

## Town of Hayden Water Department Annual Drinking Water Quality Report

The Town of Hayden Water Department is pleased to provide you with the 2019 Annual Quality Water Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water.

The Hayden Water Department purchases water from Blount County Water Authority (BCWA). Their water source is groundwater drawn from the Warren Spring and Blue Springs, which comes from the Pride Mountain Aquifer. They also purchase water from Douglas Water Authority. Each water system must complete a Source Water Assessment Program (SWAP). The SWAP is comprised of four distinct activities: delineation of the source water assessment area, contaminant inventory, susceptibility analysis and public awareness. BCWA has completed each required component of the source water assessment and the Alabama Department of Environmental Management (ADEM) has approved the plan. The findings of the SWAP are available for your review at the BCWA office located at 18 Arena Drive, Cleveland, AL. Chlorine is added at the filter plant as a disinfectant.

The Hayden Water Department is pleased to report that our drinking water is safe and meets federal and state requirements. If you have any questions about this report or concerning your water utility, please contact the Hayden Water Department at 205-543-6882. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings which are held on the second Tuesday of each month at 7:00pm at the Hayden Community Center located at 629 County Road 7, Hayden, Alabama.

This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2019. It's important to remember that the presence of these constituents does not necessarily pose a health risk. This table has many abbreviations you might not be familiar with. To help you better understand these abbreviations we've provided the following definitions:

- Non-Detects (ND) – laboratory analysis indicates that the constituent is not present.
- 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 (ug/l) – micrograms per liter – one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Picocuries per liter (pCi/l) – picocuries per liter is a measure of radioactivity in water.
- Millirems per year (mrem/yr) – measure of radiation absorbed by the body.
- Nephelometric Turbidity Units (NTU) – a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- Maximum Contaminant Level – The “Maximum Allowed” (MCL) is the highest level of a contaminant that is allowed in drinking water.
- Maximum Contaminant Level Goal – The “Goal” (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- AL – Action Level – the concentrations of a contaminant, which if exceeded, triggers, treatment or other requirements which a water system must follow.
- TT – Treatment Technique – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

### Table of Detected Contaminants

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>						
Total Coliform Bacteria	Yes	Monitoring Violation		0	presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
Turbidity	No	.05	NTU	n/a	TT	Soil runoff
<b>Radioactive Contaminants</b>						
Alpha emitters	No	2.0	pCi/l	0	15	Erosion of natural deposits
Combined radium	No	.6	pCi/l	0	5	Erosion of natural deposits
<b>Inorganic Contaminants</b>						
Barium	No	.014	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	No	5.81	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits

Copper	No	.189	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Nitrate	No	2.17	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Volatile Organic Contaminants</b>						
TTHM [Total trihalomethanes]	No	12.4	ppb	0	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	No	3.99	ppb	0	60	By-product of drinking water chlorination
Total Organic Carbon (TOC)	No	.7	ppb	n/a	TT	Naturally present in the environment
Chlorine	No	1.4	ppm	4	4	Water additive used to control microbes.

### Table of Primary Contaminants

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

Contaminant	MCL	Amount Detected	Contaminant	MCL	Amount Detected
<b>Bacteriological</b>			Endothall	100 ppb	ND
Total Coliform Bacteria	< 5 %	ND	Endrin	2 ppb	ND
Turbidity	TT	.05	Epichlorohydrin	TT	ND
<b>Radiological</b>			Glyphosate	700 ppb	ND
Beta/photon emitters (mrem/yr)	4	ND	Heptachlor	400 ppt	ND
Alpha emitters (pCi/l)	15	2.0	Heptachlor epoxide	200 ppt	ND
Combined radium (pCi/l)	5	.6	Hexachlorobenzene	1 ppb	ND
Uranium	30 ppb	ND	Lindane	200 ppt	ND
<b>Inorganic Chemicals</b>			Methoxychlor	40 ppb	ND
Antimony	6 ppb	ND	Oxamyl [Vydate]	200 ppb	ND
Arsenic	10 ppb	ND	PCBs	500 ppt	ND
Asbestos (MFL)	7	ND	Pentachlorophenol	1 ppb	ND
Barium	2 ppm	.014	Picloram	500 ppb	ND
Beryllium	4 ppb	ND	Simazine	4 ppb	ND
Cadmium	5 ppb	ND	Toxaphene	3 ppb	ND
Chromium	100 ppb	5.81	Benzene	5 ppb	ND
Copper	AL=1.3 ppm	.189	Carbon tetrachloride	5 ppb	ND
Cyanide	200 ppb	ND	Chlorobenzene	100 ppb	ND
Fluoride	4 ppm	ND	Dibromochloropropane	200 ppt	ND
Lead	AL=15 ppb	ND	o-Dichlorobenzene	600 ppb	ND
Mercury	2 ppb	ND	p-Dichlorobenzene	75 ppb	ND
Nitrate	10 ppm	1.42	1,2-Dichloroethane	5 ppb	ND
Nitrite	1 ppm	ND	1,1-Dichloroethylene	7 ppb	ND
Selenium	50 ppb	ND	cis-1,2-Dichloroethylene	70 ppb	ND
Thallium	2 ppb	ND	trans-1,2-Dichloroethylene	100 ppb	ND
<b>Organic Chemicals</b>			Dichloromethane	5 ppb	ND
2,4-D	70 ppb	ND	1,2-Dichloropropane	5 ppb	ND
2,4,5-TP(Silvex)	50 ppb	ND	Ethylbenzene	700 ppb	ND
Acrylamide	TT	ND	Ethylene dibromide	50 ppt	ND
Alachlor	2 ppb	ND	Styrene	100 ppb	ND
Atrazine	3 ppb	ND	Tetrachloroethylene	5 ppb	ND

Benzo(a)pyrene [PAHs]	200 ppt	ND	1,2,4-Trichlorobenzene	70 ppb	ND
Carbofuran	40 ppb	ND	1,1,1-Trichloroethane	200 ppb	ND
Chlordane	2 ppb	ND	1,1,2-Trichloroethane	5 ppb	ND
Dalapon	200 ppb	ND	Trichloroethylene	5 ppb	ND
Di (2-ethylhexyl)adipate	400 ppb	ND	TTHM	80 ppb	12.4
Di (2-ethylhexyl) phthlates	6 ppb	ND	Toluene	1	ND
Dinoseb	7 ppb	ND	Vinyl Chloride	2 ppb	ND
Diquat	20 ppb	ND	Xylenes	10 ppm	ND
Dioxin [2,3,7,8-TCDD]	30 ppq	ND	TOC	TT	.7
Chloramines	4 ppm	ND	Chlorine	4 ppm	1.4
Chlorite	1 ppm	ND	Chlorine dioxide	800 ppb	ND
HAA5	60 ppb	3.99	Bromate	10 ppb	ND

The table below list the contaminants that are not regulated by the EPA or ADEM but are tested for in your drinking water. These contaminants pose many of the same health risk as the regulated contaminants but their presence in most drinking water is not frequent enough to warrant regulation. Unregulated contaminants are tested for to provide historical data on components presence in drinking water over time.

<b>Test Results – Unregulated Contaminant Table</b>					
<b>Monitoring results in ppm</b>					
<b>CONTAMINANT</b>	<b>Low Result</b>	<b>High Result</b>	<b>CONTAMINANT</b>	<b>Low Result</b>	<b>High Result</b>
1,1 – Dichloropropene	ND	ND	Chloroform	<.1	5.8
1,1,1,2-Tetrachloroethane	ND	ND	Chloromethane	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	Dibromochloromethane	<.1	3.5
1,1-Dichloroethane	ND	ND	Dibromomethane	ND	ND
1,2,3 – Trichlorobenzene	ND	ND	Dicamba	ND	ND
1,2,3 – Trichloropropane	ND	ND	Dichlorodifluoromethane	ND	ND
1,2,4 – Trimethylbenzene	ND	ND	Dieldrin	ND	ND
1,3 – Dichloropropane	ND	ND	Hexachlorobutadiene	ND	ND
1,3 – Dichloropropene	ND	ND	Isopropylbenzene	ND	ND
1,3,5 – Trimethylbenzene	ND	ND	M-Dichlorobenzene	ND	ND
2,2 – Dichloropropane	ND	ND	Methomyl	ND	ND
3-Hydroxycarbofuran	ND	ND	MTBE	ND	ND
Aldicarb	ND	ND	Metolachlor	ND	ND
Aldicarb Sulfone	ND	ND	Metribuzin	ND	ND
Aldicarb Sulfoxide	ND	ND	N - Butylbenzene	ND	ND
Aldrin	ND	ND	Naphthalene	ND	ND
Bromobenzene	ND	ND	N-Propylbenzene	ND	ND
Bromochloromethane	ND	ND	O-Chlorotoluene	ND	ND
Bromodichloromethane	<.01	2.9	P-Chlorotoluene	ND	ND
Bromoform	<.01	.09	P-Isopropyltoluene	ND	ND
Bromomethane	ND	ND	Propachlor	ND	ND
Butachlor	ND	ND	Sec - Butylbenzene	ND	ND
Carbaryl	ND	ND	Tert - Butylbenzene	ND	ND
Chloroethane	ND	ND	Trichlorfluoromethane	ND	ND

The third Unregulated Contaminant Rule (UCMR3) was initiated by EPA in 2012. UCMR3 requires the monitoring of two viruses and 28 unregulated chemical contaminants. These contaminants pose many of the same health risk as the regulated contaminants but their presence in most drinking water is not frequent enough to warrant regulation. Unregulated contaminants are tested for to provide historical data on components presence in drinking water over time.

<b>Third Unregulated Contaminant Monitoring (UCMR 3)</b>			
<b>Monitoring results in ppb</b>			
	<b>Detected</b>		<b>Detected</b>
1,2,3 -tricholoropropane	ND	cobalt	ND
1,3-butadiene	ND	strontium	78.2
chloromethane (methyl chloride)	ND	chromium <sup>5</sup>	ND
1,1-dichloroethane	ND	chromium-6 <sup>6</sup>	.42
Bromomethane	ND	chlorate	130

chlorodifluoromethane (HCFC-22)	ND	perflourooctanesulfonic acid (PFOS)	ND
bromochloromethane (Halon 1011)	ND	perflourooctanoic acid (PFOA)	ND
1,4-dioxane	ND	perflourononanoic acid (PFNA)	ND
Vanadium	.22	perflourohexanesulfonic acid PFHxS)	ND
Molybdenum	ND	perflourobutanesulfonic acid (PFBS)	ND
17-β-estradiol	ND	perflouroheptanoic acid (PFHpA)	ND
17-α-ethynylestradiol	ND	estrone	ND
Estriol	ND	testosterone	ND
Equilin	ND	4-androstene-3,17dione	ND
Noroviruses	ND	enteroviruses	ND

The fourth Unregulated Contaminant Rule (UCMR4) was initiated by EPA in 2016. UCMR4 requires the monitoring of 10 cyanotoxins and 20 additional unregulated chemical contaminants. These contaminants pose many of the same health risk as the regulated contaminants but their presence in most drinking water is not frequent enough to warrant regulation. Unregulated contaminants are tested for to provide historical data on components presence in drinking water over time.

Fourth Unregulated Contaminant Monitoring (UCMR 4)			
Monitoring results in ppb			
	Detected		Detected
Germanium	.10	Tribufos	ND
Manganese	.13	1-butanol	.67
Alpha-hexachlorocyclohexane	.0032	2-methoxyethanol	.13
Chlorpyrifos	.0096	2-propen-1-ol	.17
Dimethipin	.064	Butylated hydroxyanisole	.01
Ethoprop	.0096	O-toluidine	.0023D
Oxyfluorfen	.016	Quinoline	.0067
Profenofos	.096	Total organic carbon (TOC)	1490
Tebuconazole	.064	Bromide	16.9
Total permethrin (cis-& trans-)	ND		
Bromochloroacetic Acid	.52	Monobromoacetic Acid	.10
Bromodichloroacetic Acid	.17	Monochloroacetic Acid	.67
Chlorodibromoacetic Acid	.10	Tribromoacetic Acid	.67
Dibromoacetic Acid	.10	Trichloroacetic Acid	.17
Dichloroacetic Acid	.92		

As you can see by the table BCWA had one violation. This violation was for monitoring non-compliance. In February 2019 they failed to take enough samples for testing. Their monitoring requires twenty-three (23) bacteriological distribution compliance samples. They did not submit the correct number of samples and cannot be sure of the quality of your drinking water during that time. This violation occurred because personnel failed to submit the correct number of samples.

Follow up test revealed that total coliform was not present in your water. Should you have any questions concerning this violation or monitoring requirements, please contact Tim Faulkner at 205-625-5100. BCWA has evaluated and implemented procedures to reduce sampling errors.

BCWA is required to monitor their drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your water meets health standards. During February 2019, they did not complete all required monitoring of total coliform bacteria and therefore cannot be sure of the quality of our drinking water during that time.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing this notice in a public place or distributing copied by hand or mail.

However, no coliform bacteria or fecal indicators were found in the samples collected from the system's distribution system on that day. They monitor monthly for many contaminants in your water and all test since that day have been free of coliform.

Should you have any questions concerning this non-compliance or monitoring requirements, please contact Tim Faulkner at 205-625-5100.

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 constituents 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 these 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).

The Town of Hayden Water Department wants you to be aware that there is not a problem with lead in your 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. The Town of Hayden Water Department 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>.

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and radioactive material, and it can pick up substances resulting from the presence of animals or from human activity.

BCWA also tests for pathogens, such as *Cryptosporidium* and *Giardia*. These pathogens can enter water from animal or human waste. All test results were well within state and federal standards. This language does *not* indicate the presence of *cryptosporidium* in our drinking water.

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.

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 (1-800-426-4791).

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

EPA and the Alabama Department of Environmental Management (ADEM) have mandated that each water system will provide an annual quality report to consumers. This report is designed to inform consumers about the quality of water from their water supplier. The Town of Hayden Water Department strives to provide a dependable and safe supply of water to all consumers. We ask that you be considerate when accidents or mother-nature hinder our efforts to supply your water. Regardless of the time, or weather, water works personnel are on call and working to keep your water flowing.

**Town of Hayden**

Larry Armstrong, Mayor

**Town Council**

Randy Curtis

William Parker

Jo Young

Mark Staton

Roger Hurt