

Annual Drinking Water Quality Report

URIAH WATER SYSTEM January – December 2018

We are proud to report that our system has not violated a maximum contaminant level or any other water quality standards. We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. **Our water source is three ground water wells**, which pump from the **Plicoene-Miocene** aquifer. Well #1 is located on Highway 21 just North of Town, Well # 2 is located on Mount Triumph Street and Well # 3 is located on Patterson Street in Megargel. We have 3 tanks with a storage capacity of 260,000 gallons. **Chlorine is added** to the water as disinfectant and the required residual is maintained to protect your drinking water from any possible outside contaminants. **Soda Ash is added** to control PH levels and assist in corrosion control. We have a **Source Water Protection Plan** and a Well Head Protection Plan available for review that provides more information such as potential sources of contamination. We are committed to ensuring the quality of your water.

If you have any questions about this report or concerning your water utility, please contact **Mike Olivieri** or **Mark Chaney** at **(251) 862-2554**. We want our valued customers to be informed about their water utility. If you want to learn more, please attend our regularly scheduled meetings held on the third Monday of each month, 6.00pm at the Uriah Water office in Uriah, Alabama.

Board of Directors				
President, Fred Brake	Vice President, Karen Frye	Director, William Turk	Director, Larry Brooks	Director, Rick Baldwin
System Employees				
Office Manager, Stacey Chaney		Operation Specialist, Mike Olivieri		Operation Specialist, Mark Chaney

PLAIN LANGUAGE DEFINITION

- **Non-Detects (ND)** - laboratory analysis indicates that the contaminant is not present.
- **Not Required (NR)** – Laboratory analysis not required due to waiver granted by the Environmental Protection Agency for the State of Alabama.
- **Parts per million (ppm) or Milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion (ppb) or Micrograms per liter** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Parts per trillion (ppt) or Nanograms per liter (nanograms/l)** - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- **Parts per quadrillion (ppq) or Picograms per liter (picograms/l)** - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.
- **Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.
- **Millirems per year (mrem/yr)** - measure of radiation absorbed by the body.
- **Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **Variances & Exemptions (V&E)** - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
- **Action Level – (AL)** the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Treatment Technique (TT)** - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- **Threshold Odor Number (T.O.N.)**- The greatest dilution of a sample with odor-free water that still yields a just-detectable odor.
- **Maximum Contaminant Level** - (mandatory language) The "Maximum Allowed" (MCL) is 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.
- **Maximum Contaminant Level Goal** - (mandatory language) The "Goal"(MCLG) is 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.
- **Maximum Residual Disinfectant Level Goal or MRDLG** - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Maximum Residual Disinfectant Level or MRDL** - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Contaminants 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, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban storm water run-off, 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, storm water run-off, and residential uses.
- **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 storm water run-off, and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

The Uriah Water System monitors for contaminants in your drinking water according to Federal and State laws. Unless otherwise stated, this table shows the results of our monitoring for the period of January 1st to December 31st, 2018. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

Table of Primary Contaminants

At high levels some primary contaminants are known to pose a health risks to humans. This table provides a quick glance of any primary contaminant detections.

CONTAMINANT	MCL	AMOUNT DETECTED	CONTAMINANT	MCL	AMOUNT DETECTED	CONTAMINANT	MCL	AMOUNT DETECTED
Bacteriological			Selenium(ppb)	50	ND	Epichlorohydrin	TT	ND
Total Coliform Bacteria	< 5%	ND	Thallium(ppb)	2	ND	Ethylbenzene(ppb)	700	ND
Turbidity	TT	0.68	Organic Chemicals			Ethylene dibromide(ppt)	50	ND
Fecal Coliform & E. coli	0	ND	Acrylamide	TT	ND	Glyphosate(ppb)	700	ND
Radiological			Alachlor(ppb)	2	ND	Haloacetic Acids(ppb)	60	1.68
Beta/photon emitters (mrem/yr)	4	ND	Atrazine(ppb)	3	ND	Heptachlor(ppt)	400	ND
Alpha emitters (pci/l)	15	2.6+0.9 & 6.9+1.2	Benzene(ppb)	5	ND	Heptachlor epoxide(ppt)	200	ND
Combined radium (pci/l)	5	4.3+1.1	Benzo(a)pyrene[PHAs](ppt)	200	ND	Hexachlorobenzene(ppb)	1	ND
Uranium(pci/l)	30	ND	Carbofuran(ppb)	40	ND	Hexachlorocyclopentadiene(ppb)	50	ND
Inorganic			Carbon Tetrachloride(ppb)	5	ND	Lindane(ppt)	200	ND
Antimony (ppb)	6	ND	Chlordane(ppb)	2	ND	Methoxychlor(ppb)	40	ND
Arsenic (ppb)	10	ND	Chlorobenzene(ppb)	100	ND	Oxamyl [Vydate](ppb)	200	ND
Asbestos (MFL)	7	ND	2,4-D	70	ND	Pentachloropheno(ppb)	1	ND
Barium (ppm)	2	ND	Dalapon(ppb)	200	ND	Picloram(ppb)	500	ND
Beryllium (ppb)	4	ND	Dibromochloropropane(ppt)	200	ND	PCBs(ppt)	500	ND
Bromate(ppb)	10	ND	0-Dichlorobenzene(ppb)	600	ND	Simazine(ppb)	4	ND
Cadmium (ppb)	5	ND	p-Dichlorobenzene(ppb)	75	ND	Styrene(ppb)	100	ND
Chloramines(ppm)	4	ND	1,2-Dichloroethane(ppb)	5	ND	Tetrachloroethylene(ppb)	5	ND
Chlorine(ppm)	4	2.00	1,1-Dichloroethylene(ppb)	7	ND	Toluene(ppm)	1	ND
Chlorine dioxide(ppb)	800	ND	Cis-1,2-Dichloroethylene(ppb)	70	ND	TOC	TT	ND
Chlorite(ppm)	1	ND	trans-1,2-Dichloroethylene(ppb)	100	ND	TTHM(ppb)	80	6.21
Chromium (ppb)	100	ND	Dichloromethane(ppb)	5	ND	Toxaphene(ppb)	3	ND
Copper (ppm)	AL=1.3	0.72	1,2-Dichloropropane(ppb)	5	ND	2,4,5-TP (Silvex)(ppb)	50	ND
Cyanide (ppb)	200	0.03	Di-(2-ethylhexyl)adipate(ppb)	400	ND	1,2,4-Trichlorobenzene(ppb)	70	ND
Fluoride (ppm)	4	ND	Di(2-ethylhexyl)phthalates(ppb)	6	ND	1,1,1-Trichloroethane(ppb)	200	ND
Lead (ppb)	AL=15	ND	Dinoseb(ppb)	7	ND	1,1,2-Trichloroethane(ppb)	5	ND
Mercury (ppb)	2	ND	Dioxin[2,3,7,8-TCDD](ppq)	30	ND	Trichloroethylene(ppb)	5	ND
Nitrate (ppm)	10	3.05	Diquat(ppb)	20	ND	Vinyl Chloride(ppb)	2	ND
Nitrite (ppm)	1	ND	Endothall(ppb)	100	ND	Xylenes(ppm)	10	0.74
Total Nitrate & Nitrite	10	3.05	Endrin(ppb)	2	ND			

Table of Secondary and Unregulated Contaminants

Secondary Drinking Water Standards are guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. ADEM has Secondary Drinking Water Standards established in state regulations applicable to water systems required to monitor for the various components. **Unregulated contaminants** are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

CONTAMINANT	MCL	DETECT	CONTAMINANT	MCL	DETECT	CONTAMINANT	MCL	DETECT
Secondary								
Aluminum	0.2	ND	Foaming Agents	0.5	ND	Silver	7	ND
Chloride	250	7.15	Iron	0.3	0.07	Sulfate	70	0.62
Color (PCU)	15	ND	Magnesium	75	1.27	Total Dissolved Solids	500	52
Copper	1	ND	Odor (T.O.N.)	5	ND	Zinc	5	ND
Special								
Calcium	N/A	2.23	pH (SU)	N/A	7.52	Temperature (*C)	N/A	ND
Carbon Dioxide	N/A	14.2	Sodium	N/A	26.10	Total Alkalinity	N/A	60.4
Manganese	0.05	0.04	Specific Conductance (umhos)	<500	160.00	Total Hardness (as CaCO3)	N/A	10.8
Unregulated								
1,1 - Dichloropropene	N/A	ND	Bromobenzene	N/A	ND	Hexachlorobutadiene	N/A	ND
1,1,2,2-Tetrachloroethane	N/A	ND	Bromochloromethane	N/A	ND	Isopropylbenzene	N/A	ND
1,1-Dichloroethane	N/A	ND	Bromodichloromethane	N/A	ND	M-Dichlorobenzene	N/A	ND
1,2,3 - Trichlorobenzene	N/A	ND	Bromoform	N/A	ND	Methomyl	N/A	ND
1,2,3 - Trichloropropane	N/A	ND	Bromomethane	N/A	ND	Metolachlor	N/A	ND
1,2,4 - Trimethylbenzene	N/A	ND	Butachlor	N/A	ND	Metribuzin	N/A	ND
1,2,4-Trichlorobenzene	N/A	ND	Carbaryl	N/A	ND	MTBE	N/A	ND
1,3 - Dichloropropane	N/A	ND	Chloroethane	N/A	ND	N - Butylbenzene	N/A	ND
1,3 - Dichloropropene	N/A	ND	Chlorodibromomethane	N/A	ND	Naphthalene	N/A	ND
1,3,5 - Trimethylbenzene	N/A	ND	Chloroform	N/A	0.29	N-Propylbenzene	N/A	ND
2,2 - Dichloropropane	N/A	ND	Chloromethane	N/A	ND	O-Chlorotoluene	N/A	ND
3-Hydroxycarbofuran	N/A	ND	Dibromochloromethane	N/A	ND	P-Chlorotoluene	N/A	ND
Aldicarb	N/A	ND	Dibromomethane	N/A	ND	P-Isopropyltoluene	N/A	ND
Aldicarb Sulfone	N/A	ND	Dichlorodifluoromethane	N/A	ND	Propachlor	N/A	ND
Aldicarb Sulfoxide	N/A	ND	Dieldrin	N/A	ND	Sec - Butylbenzene	N/A	ND
Aldrin	N/A	ND	Fluorotrichloromethan	N/A	ND	Tert - Butylbenzene	N/A	ND

Table of Detected Drinking Water Contaminants								
CONTAMINANT	MCLG	MCL	Range			Amount Detected		Likely Source of Contamination
Bacteriological Contaminants January - December 2017								
Turbidity	0	TT				0.68	NTU	Soil runoff
Radiological Contaminants January - December 2017								
Alpha emitters	0	15				2.6+0.9 & 6.9+1.2	pCi/L	Erosion of natural deposits
Combined Radium 226 & 228	0	5				4.3+1.1	pCi/L	Erosion of natural deposits
Inorganic Contaminants January - December 2018								
Chlorine	MRDLG 4	MRDL 4	0.20	-	3.90	3.90	ppm	Water additive used to control microbes
Copper	1.3	10 Sites AL=1.3	No. of Sites above action level 0			0.72	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Cyanide (2013)	200	200	ND	-	0.03	0.03	ppb	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Nitrate (as N)	10	10	1.41	-	3.37	3.37	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as N)	1	1	1.41	-	3.37	3.37	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Nitrate & Nitrite	10	10	1.41	-	3.37	3.37	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Organic Contaminants January - December 2018								
Haloacetic Acids (HAA5)	0	60	ND	-	0.01	0.01	ppb	By-product of drinking water chlorination
Total trihalomethanes (TTHM)	0	80	ND	-	0.01	0.01	ppb	By-product of drinking water chlorination
Secondary Contaminants January - December 2018								
Chloride	N/A	250	5.14	-	7.15	7.15	ppm	Naturally occurring in the environment or as a result of agricultural runoff
Iron	N/A	0.3	ND	-	0.07	0.07	ppm	Erosion of natural deposits
Magnesium	N/A	0.05	0.62	-	1.27	1.27	ppm	Erosion of natural deposits
Sulfate	N/A	250	ND	-	0.62	0.62	ppm	Naturally occurring in the environment
Total Dissolved Solids	N/A	500	ND	-	52.00	52.00	ppm	Erosion of natural deposits
Special Contaminants January - December 2018								
Calcium	N/A	N/A	1.53	-	2.23	2.23	ppm	Erosion of natural deposits
Carbon Dioxide	N/A	N/A	12.70	-	14.20	14.20	ppm	Erosion of natural deposits
Manganese	N/A	N/A	ND	-	0.04	0.04	ppm	Erosion of natural deposits
pH	N/A	N/A	6.16	-	7.52	7.52	SU	Naturally occurring in the environment or as a result of treatment with water additives
Sodium	N/A	N/A	2.37	-	26.10	26.10	ppm	Naturally occurring in the environment
Specific Conductance	N/A	<500	32.00	-	160.00	160.00	umhos	Naturally occurring in the environment or as a result of treatment with water additives
Total Alkalinity	N/A	N/A	3.20	-	60.40	60.40	ppm	Erosion of natural deposits
Total Hardness (as CaCO3)	N/A	N/A	6.39	-	10.80	10.80	ppm	Naturally occurring in the environment or as a result of treatment with water additives

GENERAL INFORMATION

As you can see by the tables, our system had no monitoring violations of allowable limits of contaminants in drinking water. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water IS SAFE at these levels.

Total Coliform: The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

All 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 the 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 at 1-800-426-4791.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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. Uriah Water System 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 or at <http://www.epa.gov/safewater/lead>.

Based on a study conducted by ADEM, with the approval of the EPA, a statewide waiver for monitoring of Asbestos and Dioxin was issued. Thus, monitoring for these contaminants was not required.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

We at the Uriah Water System work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future.