

For Consumers Of The:

Dekalb-Jackson Water Supply District  
PWS ID: AL0001796  
21700 AL HWY 117  
Ider, AL 35981

By Order Of The U.S. Environmental Protection Agency & The Alabama Department Of Environmental Management

# 2018 Water Quality Report

## THE EPA WANTS YOU TO KNOW

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, in some cases, radioactive material, and it can pick up substances resulting from the presence of animals or from human activity.

In order to insure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

All drinking water, including bottled water, is reason-ably expected to contain at least small amounts of some contaminants. **THE MERE PRESENCE OF A CONTAMINANT 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 EPA's Safe Drinking Water Hotline.

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 and Center For Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the EPA Safe Drinking Water Hotline.

### EPA Safe Drinking Water Hotline

call (800) 426-4791 or visit [www.epa.gov/safewater](http://www.epa.gov/safewater)

If you have any questions about this report or concerning your water utility, please contact Kenneth Palmer at (256) 632-2254 or come by our office, located at 21700 AL HWY 117, Ider, AL 35981.

Dekalb-Jackson Water Supply District is pleased to share our annual Water Quality Report with our customers.

This Water Quality Report is meant to describe, in full detail, the quality of the water provided to you between January 1, 2018 and December 31, 2018.

For this year, as in years past, our water system has surpassed the strict regulations of both the State Of Alabama and the U.S. EPA, which require all water suppliers to deliver this annual Water Quality Report.

## GET INVOLVED IN YOUR WATER QUALITY

### MEET WITH US

We want you, our valued customer, to be informed about your water utility. You can attend open water board meetings on the 2nd Monday of each month at 5:00 p.m. central time at our water office.

Our water system is governed by a board of directors appointed by the local county government and is managed by a system manager responsible to the board.

Pay your bill online at:  
[www.djwaterusmgas.com](http://www.djwaterusmgas.com)

Or by telephone at:  
(256) 632-2254



bank draft forms available on our website

### WATER QUALITY SUMMARY

For 2018, we are pleased to report that your drinking water has been delivered to you with the highest quality and concern for safety. However, the system did receive a monitoring violation for above MCL levels of a disinfection by-product. An investigation determined the cause to be circumstantial and there was no cause for health concerns. You can read more about this in the Table Of Detected Contaminants.

#### ABOUT LEAD AND COPPER

With the recent issues in the news of lead and copper problems in US cities such as Flint, MI, we want to take this opportunity to assure you that we take great care to protect your water from being corrosive and creating these problems in our system. While lead and copper most often comes from the piping and fixtures in your home, our responsibility is to provide your home with water that doesn't leach those metals out of your plumbing.

We are pleased to report that this year, as in years past, our system has had no instance of a lead or copper problem either in our treatment plant, our distribution system, or any homes on our grid.

Learn more at [www.epa.gov/dwreginfo/lead-and-copper-rule](http://www.epa.gov/dwreginfo/lead-and-copper-rule)

Our water system has enlisted the professional services of Anthem Water as a 3<sup>rd</sup> party quality control specialist. Anthem Water works with our system throughout the year to assure that chemical monitoring is appropriate for us to deliver the highest quality water possible to our customers. Anthem Water has also prepared this custom report in accordance with state and federal law in order to provide you with the most pertinent information possible about the quality of your water.

[www.anthemwater.com](http://www.anthemwater.com)

You can visit the EPA website online at [www.epa.gov/safewater](http://www.epa.gov/safewater) or visit the ADEM website online at [adem.alabama.gov/programs/water/drinkingwater.net](http://adem.alabama.gov/programs/water/drinkingwater.net) for additional information on understanding your drinking water quality.

# ABOUT YOUR SOURCE WATER

In 2018 our water department distributed 311,000,000 gallons of water to our customers. Our water source is surface water pumped from the Tennessee River. Your water is treated using disinfection and membrane filtration to remove or reduce harmful contaminants that may come from the source water.

ADEM (Alabama Department of Environmental Management) has required that all water systems complete a SWAP (source water assessment plan). The SWAP is composed of four distinct activities: delineation of the source water assessment area, contaminant inventory, susceptibility analysis and public awareness. Dekalb- Jackson Water Supply District has completed each required component of the SWAP and ADEM has approved our plan. Our water supply has received a rating of low for susceptibility of contamination. You may view the SWAP at the water department office.

## DID YOU KNOW?

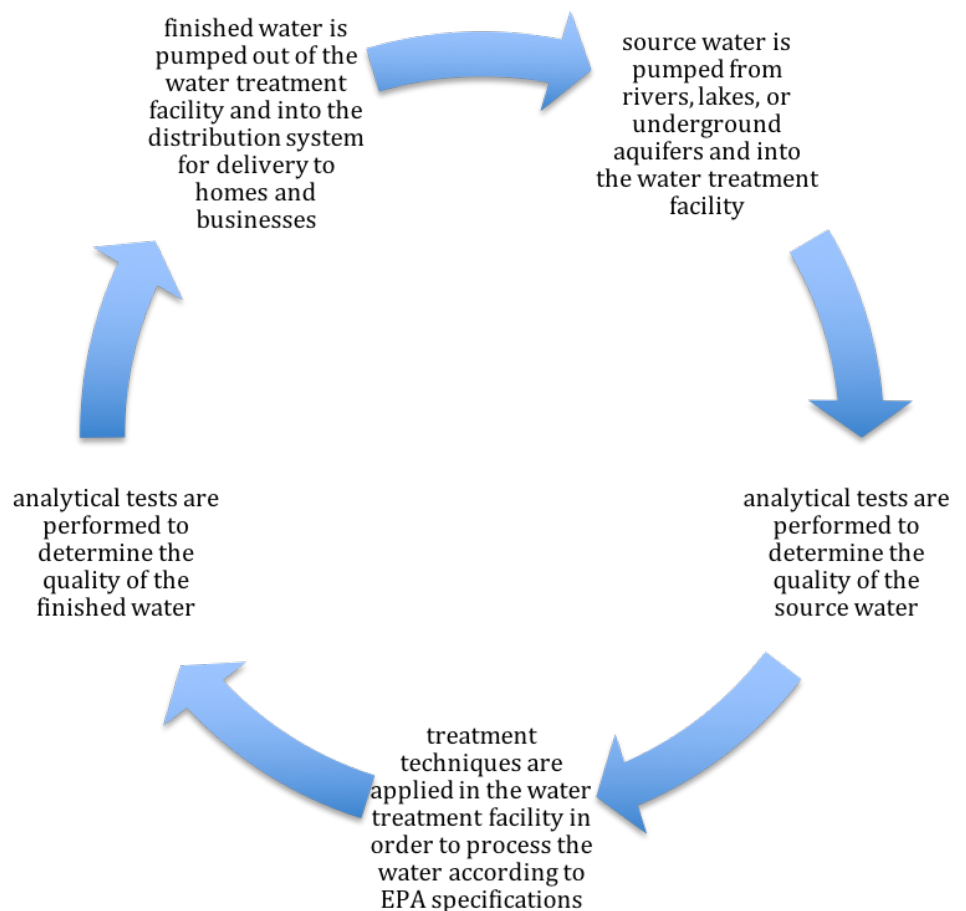
Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature:

- 1) Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- 2) Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- 3) Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- 4) Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- 5) Water plants only when necessary.
- 6) Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- 7) Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- 8) Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's bill!
- 9) Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information.

*We ask that you be considerate when accidents or Mother Nature hinder our efforts to supply your water. Regardless of the time or the weather, our water works personnel are on call and working to keep your water flowing. Please help us to protect our water sources, which are a vital part of our lives and our future.*

The process of preparing source water for consumption in this country is not, necessarily, difficult, but it is highly regulated – nationally by the E.P.A. and locally by state environmental agencies. The chart below provides a general outline of

## THE WATER TREATMENT PROCESS



# PRIMARY LIST OF DRINKING WATER CONTAMINANTS

At high levels some primary contaminants are known to pose a health risk to humans. This table provides a reference of those contaminants and their safe MCL.

CONTAMINANT	MCLG	MCL	UNITS
<b>MICROORGANISMS</b>			
Cryptosporidium	0.000	TT	ppm
Giardia lamblia	0.000	TT	ppm
Heterotrophic plate count	NA	TT	ppm
Legionella	0.000	TT	ppm
Total Coliforms (including fecal coliform)	0.000	5	% total
Turbidity	NA	TT	ppm
Viruses (enteric)	0.000	TT	ppm
<b>DISINFECTANTS</b>			
Chloramines (as Cl <sub>2</sub> )	4.0	4.0	ppm
Chlorine (as Cl <sub>2</sub> )	4.0	4.0	ppm
Chlorine dioxide (as ClO <sub>2</sub> )	0.8	0.8	ppm
<b>DISINFECTION BYPRODUCTS</b>			
Bromate	0.000	0.010	ppm
Chlorite	0.800	1.000	ppm
Haloacetic acids (HAA5)	NA	0.060	ppm
Total Trihalomethanes (TTHMs)	NA	0.080	ppm
<b>INORGANIC CHEMICALS</b>			
Antimony	0.006	0.006	ppm
Arsenic	0.000	0.010	ppm
Asbestos (fiber >10 micrometers)	7.000	7.000	MFL
Barium	2.000	2.000	ppm
Beryllium	0.004	0.004	ppm
Cadmium	0.005	0.005	ppm
Chromium (total)	0.100	0.100	ppm
Copper	1.300	AL=1.3	ppm
Cyanide (as free cyanide)	0.200	0.200	ppm
Fluoride	4.000	4.000	ppm
Lead	0.000	AL=0.015	ppm
Mercury (inorganic)	0.002	0.002	ppm
Nitrate (measured as Nitrogen)	10.000	10.000	ppm
Nitrite (measured as Nitrogen)	1.000	1.000	ppm
Total Nitrate + Nitrite	10.000	10.000	ppm
Selenium	0.050	0.050	ppm
Thallium	0.001	0.002	ppm
<b>ORGANIC CHEMICALS</b>			
Acrylamide	0.000	TT	ppm
Alachlor	0.000	0.002	ppm
Atrazine	0.003	0.003	ppm
Benzene	0.000	0.005	ppm
Benzo(a)pyrene (PAHs)	0.000	0.200	ppb
Carbofuran	0.040	0.040	ppm
Carbon tetrachloride	0.000	0.005	ppm
Chlordane	0.000	0.002	ppm
Chlorobenzene	0.100	0.100	ppm
2,4-D	0.070	0.070	ppm
Dalapon	0.200	0.200	ppm
1,2-Dibromo-3-chloropropane (DBCP)	0.000	0.200	ppb

CONTAMINANT	MCLG	MCL	UNITS
<b>ORGANIC CHEMICALS (continued)</b>			
o-Dichlorobenzene	0.600	0.600	ppm
p-Dichlorobenzene	0.075	0.075	ppm
1,2-Dichloroethane	0.000	0.005	ppm
1,1-Dichloroethylene	0.007	0.007	ppm
cis-1,2-Dichloroethylene	0.070	0.070	ppm
trans-1,2-Dichloroethylene	0.100	0.100	ppm
Dichloromethane	0.000	0.005	ppm
1,2-Dichloropropane	0.000	0.005	ppm
Di(2-ethylhexyl) adipate	0.400	0.400	ppm
Di(2-ethylhexyl) phthalate	0.000	0.006	ppm
Dinoseb	0.007	0.007	ppm
Dioxin (2,3,7,8-TCDD)	0.000	3.0E-08	ppm
Diquat	0.020	0.020	ppm
Endothall	0.100	0.100	ppm
Endrin	0.002	0.002	ppm
Epichlorohydrin	0.000	TT	ppm
Ethylbenzene	0.700	0.700	ppm
Ethylene dibromide	0.000	0.050	ppb
Glyphosate	0.700	0.700	ppm
Heptachlor	0.000	0.400	ppb
Heptachlor epoxide	0.000	0.200	ppb
Hexachlorobenzene	0.000	0.001	ppm
Hexachlorocyclopentadiene	0.050	0.050	ppm
Lindane	0.200	0.200	ppb
Methoxychlor	0.040	0.040	ppm
Oxamyl (Vydate)	0.200	0.200	ppm
Polychlorinated biphenyls (PCBs)	0.000	0.0005	ppm
Pentachlorophenol	0.000	0.001	ppm
Picloram	0.500	0.500	ppm
Simazine	0.004	0.004	ppm
Styrene	0.100	0.100	ppm
Tetrachloroethylene	0.000	0.005	ppm
Toluene	1.000	1.000	ppm
Total Organic Carbon	NA	TT	ppm
Toxaphene	0.000	0.003	ppm
2,4,5-TP (Silvex)	0.050	0.050	ppm
1,2,4-Trichlorobenzene	0.070	0.070	ppm
1,1,1-Trichloroethane	0.200	0.200	ppm
1,1,2-Trichloroethane	0.003	0.005	ppm
Trichloroethylene	0.000	0.005	ppm
Vinyl chloride	0.000	0.002	ppm
Xylenes (total)	10.000	10.000	ppm
<b>RADIONUCLIDES</b>			
Alpha particles	0.0	15.0	pCi/L
Beta particles and photon emitters	0.0	4.0	mrem/yr
Radium 226 and Radium 228 (combined)	0.0	5.0	pCi/L
Uranium	0.0	30.0	ppb

visit [www.epa.gov/safewater/contaminants/index](http://www.epa.gov/safewater/contaminants/index) for more information on the sources and health risks of contaminants in these lists

CONTAMINANT	MCLG	MCL	UNITS
<b>SECONDARY CONTAMINANTS</b>			
aluminum	NA	0.2	ppm
calcium	NA	NA	ppm
carbon dioxide	NA	NA	ppm
chloride	NA	250	ppm
color	NA	15	units
corrosivity	NA	not corrosive	units
MBAs	NA	0.5	ppm
hardness	NA	NA	ppm
iron	NA	0.3	ppm
magnesium	NA	NA	ppm
manganese	NA	0.05	ppm
nickel	NA	0.1	ppm
odor	NA	3	units
pH	NA	NA	SU
silver	NA	0.1	ppm
sodium	NA	NA	ppm
specific conductance	NA	NA	umho/cm
sulfate	NA	250	ppm
total alkalinity	NA	NA	ppm
total dissolved solids	NA	500	ppm
zinc	NA	5	ppm
<b>OTHER REGULATED CONTAMINANTS</b>			
bromoacetic acid	NA	NA	ppb
dibromoacetic acid	NA	NA	ppb
chloroacetic acid	0.07	NA	ppm
dichloroacetic acid	0	NA	ppm
trichloroacetic acid	0.02	NA	ppm
bromodichloromethane	0	NA	ppm
dibromochloromethane	0.06	NA	ppm
chloroform	0.07	NA	ppm
bromoform	0	NA	ppm

for more unregulated contaminants, please visit [www.epa.gov/safewater](http://www.epa.gov/safewater)

*In addition to the primary drinking water contaminants, this utility monitors regularly for some secondary and unregulated contaminants as required by ADEM. ADEM requires publication of all detections of these contaminants in the Annual Water Quality Report. The required monitoring of unregulated contaminants further insures the quality of your drinking water.*

## CONTAMINANTS THAT MAY BE PRESENT IN YOUR WATER

**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 runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**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 runoff, and septic systems.

**Pesticides & Herbicides:** which may come from a variety of sources such as agricultural operations, urban storm water runoff, and residential uses.

**Radioactive Contaminants:** which can be naturally occurring or be the result of oil and gas production and mining activities.

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. Your 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>.

## DEFINITIONS

**MAX AMOUNT:** the highest level detected of a contaminant for comparison against the acceptable level. These levels could be the highest single measurement or an average of values depending on the contaminant.

**MAXIMUM CONTAMINANT LEVEL (MCL):** the highest level of a contaminant that is allowed by regulation in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.

**MAXIMUM CONTAMINANT LEVEL GOAL (MCLG):** 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.

**ACTION LEVEL (AL):** the concentration of a contaminant which, if exceeded, triggers treatment requirements that a water system must follow.

**RANGE:** the lowest to the highest values for all samples tested for a contaminant during the specified period. If only one sample is taken there is no range to report for that contaminant.

**TREATMENT TECHNIQUE (TT):** a required process intended to reduce the level of a contaminant in drinking water.

NA: not applicable

ND: not detected

NTU: nephelometric turbidity units

pCi/L: picocuries per liter (a measure of radioactivity)

ppb: parts per billion (micrograms per liter)

ppm: parts per million (milligrams per liter)

umho/cm: micromhos per centimeter

SU: standard unit

1. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.
2. Turbidity is a measure of the cloudiness of the water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system.
3. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, and/or central nervous system, and may have an increased risk of developing cancer.
4. IDSE results, if required, are included in the range but not the average for TTHM and HAA5. Under the EPA Stage 2 Disinfectants/Disinfection By-Products Rule (D/DBPR), our public water system was required to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE), and is intended to identify locations in our distribution system with elevated disinfection by-product concentrations. The locations selected for IDSE may be used for compliance monitoring under Stage 2 DBPR beginning in 2012. Disinfection by-products are the result of providing continuous disinfection of your drinking water and form when disinfectants combine with organic matter naturally occurring in your source water. Disinfection by-products are grouped into two categories: total trihalomethanes (TTHM) and haloacetic acids (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfection by-products in drinking water, including both TTHM and HAA5.

## WAIVER

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. Therefore, monitoring for these contaminants was not required.

# TABLE OF DETECTED CONTAMINANTS

This table represents all contaminants detected in your drinking water for the monitoring year. For more information on how these contaminants affect the overall quality of your water and your health, please call the EPA Safe Drinking Water Hotline or visit [www.epa.gov/safewater](http://www.epa.gov/safewater).

CONTAMINANT	MIN	MAX	AVG	UNITS	MCLG	MCL	VIO	LIKELY SOURCE OF CONTAMINATION
<b>PRIMARY CONTAMINANTS DETECTED IN YOUR DRINKING WATER</b>								
chlorine	running annual avg = 2.12		ppm	MRDLG=4	MRDL=4	N		Water additive used to control microbes
copper*	ND	0.054	0.002	ppm	1.3	AL = 1.3	N	Corrosion of household plumbing systems; erosion of natural deposits
nitrate	0.50	0.50	0.50	ppm	10	10	N	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits
total haloacetic acids**	15.20	81.80	47.22	ppb	0	60	Y	By-product of drinking water chlorination
total organic carbon	1.30	2.00	1.54	ppm	NA	TT	N	Naturally present in the environment
total trihalomethanes	18.10	76.40	47.80	ppb	0	80	N	By-product of drinking water chlorination
turbidity	0.008	0.266	0.028	mNTU	NA	TT	N	Soil runoff
alpha particles*	0.8 +/- 0.5	0.8 +/- 0.5	0.8 +/- 0.5	pCi/L	0.0	15.0	N	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation
radium 228*	1.2 +/- 0.5	1.2 +/- 0.5	1.2 +/- 0.5	pCi/L	0.0	5.0	N	Erosion of natural deposits
<b>SECONDARY CONTAMINANTS DETECTED IN YOUR DRINKING WATER</b>								
aluminum	0.12	13.40	4.44	ppm	NA	0.2	N	-
calcium	18.8	18.8	18.8	ppm	NA	NA	N	-
carbon dioxide	3.2	3.2	3.2	ppm	NA	NA	N	-
chloride	15.7	15.7	15.7	ppm	NA	250	N	-
color	1	1	1	CU	NA	15	N	-
hardness as CaCO3	65.4	65.4	65.4	ppm	NA	NA	N	-
lanthanum index	-0.82	-0.82	-0.82	SI	NA	NA	N	-
magnesium	4.47	4.47	4.47	ppm	NA	NA	N	-
pH	7.65	7.65	7.65	SU	NA	NA	N	-
sodium	9.02	9.02	9.02	ppm	NA	NA	N	-
specific conductance	197	197	197	umhos/cm	NA	NA	N	-
sulfate	13.8	13.8	13.8	ppm	NA	250	N	-
total alkalinity	53.9	53.9	53.9	ppm	NA	NA	N	-
total dissolved solids	112	112	112	ppm	NA	500	N	-
total phosphorus	0.00	0.11	0.02	ppm	NA	NA	N	-
total suspended solids	2.00	40.00	13.50	ppm	NA	NA	N	-
<b>OTHER REGULATED CONTAMINANTS DETECTED IN YOUR DRINKING WATER</b>								
chloroform	14.50	67.20	40.22	ppb	NA	NA	N	-
dichlorobromomethane	3.60	10.20	6.63	ppb	NA	NA	N	-
chlorodibromomethane	0.00	2.00	0.94	ppb	NA	NA	N	-
bromoform	0.00	0.00	0.00	ppb	NA	NA	N	-
monochloroacetic acid	0.00	11.20	4.43	ppb	NA	NA	N	-
monobromoacetic acid	0.00	0.00	0.00	ppb	NA	NA	N	-
dichloroacetic acid	8.00	44.70	25.65	ppb	NA	NA	N	-
trichloroacetic acid	7.20	28.90	17.13	ppb	NA	NA	N	-
tribromoacetic acid	0.00	0.00	0.00	ppb	NA	NA	N	-

\*data last obtained in previous year

\*\*Operational Evaluation Level violation observed at 10887 CO RD 88 regular monitoring site for total haloacetic acids. An investigation was ordered within 90 days of the observed violation and determined the cause to be circumstantial - a faulty tank control that overfilled the tank and lack of flushing from dead batteries. Corrective measures were taken and lab results returned to acceptable limits. Please contact Kenneth Palmer at 256-632-2254 for more information. This serves as consumer notification of the violation as required by ADEM.