/2020	BDL	BDL	ppm	0.6	0.6	Discharge from industrial chemical factories
P-DICHLOROBENZENE	03/25/2020	BDL	BDL	ppm	0.075	0.075	Discharge from industrial chemical factories
STYRENE	03/25/2020	BDL	BDL	ppm	0.1	0.1	Discharge from rubber & plastic factories; leaching from landfills
TETRACHLOROETHYLENE	03/25/2020	BDL	BDL	ppb	5	0	Discharge from factories & dry cleaners
TOLUENE	03/25/2020	BDL	BDL	ppm	1	1	Discharge from petroleum factories
TRANS-1,2-DICHLOROETHYLENE	03/25/2020	BDL	BDL	ppm	0.1	0.1	Discharge from industrial chemical factories
TRICHLOROETHYLENE	03/25/2020	BDL	BDL	ppb	5	0	Discharge from metal degreasing sites & other factories
VINYL CHLORIDE	03/25/2020	BDL	BDL	ppb	2	0	Leaching from PVC pipes; discharge from plastic factories
XYLENES, TOTAL	03/25/2020	BDL	BDL	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories

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Lead and Copper	Date	90 th Percentile: 90% of your water utility levels were less than	Range of Sampled Results (low – high)	Unit	AL	Sites Over AL	Typical Source
COPPER	2020	0.045	0.00874 – 0.0844	ppm	1.3	0	Corrosion of household plumbing systems
LEAD	2020	0.00159	BDL – 0.00207	ppm	0.015	0	Corrosion of household plumbing systems; erosion of natural deposits

Radionuclides	Collection Date	Highest Value	Range of Sampled Result(s) (low – high)	Unit	MCL	MCLG	Typical Source
COMBINED RADIUM (-226 & -228)	2020	2.7	2 – 2.7	pCi/L	5	0	Erosion of natural deposits
GROSS ALPHA PARTICLE ACTIVITY	2020	8.4	6.3 – 8.4	pCi/L			Erosion of natural deposits of certain minerals that are radioactive & may emit a form of radiation known as alpha radiation
RADIUM-226	2020	2.7	2 – 2.7	pCi/L	5	0	Erosion of natural deposits
RADIUM-228	2020	BDL	BDL	pCi/L	5	0	Erosion of natural deposits
COMBINED URANIUM	2020	BDL	BDL	ug/L	30	0	Erosion of natural deposits

Microbiological	Results	MCL	MCLG	Typical Source
COLIFORM (TCR)	No positive samples collected in 2020	Treatment Technique Trigger	0	Naturally present in the environment

Violations and Health Effects Information

During the 2020 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 2020		

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

During the past year we were required to conduct one Level 1 assessment(s). one Level 1 assessment(s) was completed. In addition, we were required to take zero corrective action(s) and we completed zero of these actions.

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. EUGENE PWS 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>.

All contaminant sample results from past and present compliance monitoring are available online at the Missouri DNR Drinking Water Watch website at www.dnr.mo.gov/DWWW/. To see the Lead and Copper results, enter your water system's name in the box titled Water System Name, then select Find Water Systems at the bottom of the page. On the next screen, click on the Water System Number. At the top of the next page, under the Help column, click on Other Chemical Results by Analyte. Scroll down to Lead and click the blue Analyte Code (1030). A Sample Collection Date range may need to be entered. 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 you assisted the water system in taking a Lead and Copper sample but cannot find your location on the list, please contact EUGENE PWS for your results.

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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, CaCO ₃ STABILITY	03/25/2020	293	293	MG/L	
CALCIUM	03/25/2020	59.5	59.5	MG/L	
HARDNESS, CARBONATE	03/25/2020	270	270	MG/L	
IRON	03/25/2020	0.232	0.232	MG/L	0.3
MAGNESIUM	03/25/2020	29.4	29.4	MG/L	
MANGANESE	03/25/2020	0.015	0.015	MG/L	0.05
NICKEL	03/25/2020	< 0.001	< 0.001	MG/L	0.1
PH	03/25/2020	7.49	7.49	PH	8.5
POTASSIUM	03/25/2020	5.88	5.88	MG/L	
SODIUM	03/25/2020	57.4	57.4	MG/L	
SULFATE	03/25/2020	82.1	82.1	MG/L	250
TDS	03/25/2020	463	463	MG/L	500
ZINC	03/25/2020	0.228	0.228	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.