

Annual Drinking Water Quality Report

Mexia Water System, Inc.

January – December 2019

We're pleased to present to you this year's Annual Water Quality Report. This Report is designed to inform you about the water quality 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. We are committed to ensuring the quality of your water. The Mexia Water System produces water from one (1) deep finished water well located at Ward Road. This water is pumped from the Citronelle Aquifer. Mexia also purchases a small amount of water from Monroeville. Monroeville water sources are groundwater wells. Their water we supply comes from the Nanafalia Aquifer. The water we provide to our customers requires no specialized treatment, however, lime is added for pH control and chlorine is added to the water as disinfectant and the required residual is maintained to protect your drinking water from any possible outside contaminants within the distribution system.

Mexia's Source Water Protection Plan is available at our office and provides more information such as potential sources of contamination. Monroeville has their Source Water Protection Plan at their office. Please help us make this effort worthwhile by protecting our source water. Carefully follow instructions on pesticides and herbicides you use for your lawn, garden and by properly dispose of household chemicals, paints, and waste oils. If you have any questions about this report or concerning your water utility, please contact James Weaver, phone 251-743-2332. 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 first Monday of each month at 7 PM, at the Mexia Water office located at US Highway 84 West.

2019 Board of Directors:

Carole J. Banks, President

Kathy Shavers, Vice President

Michelle Smith, Secretary

Willie J. White, Director

Shay Harper, Director

Jackson Campbelle, Director

PLAIN LANGUAGE DEFINITION

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 Mexia Water System and the Monroeville Water Works routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2019. 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. In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions.

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	Mexia	Monroeville	CONTAMINANT	MCL	Mexia	Monroeville	CONTAMINANT	MCL	Mexia	Monroeville
Bacteriological											
Total Coliform Bacteria	< 5%	ND	ND	Selenium(ppb)	50	ND	ND	Epichlorohydrin	TT	ND	ND
Turbidity	TT	ND	0.46	Thallium(ppb)	2	ND	ND	Ethylbenzene(ppb)	700	ND	ND
Fecal Coliform & E. coli	0	ND	ND	Organic Chemicals			Ethylene dibromide(ppt)	50	ND	ND	
Radiological											
Beta/photon emitters (mrem/yr)	4	ND	ND	Acrylamide	TT	ND	ND	Glyphosate(ppb)	700	ND	ND
Alpha emitters (pci/l)	15	4.40	3.0+/-2.0	Alachlor(ppb)	2	ND	ND	Haloacetic Acids(ppb)	60	4.00	5.50
Combined radium (pci/l)	5	2.00	.3+/-3	Atrazine(ppb)	3	ND	ND	Heptachlor(ppt)	400	ND	ND
Uranium(pci/l)	30	ND	ND	Benzene(ppb)	5	ND	ND	Heptachlor epoxide(ppt)	200	ND	ND
Inorganic											
Antimony (ppb)	6	ND	ND	Benzo(a)pyrene[PHAs](ppt)	200	ND	ND	Hexachlorobenzene(ppb)	1	ND	ND
Arsenic (ppb)	10	ND	ND	Carbofuran(ppb)	40	ND	ND	Hexachlorocyclopentadiene(ppb)	50	ND	ND
Asbestos (MFL)	7	ND	ND	Carbon Tetrachloride(ppb)	5	ND	ND	Lindane(ppt)	200	ND	ND
Barium (ppm)	2	0.11	0.01	Chlordane(ppb)	2	ND	ND	Methoxychlor(ppb)	40	ND	ND
Beryllium (ppb)	4	ND	ND	Chlorobenzene(ppb)	100	ND	ND	Oxamyl [Vydate](ppb)	200	ND	ND
Bromate(ppb)	10	ND	ND	2,4-D	70	ND	ND	Pentachlorophenol(ppb)	1	ND	ND
Cadmium (ppb)	5	ND	ND	Dalapon(ppb)	200	ND	ND	Picloram(ppb)	500	ND	ND
Chloramines(ppm)	4	ND	ND	Dibromochloropropane(ppt)	200	ND	ND	PCBs(ppt)	500	ND	ND
Chlorine(ppm)	4	3.00	1.00	0-Dichlorobenzene(ppb)	600	ND	ND	Simazine(ppb)	4	ND	ND
Chlorine dioxide(ppb)	800	ND	ND	p-Dichlorobenzene(ppb)	75	ND	ND	Styrene(ppb)	100	ND	ND
Chlorite(ppm)	1	ND	ND	1,2-Dichloroethane(ppb)	5	ND	ND	Tetrachloroethylene(ppb)	5	ND	ND
Chromium (ppb)	100	ND	ND	1,1-Dichloroethylene(ppb)	7	ND	ND	Toluene(ppm)	1	ND	ND
Copper (ppm)	AL=1.3	0.39	0.14	Cis-1,2-Dichloroethylene(ppb)	70	ND	ND	TOC	TT	ND	ND
Cyanide (ppb)	200	ND	ND	trans-1,2-Dichloroethylene(ppb)	100	ND	ND	TTHM(ppb)	80	9.00	37.00
Fluoride (ppm)	4	0.82	0.80	Dichloromethane(ppb)	5	ND	ND	Toxaphene(ppb)	3	ND	ND
Lead (ppb)	AL=15	16.00	1.70	1,2-Dichloropropane(ppb)	5	ND	ND	2,4,5-TP (Silvex)(ppb)	50	ND	ND
Mercury (ppb)	2	ND	ND	Di-(2-ethylhexyl)adipate(ppb)	400	ND	ND	1,2,4-Trichlorobenzene(ppb)	70	ND	ND
Nitrate (ppm)	10	6.00	0.16	Di(2-ethylhexyl)phthlates(ppb)	6	ND	ND	1,1,1-Trichloroethane(ppb)	200	ND	ND
Nitrite (ppm)	1	ND	ND	Dinoseb(ppb)	7	ND	ND	1,1,2-Trichloroethane(ppb)	5	ND	ND
Total Nitrate & Nitrite	10	6.00	0.16	Dioxin[2,3,7,8-TCDD](ppq)	30	ND	ND	Trichloroethylene(ppb)	5	ND	ND
				Diquat(ppb)	20	ND	ND	Vinyl Chloride(ppb)	2	ND	ND
				Endothall(ppb)	100	ND	ND	Xylenes(ppm)	10	ND	ND
				Endrin(ppb)	2	ND	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. ADEMHs 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	Mexia	Monroeville	CONTAMINANT	MCL	Mexia	Monroeville	CONTAMINANT	MCL	Mexia	Monroeville
Secondary											
Aluminum	0.2	0.06	ND	Foaming Agents	0.5	ND	ND	Silver	7	ND	ND
Chloride	250	9.69	61.60	Iron	0.3	ND	ND	Sulfate	70	ND	27.5
Color (PCU)	15	ND	5.00	Magnesium	75	2.92	0.70	Total Dissolved Solids	500	88	530
Copper	1	ND	0.0066	Odor (T.O.N.)	5	ND	1.00	Zinc	5	ND	0.066
Special											
Calcium	N/A	14.50	3.00	pH (SU)	N/A	6.01	8.82	Temperature (*C)	N/A	ND	ND
Carbon Dioxide	N/A	2.5	6.8	Sodium	N/A	2.83	199.00	Total Alkalinity	N/A	29.2	374
Manganese	0.05	ND	ND	Specific Conductance(umhos)	N/A	127.00	916.00	Total Hardness (as CaCO3)	N/A	48.2	10.4
Unregulated											
1,1 - Dichloropropene	N/A	ND	ND	Bromobenzene	N/A	ND	ND	Hexachlorobutadiene	N/A	ND	ND
1,1,2,2-Tetrachloroethane	N/A	ND	ND	Bromochloromethane	N/A	ND	ND	Isopropylbenzene	N/A	ND	ND
1,1-Dichloroethane	N/A	ND	ND	Bromodichloromethane	N/A	0.00340	0.00165	M-Dichlorobenzene	N/A	ND	ND
1,2,3 - Trichlorobenzene	N/A	ND	ND	Bromoform	N/A	ND	0.01557	Methomyl	N/A	ND	ND
1,2,3 - Trichloropropane	N/A	ND	ND	Bromomethane	N/A	ND	ND	Metolachlor	N/A	ND	ND
1,2,4 - Trimethylbenzene	N/A	ND	ND	Butachlor	N/A	ND	ND	Metribuzin	N/A	ND	ND
1,2,4-Trichlorobenzene	N/A	ND	ND	Carbaryl	N/A	ND	ND	MTBE	N/A	ND	ND
1,3 - Dichloropropane	N/A	ND	ND	Chloroethane	N/A	ND	ND	N - Butylbenzene	N/A	ND	ND
1,3 - Dichloropropene	N/A	ND	ND	Chlorodibromomethane	N/A	ND	ND	Naphthalene	N/A	ND	ND
1,3,5 - Trimethylbenzene	N/A	ND	ND	Chloroform	N/A	0.00300	0.00071	N-Propylbenzene	N/A	ND	ND
2,2 - Dichloropropane	N/A	ND	ND	Chloromethane	N/A	ND	ND	O-Chlorotoluene	N/A	ND	ND
3-Hydroxycarbofuran	N/A	ND	ND	Dibromochloromethane	N/A	0.0027	0.00534	P-Chlorotoluene	N/A	ND	ND
Aldicarb	N/A	ND	ND	Dibromomethane	N/A	ND	ND	P-Isopropyltoluene	N/A	ND	ND
Aldicarb Sulfone	N/A	ND	ND	Dichlorodifluoromethane	N/A	ND	ND	Propachlor	N/A	ND	ND
Aldicarb Sulfoxide	N/A	ND	ND	Dieldrin	N/A	ND	ND	Sec - Butylbenzene	N/A	ND	ND
Aldrin	N/A	ND	ND	Fluorotrchloromethan	N/A	ND	ND	Tert - Butylbenzene	N/A	ND	ND

Table of Detected Drinking Water Contaminants

CONTAMINANT	MCLG	MCL	Range			Mexia	Monroeville	Amount Detected	Likely Source of Contamination
Bacteriological Contaminants January - December 2019									
Total Coliform Bacteria	0	< 5%				ND	ND	Present or Absent	Naturally present in the environment
Turbidity	0	TT				0.22	0.46	NTU	Clay, Silt, Finely dissolved inorganic and organic material
Fecal Coliform & E. coli	0	0				ND	ND	Present or Absent	Human and animal fecal waste
Viruses, Giardia	0	TT				0	0	Present or Absent	Human and animal fecal waste
Legionella	0	TT				0	0	Present or Absent	Found naturally in water, multiplies in heating systems
Radiological Contaminants January - December 2014 - 2019									
Beta particle and photon	0	4				ND	ND	mrem/yr	Decay of natural and man-made deposits
Alpha emitters	0	15				4.40	3.0+/-2.0	pCi/L	Erosion of natural deposits
Combined Radium 226 & 228	0	5				2.00	.3+/--.3	pCi/L	Erosion of natural deposits
Uranium	0	30				ND	ND	pCi/L	Erosion of natural deposits
Inorganic Contaminants January - December 2019									
Barium	2	2	ND	-	0.11	0.11	0.01	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine	MRDLG 4	MRDL 4	0.70	-	3.00	3.00	1.00	ppm	Water additive used to control microbes
Copper	1.3	10 Sites AL=1.3	No. of Sites above action level 1			0.39	0.14	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	4	4	ND	-	0.82	0.82	0.80	ppm	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Lead	0	10 Sites AL=15	No. of Sites above action level 3			16.00	1.70	ppb	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as N)	10	10	5.50	-	6.00	6.00	0.16	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Nitrate & Nitrite	10	10	5.50	-	6.00	6.00	0.16	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Organic Contaminants January - December 2019									
Haloacetic Acids (HAA5)	0	60	ND	-	4.00	4.00	5.50	ppb	By-product of drinking water chlorination
Total trihalomethanes (TTHM)	0	80	ND	-	9.00	9.00	37.00	ppb	By-product of drinking water chlorination
Secondary Contaminants January - December 2019									
Aluminum	N/A	0.2	ND	-	0.06	0.06	ND	ppm	Erosion of natural deposits or as a result of treatment with water additives
Chloride	N/A	250	ND	-	9.69	9.69	61.60	ppm	Naturally occurring in the environment or as a result of agricultural runoff
Color	N/A	15	ND	-	ND	ND	5.00	PCU	Naturally occurring in the environment or as a result of treatment with water additives
Copper	N/A	1	ND	-	ND	ND	0.00660	ppm	Erosion of natural deposits; leaching from pipes
Magnesium	N/A	0.05	ND	-	2.92	2.92	0.70	ppm	Erosion of natural deposits
Odor	N/A	3	ND	-	ND	ND	1.00	T.O.N.	Naturally occurring in the environment or as a result of treatment with water additives
Sulfate	N/A	250	ND	-	ND	ND	27.50	ppm	Naturally occurring in the environment
Total Dissolved Solids	N/A	500	ND	-	88.00	88.00	530.00	ppm	Erosion of natural deposits
Zinc	N/A	5	ND	-	ND	ND	0.07	ppm	Erosion of natural deposits
Special Contaminants January - December 2019									
Calcium	N/A	N/A	ND	-	14.50	14.50	3.00	ppm	Erosion of natural deposits
Carbon Dioxide	N/A	N/A	ND	-	2.50	2.50	6.80	ppm	Erosion of natural deposits
pH	N/A	N/A	ND	-	6.01	6.01	8.82	SU	Naturally occurring in the environment or as a result of treatment with water additives
Sodium	N/A	N/A	ND	-	2.83	2.83	199.00	ppm	Naturally occurring in the environment
Specific Conductance	N/A	<500	ND	-	127.00	127.00	916.00	umhos	Naturally occurring in the environment or as a result of treatment with water additives
Total Alkalinity	N/A	N/A	ND	-	29.20	29.20	374.00	ppm	Erosion of natural deposits
Total Hardness (as CaCO3)	N/A	N/A	ND	-	48.20	48.20	10.40	ppm	Naturally occurring in the environment or as a result of treatment with water additives
Unregulated Contaminants January - December 2019									
Bromodichloromethane	N/A	N/A	ND	-	0.0034	0.0017	0.00165	ppb	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by-product of chlorination
Bromoform	N/A	N/A	ND	-	ND	ND	0.01557	ppm	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by-product of chlorination
Chloroform	N/A	N/A	ND	-	0.0030	0.0015	0.00071	ppb	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by-product of chlorination
Dibromochloromethane	N/A	N/A	ND	-	0.0027	ND	0.00534	ppm	Naturally occurring in the environment

GENERAL INFORMATION

NOTICE OF VIOLATION

"Our water system failed to submit its 2018 Consumer Confidence Report certification form to ADEM by the July 1, 2019 deadline."

The Mexia Water System is required to monitor your drinking water for specific contaminants on a regular basis.

Results of regular monitoring are an indicator of whether or not your drinking water meets health standards.

During our December 30, 2019 sampling, The 90th percentile lead level for samples collected was 16.0 ug/L. Since the detect additional samples have been taken and all were in compliance with ADEM regulations If you have any questions about this violation, please contact The Mexia Water System at 251-743-2332

We proud work to ensure 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.

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. Mexia 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>.

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).

Mexia Water System and Monroeville Water Service test your water for pathogens, such as *Cryptosporidium* and *Giardia*. These pathogens can enter the water from animals or human waste. All test results were well within state and federal standards. For people who may be immuno-compromised, a guidance document developed jointly by the Environmental Protection Agency and the Center for Disease Control is available online at www.epa.gov/safewater/crypto.html or from the Safe Drinking Water Hotline at 800-426-4791. This language does not indicate the presence of cryptosporidium in our drinking water.

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.

We at the Mexia Water System, Inc. 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.

**For more information contact:
Mexia Water System Inc.
PO Box 247
Mexia, AL 36458.
Telephone: (251)743-2332**