

Pine Bluff Water Authority 2018 Consumer Confidence Report For 2017



Pine Bluff Water Authority
P O Box 89
Locust Fork, AL 35097

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The PBWA is a proud participant in Alabama 1 Call.
Call Before You Dig.
1-800-292-8525 or visit www.al1call.com

CCR: Government Mandated

The Pine Bluff Water Authority (PBWA), like water utilities across the U.S., is required by the Environmental Protection Agency to send its customers this water quality report of Consumer Confidence Report (CCR) each year.

In 1996, Congress amended the Safe Drinking Water Act by adding a provision requiring all community water systems to deliver to their customers an annual water quality report or CCR, which contains information on the water system's source water, the levels of any detected contaminants, compliance with drinking water rules and other educational information.

Every community water system serving at least 25 people year-round must prepare and distribute the CCR each year to all of its customers by July 1. Since 1999, the PBWA has provided its customers with this annual water quality report as required by the Safe Drinking Water Act.

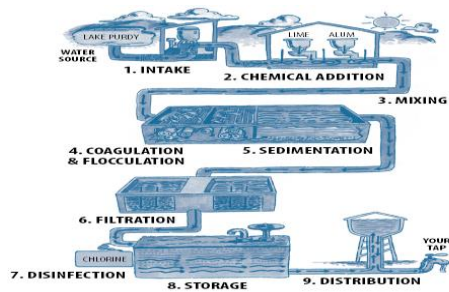
In 2017, as in years past, PBWA met all state and federal regulations for water quality. This CCR can be found on the PBWA's Web site by visiting www.pinebluffwater.com and clicking on "Water Quality". Copies are also available at the PBWA office, 5501 County Highway 15 Cleveland, Al. 35049.

A Commitment to Water Quality and Community

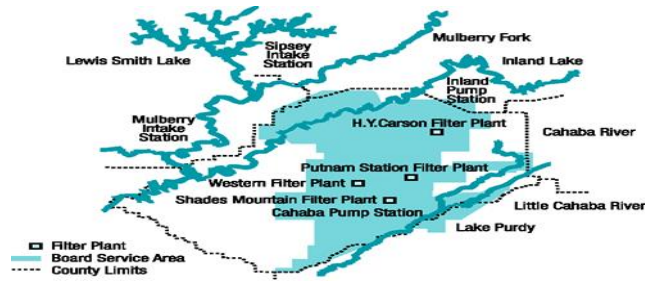
- ❖ Pine Bluff is not only committed to the quality of water, it is committed to the progress of its community. Over the past year Pine Bluff has worked to improve our customer service and the upgrade of our system. We are constantly preparing for the future growth of our customers and our community. This is just some of the exciting things to come in our town.
- ❖ In the summer of 2018, Burger King is scheduled to open. This will provide some new employment for our town. They are projecting an average of 40 to 50 employees to be hired for a variety of shifts.
- ❖ The town has applied for a grant to add sidewalks in its downtown area. These sidewalks will extend from Locusts Fork Baptist Church to the park. This will also include pedestrian crossings as well as lighting. This is to promote downtown activity and future use of the school and park.
- ❖ Coming in 2019, Pine Bluff Water will partner with the Locust Fork Fire Department to collect your volunteer fire dues for the Locust Fork Fire District.
- ❖ Have a great summer from all of us at Pine Bluff Water.

The Water Treatment Process

1. Intake – Water is taken from the source. Logs, fish and plants are screened out and water is drawn into the treatment plant.
2. Chemical Addition – Chemicals are added to kill germs and improve taste and odor.
3. Mixing – Water and chemicals are rapidly mixed.
4. Coagulation & Flocculation – The particles stick together and form larger particles called floc.
5. Sedimentation – The water and floc particles flow into a sedimentation basin. The floc then settles to the bottom and is removed from the water.
6. Filtration – Water Flows through filters. The filters are made of layers of sand and gravel.
7. Disinfection – A small amount of chlorine or other disinfecting chemical is added to kill any remaining germs and keeps the water safe as it travels to your house.
8. Storage – Water is placed in a closed tank or clear well.
9. Distribution – Water is transported to houses. The Birmingham Water Works delivers on average 100 million gallons of water per day.



10.



SOURCE WATER ASSESSMENT

A source water assessment has been updated on the water system. It is available for review at the BWWB’s main office during normal business hours. The following is a list of the sources of raw water along with the susceptibility rate of the contaminant source and the contaminant sources:

- Mulberry fork – moderate susceptibility (septic tanks and propane tanks): high susceptibility (industrial facility, bridge and highway)
- Sipsy Fork – moderate susceptibility (power plant)

The Birmingham Water Works Board is making a maximum effort to physically protect all of our critical assets.

EDUCATIONAL INFORMATION

Some people may be vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as people with cancer undergoing chemotherapy, people who have undergone organ transplant, people with HIV/AIDS or other immune system disorder, some elderly, and infants can be particularly at risk from infections. These people should seek advice about the drinking water from their health care providers. Environmental Protection Agency and the Center for Disease Control 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).

FOR YOUR HEALTH

Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immuno-compromised such as cancer patients undergoing chemotherapy, organ transplant recipients, HIV/AIDS positive or other immune system disorders, some elderly and infants can be particularly at risk from infections.

People at risk should seek advice about drinking water from their healthcare 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 at 1-800-426-4791. For further information, contact the Jefferson County Health Department at 205-933-9110.

ADDITIONAL INFORMATION

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 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.

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 dissolves naturally occurring minerals and radioactive material, and it can pick up substances resulting from the presence of animals or from human activity.

DEFINITIONS

Action Level (AL) – Concentration of contaminant which, when exceeded, triggers treatment of other requirements that a water system must follow.

Maximum Contaminant Level Goal (MCLG) – 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 Contaminant Level (MCL) – 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 Residual Disinfectant Level Goal (MRDLG) – The level of 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 (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.

Treatment Technique (TT) – Required process intended to reduce the level of a contaminant in drinking water.

Running Annual Average (RAA) – Compliance period where an average of four consecutive quarterly samples are used.

Contaminant - Any substance other than water. Note that contaminants, as defined, include dissolved minerals, purifying and dental health promotion additives.

Turbidity – Measure of the clarity of water as it relates to its particle content.

Variance and Exemptions – ADEM or EPA permission not to meet an MCL or treatment technique under certain conditions.

Mg/L – milligrams per liter, or parts per million (ppm).

Ug/L – micrograms per liter, or parts per billion (ppb).

DBP – Disinfection By-Products is a by-product of treatment.

Trihalomethanes – A disinfection By-product

Haloacetic Acids – A disinfection By-product

Wavier

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 was not required.

QUESTIONS AND ANSWERS

What is the Consumer Confidence Report? The Consumer Confidence Report (CCR) is an annual report **required** by the Environmental Protection Agency (EPA) on the water quality of a particular water system such as the PBWA. **The report details and outlines contaminants and their levels in drinking water.**

Why am I getting this report? The PBWA is federally mandated by the EPA to provide this information to you. The Alabama Department of Environmental Management (ADEM) enforces these rules for the EPA. Regulated drinking water substances that were detected during the 2017 calendar year are provided in the chart.

For whom is this report produced? The Consumer Confidence Report is produced for customers and wholesalers of the PBWA and ensures that everyone is provided safe drinking water.

How much does it cost to receive this report? This report is free of charge to all customers and stakeholders of the PBWA.

Where can I get additional copies of this report? You may obtain additional copies of the Consumer Confidence Report at Pine Bluff Water Authority Office, by mail (upon request). For questions concerning the CCR, please call Kim Vaughn at 205-681-8871.

What authorities regulate contaminant levels? In order to ensure that tap water is safe to drink, the EPA and ADEM prescribe regulations that limit the amount of certain substances in water provided by public water systems.

When does the board meet? 3rd Tuesday of each month at 5:30 pm.

Board Members are: Chairperson: Jeff McDonald, Vice Chair: Debra Hicks, Secretary/Treasurer: Milton Faris, Director: Deanna Washburn, Director: Ned Fortenberry.

ABBREVIATIONS

NA: Not Applicable **CDC:** Centers for Disease Control

ND: Not Detected **NTU:** Nephelometric Turbidity Unit

EPA: Environmental Protection Agency **ADEM:** Alabama Department of Environmental Management

2017 Chemical Analysis

| Regulated Drinking Water Contaminants for CCR | | | | | | | | | | | | |
|---|-----------------------------|--|---|---------------|---------|---------------|-----------------|---------------|---------|---------------|---|---|
| Primary Drinking Water Standards - Limits are set based on public health effects. | | | | | | | | | | | Major Sources in Drinking Water | |
| Parameters (mg/L) | MCLG | MCL | Carson | | Putnam | | Shades Mountain | | Western | | Major Sources in Drinking Water | |
| | | | Highest | Range | Highest | Range | Highest | Range | Highest | Range | | |
| Total Coliform Bacteria | 0 | Presence of Coliform bacteria is < 5% of monthly samples | The highest percentage of bacteria in the distribution system for one month was 1.25% (4 out of 319 samples). All locations that tested total coliform - positive were tested for <i>E. coli</i> . <i>E. coli</i> was not detected in any of these samples. All locations that tested total coliform - positive were resampled and all resamples were negative. | | | | | | | | | Naturally present in the environment. Human and animal fecal waste |
| Antimony | 0.006 | 0.006 | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder | |
| Arsenic | 0 | 0.01 | ND | ND | ND | ND | ND | ND | ND | ND | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes | |
| Barium | 2 | 2 | 0.014 | 0.013 - 0.014 | 0.014 | 0.012 - 0.014 | 0.024 | 0.023 - 0.024 | 0.021 | 0.019 - 0.021 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits | |
| Beryllium | 0.004 | 0.004 | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace and defense industries | |
| Cadmium | 0.005 | 0.005 | ND | ND | ND | ND | ND | ND | ND | ND | Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints | |
| Chlorine | MRDLG = 4 | MRDL = 4 | 2.49 | 1.62 - 2.49 | 3.26 | 1.09 - 3.26 | 2.43 | 1.55 - 2.43 | 2.10 | 1.50 - 2.10 | Water additive used to control microbes | |
| Chromium | 0.1 | 0.1 | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from steel and pulp mills; erosion of natural deposits | |
| Copper | 1.3 | AL = 1.3 | 0.002 | 0.002 | ND | ND | 0.036 | 0.023 - 0.036 | 0.002 | 0.002 | Corrosion of household plumbing systems; erosion of natural deposits | |
| Cyanide | 0.2 | 0.2 | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from steel/ metal factories; discharge from plastic and fertilizer factories | |
| Fluoride | 4 | 4 | 0.66 | 0.61 - 0.66 | 0.66 | 0.58 - 0.66 | 0.67 | 0.64 - 0.67 | 0.54 | ND - 0.54 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories | |
| Gross Alpha (pCi/L) | 0 | 15 | ND | ND | ND | ND | ND | ND | ND | ND | Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation | |
| Lead | 0 | AL = 0.015 | ND | ND | ND | ND | ND | ND | ND | ND | Corrosion of household plumbing; erosion of natural deposits | |
| Mercury | 0.002 | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and croplands | |
| Nitrate as N | 10 | 10 | 0.33 | ND - 0.33 | 0.33 | ND - 0.33 | 0.79 | 0.31 - 0.79 | 0.77 | 0.28 - 0.77 | Runoff from fertilizer; leaching from septic tanks and sewage; erosion of natural deposits | |
| Nitrite as N | 1 | 1 | ND | ND | ND | ND | ND | ND | ND | ND | Runoff from fertilizer; leaching from septic tanks and sewage; erosion of natural deposits | |
| Radium 226 (pCi/L) | 0 | 5 | ND | ND | ND | ND | ND | ND | ND | ND | Erosion of natural deposits | |
| Radium 228 (pCi/L) | 0 | 5 | ND | ND | ND | ND | ND | ND | ND | ND | Erosion of natural deposits | |
| Selenium | 0.05 | 0.05 | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from petroleum refineries; erosion of natural deposits; discharge from mines | |
| Thallium | 0.0005 | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | Leaching from ore-processing sites; discharge from electronics, glass and drug factories | |
| Total Nitrate/Nitrite | 10 | 10 | 0.33 | ND - 0.33 | 0.33 | ND - 0.33 | 0.79 | 0.31 - 0.79 | 0.77 | 0.28 - 0.77 | Runoff from fertilizer; leaching from septic tanks and sewage; erosion of natural deposits | |
| Turbidity (NTU) | N/A | 0.3 (TT) | 0.09 | 0.01 - 0.09 | 0.27 | 0.02 - 0.27 | 0.16 | 0.01 - 0.16 | 0.44 | 0.01 - 0.44 | Soil runoff | |
| Parameters (µg/L) | Regulated Organic Chemicals | | | | | | | | | | Major Sources in Drinking Water | |
| 1,1 Dichloroethylene | 7 | 7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from industrial chemical factories |
| 1,1,1 Trichloroethane | 200 | 200 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from metal degreasing sites and other factories |
| 1,1,2 Trichloroethane | 3 | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from industrial chemical factories |
| 1,2 Dichloroethane | 0 | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from industrial chemical factories |
| 1,2 Dichloropropane | 0 | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from industrial chemical factories |
| 1,2,4-Trichlorobenzene | 70 | 70 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from textile-finishing factories |
| 2,4,5-TP (Silvex) | 50 | 50 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Residue of banned herbicide |
| 2,4-D | 70 | 70 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff from herbicide used on row crops |
| Alachlor | 0 | 2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff from herbicide used on row crops |
| Atrazine | 3 | 3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff from herbicide used on row crops |
| Benzene | 0 | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from factories; leaching from gas storage tanks and landfills |
| Benzo(a)pyrene | 0 | 0.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Leaching from linings of water storage tanks and distribution lines |
| Carbafuran | 40 | 40 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Leaching of soil fumigant used on rice and alfalfa |
| Carbon Tetrachloride | 0 | 2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from chemical plants and other industrial activities |
| Chlordane | 0 | 2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Residue of banned termiticide |
| Chlorobenzene | 100 | 100 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from chemical and agricultural chemical factories |
| Cis-1,2 Dichloroethylene | 70 | 70 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from industrial chemical factories |
| Dalapon | 200 | 200 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff from herbicide used on rights of way |
| Di (2-Ethylhexyl) Adipate | 400 | 400 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from chemical factories |
| Di (2-Ethylhexyl) Phthalate | 0 | 6 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from rubber and chemical factories |
| Dibromochloropropane | 0 | 0.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff/ leaching from soil fumigant used on soybeans, cotton, pineapples and orchards |
| Dichloromethane | 0 | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from pharmaceutical and chemical factories |
| Dinoseb | 7 | 7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff from herbicide used on soybeans and vegetables |
| Diquat | 20 | 20 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff from herbicide use |
| Endothal | 100 | 100 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff from herbicide use |
| Erdrin | 2 | 2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Residue of banned insecticide |
| Ethylbenzene | 700 | 700 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from petroleum refineries |
| Ethylene Dibromide (EDB) | 0 | 0.05 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from petroleum refineries |
| Glyphosate | 700 | 700 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff from herbicide use |
| Heptachlor | 0 | 0.4 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Residue of banned termiticide |
| Heptachlor Epoxide | 0 | 0.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Breakdown of heptachlor |
| Hexachlorobenzene | 0 | 1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from metal refineries and agricultural chemical factories |
| Hexachlorocyclopentadiene | 50 | 50 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from chemical factories |
| Lindane | 0.2 | 0.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff/ leaching from insecticide used on cattle, lumber, gardens |
| Methoxychlor | 40 | 40 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff/ leaching from insecticide used on fruits, vegetables, alfalfa, livestock |
| o-Dichlorobenzene | 600 | 600 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from industrial chemical factories |
| Oxamyl (Vydate) | 200 | 200 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff/ leaching from insecticide used on apples, potatoes, and tomatoes |
| PCB, 1016 | 0 | 0.5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff from landfills; discharge of waste chemicals |
| PCB, 1221 | 0 | 0.5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff from landfills; discharge of waste chemicals |
| PCB, 1232 | 0 | 0.5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff from landfills; discharge of waste chemicals |
| PCB, 1242 | 0 | 0.5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff from landfills; discharge of waste chemicals |
| PCB, 1248 | 0 | 0.5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff from landfills; discharge of waste chemicals |
| PCB, 1254 | 0 | 0.5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff from landfills; discharge of waste chemicals |
| PCB, 1260 | 0 | 0.5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff from landfills; discharge of waste chemicals |
| p-Dichlorobenzene | 75 | 75 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from industrial chemical factories |
| Pentachlorophenol | 0 | 1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from wood preserving factories |
| Picloram | 500 | 500 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Herbicide runoff |
| Simazine | 4 | 4 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Herbicide runoff |
| Styrene | 100 | 100 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from rubber and plastic factories; leaching from landfills |
| Tetrachloroethylene | 0 | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Leaching from PVC pipes; discharge from factories and dry cleaners |
| Toluene | 1000 | 1000 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from petroleum factories |
| Total Haloacetic Acids | N/A | 60 | 30.2 | 19.5 - 30.2 | 12.3 | 11.0 - 12.3 | 32.1 | 15.0 - 32.1 | 26.0 | 17.6 - 26.0 | By-product of drinking water chlorination | |
| Total Trihalomethanes | N/A | 80 | 23.8 | 14.1 - 23.8 | 18.8 | 10.3 - 18.8 | 31.5 | 14.6 - 31.5 | 34.6 | 24.2 - 34.6 | By-product of drinking water chlorination | |
| Toxaphene | 0 | 3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Runoff/ leaching from insecticide used on cotton and cattle |
| Trans-1,2 Dichloroethylene | 100 | 100 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from industrial chemical factories |
| Trichloroethylene | 0 | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from metal degreasing sites and other factories |
| Vinyl Chloride | 0 | 2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Leaching from PVC piping; discharge from plastic factories |
| Xylenes | 10,000 | 10,000 | ND | ND | ND | ND | ND | ND | ND | ND | ND | Discharge from petroleum factories; discharge from chemical factories |
| Running Annual Average for System Wide Stage 2 Sites | | | | | | | | | | | | |
| Total Trihalomethanes (µg/L) | N/A | System-wide Running Annual Average (RAA): 80 µg/L | 47.7 | | | | | | | | Major Sources in Drinking Water | |
| Total Haloacetic Acids (µg/L) | N/A | System-wide Running Annual Average (RAA): 60 µg/L | 29.5 | | | | | | | | By-product of drinking water chlorination | |
| TOC Step Removal for Filter Plants | | | | | | | | | | | | |
| TOC Percent Removal | N/A | 4 (TT) | Carson | | Putnam | | Shades Mountain | | Western | | Major Sources in Drinking Water | |
| Total Organic Carbon (TOC) | N/A | 4 (TT) | 1.00 | | 1.00 | | 2.00 | | 1.00 | | Naturally present in the environment | |

2017Chemical Analysis

Standard List Of Primary Drinking Water Contaminants for CCR
Primary Drinking Water Standards - Limits are set based on public health effects.

| Bacteriological | | | | | |
|---|--|---|----------------|-------------------------|-----------------|
| Distribution System Microbiological Substance (Regulated) | | | | | |
| | MCL | | | | |
| Total Coliform Bacteria | Presence of Coliform bacteria is < 5% of monthly samples | The highest percentage of bacteria in the distribution system for one month was 1.25% (4 out of 319 samples). All locations that tested total coliform - positive were tested for <i>E. coli</i> . <i>E. coli</i> was not detected in any of these samples. All locations that tested total coliform - positive were resampled and all resamples were negative. | | | |
| Inorganic Chemicals and Radiological | | | | | |
| Parameters (mg/L) | MCL | Carson Highest | Putnam Highest | Shades Mountain Highest | Western Highest |
| Antimony | 0.006 | ND | ND | ND | ND |
| Arsenic | 0.01 | ND | ND | ND | ND |
| Barium | 2 | 0.014 | 0.014 | 0.024 | 0.021 |
| Beryllium | 0.004 | ND | ND | ND | ND |
| Cadmium | 0.005 | ND | ND | ND | ND |
| Chlorine | MRDL = 4 | 2.49 | 3.26 | 2.43 | 2.10 |
| Chromium | 0.1 | ND | ND | ND | ND |
| Copper | AL = 1.3 | 0.002 | ND | 0.036 | 0.002 |
| Cyanide | 0.2 | ND | ND | ND | ND |
| Fluoride | 4 | 0.66 | 0.66 | 0.67 | 0.54 |
| Gross Alpha (pCi/L) | 15 | ND | ND | ND | ND |
| Lead | AL = 0.015 | ND | ND | ND | ND |
| Mercury | 0.002 | ND | ND | ND | ND |
| Nitrate as N | 10 | 0.33 | 0.33 | 0.79 | 0.77 |
| Nitrite as N | 1 | ND | ND | ND | ND |
| Radium 226 (pCi/L) | 5 | ND | 0.2 | ND | ND |
| Radium 228 (pCi/L) | 5 | ND | ND | ND | ND |
| Selenium | 0.05 | ND | ND | ND | ND |
| Thallium | 0.002 | ND | ND | ND | ND |
| Total Nitrate/Nitrite | 10 | 0.33 | 0.33 | 0.79 | 0.77 |
| Turbidity (NTU) | 0.3 (TT) | 0.09 | 0.27 | 0.16 | 0.44 |
| Regulated Organic Chemicals | | | | | |
| Parameters (µg/L) | MCL | Carson Highest | Putnam Highest | Shades Mountain Highest | Western Highest |
| 1,1 Dichloroethylene | 7 | ND | ND | ND | ND |
| 1,1,1 Trichloroethane | 200 | ND | ND | ND | ND |
| 1,1,2 Trichloroethane | 5 | ND | ND | ND | ND |
| 1,2 Dichloroethane | 5 | ND | ND | ND | ND |
| 1,2 Dichloropropane | 5 | ND | ND | ND | ND |
| 1,2,4-Trichlorobenzene | 70 | ND | ND | ND | ND |
| 2,4,5-TP (Silvex) | 50 | ND | ND | ND | ND |
| 2,4-D | 70 | ND | ND | ND | ND |
| Alachlor | 2 | ND | ND | ND | ND |
| Atrazine | 3 | ND | ND | ND | ND |
| Benzene | 5 | ND | ND | ND | ND |
| Benzo(a)pyrene | 0.2 | ND | ND | ND | ND |
| Carbofuran | 40 | ND | ND | ND | ND |
| Carbon Tetrachloride | 5 | ND | ND | ND | ND |
| Chlordane | 2 | ND | ND | ND | ND |
| Chlorobenzene | 100 | ND | ND | ND | ND |
| Cis-1,2 Dichloroethylene | 70 | ND | ND | ND | ND |
| Dalapon | 200 | ND | ND | ND | ND |
| Di (2-Ethylhexyl) Adipate | 400 | ND | ND | ND | ND |
| Di (2-Ethylhexyl) Phthalate | 6 | ND | ND | ND | ND |
| Dibromochloropropane | 0.2 | ND | ND | ND | ND |
| Dichloromethane | 5 | ND | ND | ND | ND |
| Dinoseb | 7 | ND | ND | ND | ND |
| Diquat | 20 | ND | ND | ND | ND |
| Endothall | 100 | ND | ND | ND | ND |
| Endrin | 2 | ND | ND | ND | ND |
| Ethylbenzene | 700 | ND | ND | ND | ND |
| Ethylene Dibromide (EDB) | 0.05 | ND | ND | ND | ND |
| Glyphosate | 700 | ND | ND | ND | ND |
| Heptachlor | 0.4 | ND | ND | ND | ND |
| Heptachlor Epoxide | 0.2 | ND | ND | ND | ND |
| Hexachlorobenzene | 1 | ND | ND | ND | ND |
| Hexachlorocyclopentadiene | 50 | ND | ND | ND | ND |
| Lindane | 0.2 | ND | ND | ND | ND |
| Methoxychlor | 40 | ND | ND | ND | ND |
| o-Dichlorobenzene | 600 | ND | ND | ND | ND |
| Oxamyl (Vydate) | 200 | ND | ND | ND | ND |
| PCB, 1016 | 0.5 | ND | ND | ND | ND |
| PCB, 1221 | 0.5 | ND | ND | ND | ND |
| PCB, 1232 | 0.5 | ND | ND | ND | ND |
| PCB, 1242 | 0.5 | ND | ND | ND | ND |
| PCB, 1248 | 0.5 | ND | ND | ND | ND |
| PCB, 1254 | 0.5 | ND | ND | ND | ND |
| PCB, 1260 | 0.5 | ND | ND | ND | ND |
| p-Dichlorobenzene | 75 | ND | ND | ND | ND |
| Pentachlorophenol | 1 | ND | ND | ND | ND |
| Picloram | 500 | ND | ND | ND | ND |
| Simazine | 4 | ND | ND | ND | ND |
| Styrene | 100 | ND | ND | ND | ND |
| Tetrachloroethylene | 5 | ND | ND | ND | ND |
| Toluene | 1000 | ND | ND | ND | ND |
| Total Haloacetic Acids | 60 | 30.2 | 12.3 | 32.1 | 26.0 |
| Total Trihalomethanes | 80 | 23.8 | 18.8 | 31.5 | 34.6 |
| Toxaphene | 3 | ND | ND | ND | ND |
| Trans-1,2 Dichloroethylene | 100 | ND | ND | ND | ND |
| Trichloroethylene | 5 | ND | ND | ND | ND |
| Vinyl Chloride | 2 | ND | ND | ND | ND |
| Xylenes | 10,000 | ND | ND | ND | ND |
| Running Annual Average for System Wide Stage 2 Sites | | | | | |
| | MCL | RAA | | | |
| Total Trihalomethanes (µg/L) | System-wide Running Annual Average (RAA): 80 µg/L | 47.7 | | | |
| Total Haloacetic Acids (µg/L) | System-wide Running Annual Average (RAA): 60 µg/L | 29.5 | | | |
| TOC Step Removal for Filter Plants | | | | | |
| Total Organic Carbon (TOC) | MCL | Carson | Putnam | Shades Mountain | Western |
| | 4 (TT) | 1.00 | 1.00 | 2.00 | 1.00 |

2017 Chemical Analysis
Unregulated Organic Substances
Substances Not Detected

| Parameters (ug/L) | MCLG | MCL | Carson | | Putnam | | Shades Mountain | | Western | |
|-----------------------------|------|-----------|---------|-------|---------|-------|-----------------|-------|---------|-------|
| | | | Highest | Range | Highest | Range | Highest | Range | Highest | Range |
| 1,1,1,2-Tetrachloroethane | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethane | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloropropene | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2,3-Trichlorobenzene | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2,3-Trichloropropane | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2,4-Trimethylbenzene | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3,5-Trimethylbenzene | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Dichlorobenzene | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Dichloropropane | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Dichloropropene | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| 2,2-Dichloropropane | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| 3-Hydroxycarbofuran | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Aldicarb | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Aldicarb Sulfone | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Aldicarb Sulfoxide | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Aldrin | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromobenzene | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromochloromethane | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromoform | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromomethane | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Butachlor | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Carbaryl | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloroethane | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloromethane | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Dibromomethane | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Dicamba | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Dichlorodifluoromethane | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Dieldrin | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Fluorotrichloromethane | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Hexachlorobutadiene | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Isopropylbenzene | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Methiocarb | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Methomyl | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Methyl Tertiary Butyl Ether | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Metolachlor | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Metribuzin | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Monobromoacetic Acid | N/A | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Monochloroacetic Acid | 70 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Naphthalene | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| n-Butylbenzene | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| n-Propylbenzene | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| o-Chlorotoluene | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| p-Chlorotoluene | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| p-Isopropyltoluene | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Propachlor | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| Propoxur | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| sec-Butylbenzene | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |
| tert-Butylbenzene | 0 | Monitored | ND | ND | ND | ND | ND | ND | ND | ND |

Unregulated Organic Substances Detected

| | | | | | | | | | | |
|----------------------|-----|-----------|------|-------------|------|-------------|------|-------------|------|-------------|
| Bromodichloromethane | 0 | Monitored | 4.79 | 3.10 - 4.79 | 4.32 | 2.41 - 4.32 | 8.91 | 4.27 - 8.91 | 6.40 | 5.17 - 6.40 |
| Chloroform | 70 | Monitored | 19.0 | 10.5 - 19.0 | 13.8 | 7.77 - 13.8 | 20.4 | 9.14 - 20.4 | 27.6 | 19.1 - 27.6 |
| Dibromochloromethane | 60 | Monitored | ND | ND | 1.04 | ND - 1.04 | 2.19 | 1.16 - 2.19 | 1.11 | ND - 1.11 |
| Dibromoacetic Acid | N/A | Monitored | 2.00 | ND - 2.00 | 2.00 | ND - 2.00 | ND | ND | 1.20 | ND - 1.20 |
| Dichloroacetic Acid | 0 | Monitored | 19.6 | 12.0 - 19.6 | 9.27 | 7.00 - 9.27 | 21.9 | 11.0 - 21.9 | 17.0 | 11.3 - 17.0 |
| Trichloroacetic Acid | 20 | Monitored | 10.6 | 6.00 - 10.6 | 3.70 | 2.00 - 3.70 | 10.2 | 4.00 - 10.2 | 9.00 | 6.30 - 9.00 |

Secondary Drinking Water Standards

Limits are set based on cosmetic or aesthetic effects.

| Parameters (mg/L) | MCLG | MCL | Carson | | Putnam | | Shades Mountain | | Western | | Major Sources in Drinking Water |
|-------------------------------|------|---------------|---------|----------------|---------|------------------|-----------------|------------------|---------|------------------|--|
| | | | Highest | Range | Highest | Range | Highest | Range | Highest | Range | |
| Aluminum | N/A | 0.05 - 0.2 | 0.017 | 0.013 - 0.017 | 0.013 | 0.009 - 0.013 | 0.026 | 0.026 | 0.022 | 0.016 - 0.022 | By-product of drinking water treatment |
| Bromide | N/A | Monitored | ND | ND | ND | ND | ND | ND | 0.07 | ND - 0.07 | |
| Calcium | N/A | Monitored | 16.1 | 12.8 - 16.1 | 18.9 | 12.8 - 18.9 | 36.2 | 23.3 - 36.2 | 27.1 | 18.4 - 27.1 | |
| Carbon Dioxide | N/A | Monitored | 1.74 | ND - 1.74 | ND | ND | 1.74 | ND - 1.74 | ND | ND | |
| Chloride | N/A | 250 | 4.23 | 4.03 - 4.23 | 4.04 | 3.77 - 4.04 | 7.42 | 6.23 - 7.42 | 5.64 | 4.70 - 5.64 | |
| Copper | N/A | 1 | 0.002 | 0.002 | ND | ND | 0.036 | 0.023 - 0.036 | 0.002 | 0.002 | |
| Foaming Agent | N/A | 0.5 | ND | ND | ND | ND | ND | ND | ND | ND | |
| Iron | N/A | 0.3 | ND | ND | ND | ND | ND | ND | ND | ND | |
| Langlier Index (LSI) | N/A | Non-corrosive | -1.16 | -1.70 to -1.16 | -0.278 | -0.649 to -0.278 | -0.749 | -0.808 to -0.749 | -0.213 | -0.362 to -0.213 | |
| Magnesium | N/A | Monitored | 3.40 | 3.11 - 3.40 | 3.42 | 2.32 - 3.42 | 8.94 | 4.34 - 8.94 | 4.42 | 2.56 - 4.42 | |
| Manganese | N/A | 0.05 | ND | ND | ND | ND | ND | ND | ND | ND | |
| pH (SU) | N/A | 6.5 - 8.5 | 8.05 | 7.56 - 8.05 | 8.98 | 8.56 - 8.98 | 7.85 | 7.62 - 7.85 | 8.53 | 8.32 - 8.53 | |
| Potassium | N/A | Monitored | 1.63 | 1.27 - 1.63 | 1.25 | 1.21 - 1.25 | 1.45 | 1.40 - 1.45 | 1.73 | 1.57 - 1.73 | |
| Silver | N/A | 0.1 | ND | ND | ND | ND | ND | ND | ND | ND | |
| Sodium | N/A | Monitored | 1.72 | 1.34 - 1.72 | 1.39 | 1.24 - 1.39 | 9.28 | 6.00 - 9.28 | 2.88 | 1.62 - 2.88 | |
| Specific Conductivity (µS/cm) | N/A | Monitored | 152 | 128 - 152 | 158 | 142 - 158 | 293 | 243 - 293 | 196 | 162 - 196 | |
| Sulfate | N/A | 250 | 25.8 | 20.5 - 25.8 | 29.1 | 28.0 - 29.1 | 49.1 | 44.5 - 49.1 | 39.6 | 30.4 - 39.6 | |
| TDS | N/A | 500 | 95.0 | 77.5 - 95.0 | 103 | 82.5 - 103 | 180 | 148 - 180 | 133 | 97.5 - 133 | |
| Temperature (°F) | N/A | Monitored | 61 | 52 - 61 | 60 | 52 - 60 | 77 | 59 - 77 | 66 | 55 - 66 | |
| Total Alkalinity | N/A | Monitored | 34 | 20 - 34 | 36 | 26 - 36 | 72 | 48 - 72 | 42 | 36 - 42 | |
| Total Hardness | N/A | Monitored | 60 | 44 - 60 | 74 | 52 - 74 | 124 | 92 - 124 | 86 | 72 - 86 | |
| Zinc | N/A | 5 | ND | ND | ND | ND | 0.010 | 0.005 - 0.010 | ND | ND | |

| | | | | | | | | | | | |
|---------------------------|-----|----------------|----|----|----|----|----|----|----|----|--|
| Color, APHA (color units) | N/A | 15 color units | ND | ND | ND | ND | ND | ND | ND | ND | |
| Odor (TON) | N/A | 3 TON | ND | ND | ND | ND | ND | ND | ND | ND | |

Monitoring

| | | | | | | | | | | | |
|--------|-----|-----|----|----|----|----|-------|---------------|----|----|---|
| Nickel | N/A | 0.1 | ND | ND | ND | ND | 0.003 | 0.002 - 0.003 | ND | ND | Discharge from nickel smelting/refining and steelworks industries |
|--------|-----|-----|----|----|----|----|-------|---------------|----|----|---|

| Oneonta Utilities Board - Contaminants Monitored | Date Monitored |
|--|----------------|
| Inorganic Compounds | 2017 |
| Lead and Copper | 2016 |
| Microbiological Contaminants | Current |
| Nitrates | 2017 |
| Radioactive Contaminants | 2017 |
| Synthetic Organic Contaminants (including herbicides and pesticides) | 2015 |
| Volatile Organic Contaminants | 2017 |
| Disinfection By-products (TTHM and HAA5) | 2017 |

Table of Primary Drinking Water Contaminants

| CONTAMINANT | MCL | Amount Detected | CONTAMINANT | MCL | Amount Detected |
|--|------------|-----------------|----------------------------|---------|-----------------|
| Bacteriological | | | | | |
| Total Coliform Bacteria | < 5% | ND | Endothall | 100 ppb | ND |
| Turbidity | TT | 1.65 | Endrin | 2 ppb | ND |
| Radiological | | | | | |
| Beta/photon emitters (mrem/yr) | 4 | ND | Epichlorohydrin | TT | ND |
| Alpha emitters (pCi/L) | 15 | ND | Glyphosate | 700 ppb | ND |
| Combined radium (pCi/L) | 5 | ND | Heptachlor | 400 ppt | ND |
| Inorganic | | | | | |
| Antimony | 6 ppb | ND | Heptachlor epoxide | 200 ppt | ND |
| Arsenic | 10 ppb | ND | Hexachlorobenzene | 1 ppb | ND |
| Barium | 2 ppm | 0.022 | Lindane | 200 ppt | ND |
| Beryllium | 4 ppb | ND | Methoxychlor | 40 ppb | ND |
| Cadmium | 5 ppb | ND | Oxamyl [Vydate] | 200 ppb | ND |
| Chromium | 100 ppb | ND | PCBs | 500 ppt | ND |
| Copper * | AL=1.3 ppm | 0.24 | Pentachlorophenol | 1 ppb | ND |
| Cyanide | 200 ppb | ND | Picloram | 500 ppb | ND |
| Fluoride | 4 ppm | ND | Simazine | 4 ppb | ND |
| Lead * | AL=15 ppb | ND | Toxaphene | 3 ppb | ND |
| Mercury | 2 ppb | ND | Benzene | 5 ppb | ND |
| Nitrate | 10 ppm | 1.32 | Carbon Tetrachloride | 5 ppb | ND |
| Nitrite | 1 ppm | ND | Chlorobenzene | 100 ppb | ND |
| Selenium | 50 ppb | ND | Dibromochloropropane | 200 ppt | ND |
| Thallium | 2 ppb | ND | 0-Dichlorobenzene | 600 ppb | ND |
| *90th percentile of the most recent sampling event. | | | p-Dichlorobenzene | 75 ppb | ND |
| | | | 1,2-Dichloroethane | 5 ppb | ND |
| | | | 1,1-Dichloroethylene | 7 ppb | ND |
| | | | Cis-1,2-Dichloroethylene | 70 ppb | ND |
| Organic Chemicals | | | | | |
| | | | trans-1,2-Dichloroethylene | 100 ppb | ND |
| 2,4-D | 70 ppb | ND | Dichloromethane | 5 ppb | ND |
| 2,4,5-TP (Silvex) | 50 ppb | ND | 1,2-Dichloropropane | 5 ppb | ND |
| Acrylamide | TT | ND | Ethylbenzene | 700 ppb | ND |
| Alachlor | 2 ppb | ND | Ethylene dibromide | 50 ppt | ND |
| Atrazine | 3 ppb | ND | Styrene | 100 ppb | ND |
| Benzo(a)pyrene[PAHs] | 200 ppt | ND | Tetrachloroethylene | 5 ppb | ND |
| Carbofuran | 40 ppb | ND | 1,2,4-Trichlorobenzene | 70 ppb | ND |
| Chlordane | 2 ppb | ND | 1,1,1-Trichloroethane | 200 ppb | ND |
| Dalapon | 200 ppb | ND | 1,1,2-Trichloroethane | 5 ppb | ND |
| Di-(2-ethylhexyl)adipate | 400 ppb | ND | Trichloroethylene | 5 ppb | ND |
| Di-(2-ethylhexyl)phthalates | 6 ppb | ND | TTHM | 80 ppb | 46.3 |
| Dinoseb | 7 ppb | ND | Toluene | 1 ppm | ND |
| Diquat | 20 ppb | ND | Vinyl Chloride | 2 ppb | ND |
| Chloramines | 4 ppm | ND | Xylenes | 10 ppm | ND |
| Chlorite | 1 ppm | ND | TOC | TT | 3.9 |
| HAA5 | 60 ppb | 30 | Chlorine | 4 ppm | 2.3 |

Table of Unregulated Drinking Water Contaminants

| CONTAMINANT | Low Result, PPM | High Result, PPM | CONTAMINANT, PPM | Low Result, PPM | High Result, PPM |
|---------------------------|-----------------|------------------|-------------------------|-----------------|------------------|
| 1,1 - Dichloropropene | ND | ND | Chloroform | ND | 0.0361 |
| 1,1,1,2-Tetrachloroethane | ND | ND | Chloromethane | ND | ND |
| 1,1,2,2-Tetrachloroethane | ND | ND | Dibromochloromethane | ND | 0.0074 |
| 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 | p-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 | ND | 0.0128 | P-Chlorotoluene | ND | ND |
| Bromoform | ND | 0.0020 | 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 | Trichlorofluoromethane | ND | ND |

Table of Secondary Drinking Water Contaminants

| Parameters | MCLG | MCL | Low Result | High Result | Parameters (mg/L) | MCLG | MCL | Low Result | High Result |
|---------------------|------|-----------|------------|-------------|-------------------|------|-----------|---------------|---------------|
| pH | 7 | Monitored | 6.42 | 6.42 | Aluminum | 0 | 0.2 | ND | ND |
| Color, APHA (units) | N/A | 15 | ND | ND | Copper | N/A | 1 | ND | ND |
| Odor | N/A | 3 | ND | ND | Iron | 0 | 0.3 | ND | ND |
| Foaming Agents | N/A | 0.5 | ND | ND | Manganese | 0 | 0.05 | ND | ND |
| TDS | 0 | 500 | 160 | 160 | Silver | 0 | 0.1 | ND | ND |
| Fluoride | N/A | 2.0 | ND | ND | Zinc | 0 | 5 | ND | ND |
| Sulfate | 0 | 250 | 44.9 | 44.9 | Total Hardness | 0 | Monitored | 88 | 88 |
| Chloride | N/A | 250 | 15.3 | 15.3 | Corrosivity | N/A | N/A | Non Corrosive | Non Corrosive |

Table of Detected Primary Drinking Water Contaminants

| CONTAMINANT | MCLG | MCL | Range Detected | | | Amount Detected | Likely Source of Contamination and Health Affects |
|-------------|---------|-------------|----------------|---|-------|-----------------|--|
| | | | | | | | |
| Turbidity | N/A | TT | 0.02 | - | 1.65 | 0.84 | Soil Runoff. |
| Barium | 2 | 2 ppm | 0.022 | - | 0.022 | 0.022 | Discharge of drilling wastes; discharge of metal refineries; erosion of natural deposits. |
| Nitrate | 10 | 10 ppm | 0.47 | - | 1.32 | 0.90 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Copper | 1.3 | AL= 1.3 ppm | ND | - | 0.79 | 0.39 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives (90 th Percentile Value) |
| HAA5 | N/A | 60 ppb | ND | - | 30 | 15 | By-product of drinking water chlorination |
| TTHM | N/A | 80 ppb | ND | - | 36.9 | 18.5 | By-product of drinking water chlorination |
| TOC | N/A | TT | 0.6 | - | 2.5 | 1.6 | Runoff from industrial, urban and natural soils; Decomposition of plant material in surface water |
| Chlorine | MRDLG=4 | MRDL =4 ppm | 0.76 | - | 2.3 | 1.53 | Drinking water additive for bacterial disinfection |

Table of Detected Contaminants Blount County Water

| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
|--------------------------------------|---------------|----------------|------------------|------|--------|--|
| Microbiological Contaminants | | | | | | |
| Turbidity | No | .60 | NTU | n/a | TT | Soil runoff |
| Radioactive Contaminants | | | | | | |
| 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 |
| Inorganic Contaminants | | | | | | |
| Barium | No | .014 | ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Copper | No | .032 | ppm | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Nitrate | No | 1.42 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Volatile Organic Contaminants | | | | | | |
| TTHM [Total trihalomethanes] | No | 12.4 | ppb | 0 | 80 | By-product of drinking water chlorination |
| Haloacetic Acids (HAA5) | No | 5 | 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 |
|--------------------------------|------------|-----------------|----------------------|---------|-----------------|
| Bacteriological | | | Endothall | 100 ppb | ND |
| Total Coliform Bacteria | < 5 % | ND | Endrin | 2 ppb | ND |
| Turbidity | TT | .60 | Epichlorohydrin | TT | ND |
| Radiological | | | 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 |
| Inorganic Chemicals | | | 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 | ND | Benzene | 5 ppb | ND |
| Copper | AL=1.3 ppm | .032 | 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 |
| Organic Chemicals | | | 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) phthalates | 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 ppt | 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 | .5 | 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.

| Test Results – Unregulated Contaminant Table | | | | | |
|--|------------|-------------|-------------------------|------------|-------------|
| Monitoring results in ppm | | | | | |
| CONTAMINANT | Low Result | High Result | CONTAMINANT | Low Result | High Result |
| 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 – Trichloropropene | ND | ND | Dichlorodifluoromethane | ND | ND |
| 1,2,4 – Trimethylbenzene | ND | ND | Dieldrin | ND | ND |
| 1,3 – Dichloropropene | ND | ND | Hexachlorobutadiene | ND | ND |
| 1,3 – Dichloropropene | ND | ND | Isoppylbenzene | ND | ND |
| 1,3,5 – Trimethylbenzene | ND | ND | M-Dichlorobenzene | ND | ND |
| 2,2 – Dichloropropene | 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 |
| Bromofom | <.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 | Trichlorofluoromethane | 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.

| Third Unregulated Contaminant Monitoring (UCMR 3) | | | |
|---|----------|--------------------------------------|----------|
| Monitoring results in ppb | | | |
| | Detected | | Detected |
| 1,2,3 -trichloropropene | ND | cobalt | ND |
| 1,3-butadiene | ND | strontium | 78.2 |
| chloromethane (methyl chloride) | ND | chromium ⁵ | ND |
| 1,1-dichloroethane | ND | chromium-6 ⁶ | .42 |
| bromomethane | ND | chlorate | 130 |
| chlorodifluoromethane (HCFC-22) | ND | perfluorooctanesulfonic acid (PFOS) | ND |
| bromochloromethane (Halon 1011) | ND | perfluorooctanoic acid (PFOA) | ND |
| 1,4-dioxane | ND | perfluorononanoic acid (PFNA) | ND |
| vanadium | .22 | perfluorohexanesulfonic acid PFHxS) | ND |
| molybdenum | ND | perflouorobutanesulfonic acid (PFBS) | ND |
| 17-β-estradiol | ND | perflouroheptanoic acid (PFHpA) | ND |
| 17-α-ethynylestradiol | ND | estrone | ND |
| estriol | ND | testosterone | ND |
| equilin | ND | 4-anadrostene-3,17dione | ND |
| noroviruses | ND | enteroviruses | ND |

As you can see by the table, our system had no violations of allowable limits of contaminants in your 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 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).

| 2017 Stage 2 Disinfection Byproducts | | | | | | |
|--|------------------------|-------------------|------------------------|----------------------|--|-----------|
| Total Trihalomethane Monitoring (TTHM) | | | | | | |
| | | 950 County Hwy 13 | | 426 Sand Valley Road | | LRAA TTHM |
| Quarter | Sample Date | ppb | Sample Date | ppb | | |
| First | 2/16/17 | 0.0 | 2/16/17 | 54.0 | | 27.0 |
| Second | 5/9/17 | 7.7 | 5/9/17 | 89.4 | | 48.6 |
| Third | 8/15/17 | 5.5 | 8/15/17 | 40.2 | | 22.9 |
| Fourth | 11/16/17 | 9.6 | 11/16/17 | 74.50 | | 42.1 |
| | Local Running Average: | 5.7 | Local Running Average: | 64.5 | | 35.2 |
| Haloacetic Acid Monitoring (HAA5) | | | | | | |
| | | 950 County Hwy 13 | | 426 Sand Valley Road | | LRAA HAA5 |
| Quarter | Sample Date | ppb | Sample Date | ppb | | |
| First | 2/16/17 | 0.0 | 2/16/17 | 26.0 | | 13.0 |
| Second | 5/9/17 | 0.0 | 5/9/17 | 39.0 | | 19.5 |
| Third | 8/15/17 | 6.0 | 8/15/17 | 26.0 | | 16.0 |
| Fourth | 11/16/17 | 0.0 | 11/16/17 | 42.00 | | 21.0 |
| | Local Running Average: | 1.5 | Local Running Average: | 33.3 | | 17.3 |

The most recent testing for lead and copper compliance within the distribution system was from July 2015 – September 2015. This testing was done in accordance with applicable regulations. The 90th percentile lead sample was <0.01mg/L. No lead samples exceeded the action level. The 90th percentile copper sample was 0.26 mg/L. No copper samples exceeded the action level. The BWVB voluntarily monitors for the organisms Cryptosporidium and Giardia quarterly at our raw water sites. **Distribution System Evaluation Sites (DSE)** 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. Pine Bluff Water Authority 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 it 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.epaq.gov/safewater/lead>.

Fun Facts

- Water is made up of two elements, [hydrogen](#) and [oxygen](#). Its chemical formula is H₂O.
- Each molecule of water is made up of two hydrogen atoms bonded to a single oxygen atom.
- The existence of water is essential for life on Earth.
- Water has three different states, liquid, solid and gas.
- The word water usually refers to water in its liquid state. The solid state of water is known as ice while the gas state of water is known as steam or water vapor.
- Water covers around 70% of the Earth's surface.
- The three largest oceans on Earth are the Pacific Ocean (largest), the Atlantic Ocean (second largest) and the Indian Ocean (third largest). More [ocean facts](#).
- Found in the Pacific Ocean, the Mariana Trench is the deepest known point in the world's oceans.
- Ocean tides are caused by the rotation of the Earth and the [gravitational](#) pull of the Moon and Sun acting on ocean water.
- The freezing point of water lowers as the amount of salt dissolved in it increases. With average levels of salt, seawater freezes at -2 °C (28.4 °F).

The longest river in the USA is the Missouri River. At around 2,340 miles (3,770 km) in length it is slightly longer than the [Mississippi River](#) (2,320 miles). The two combines to form the longest river system in North America.