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

# 2017 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

If you have any questions about this report or concerning your water utility, please contact Doyce Holman 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, 2017 and December 31, 2017.

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

Or by telephone at: (256) 632-2254



bank draft forms available on our website

### WATER QUALITY SUMMARY

For 2017, we are pleased to report that we have received no monitoring or safe water violations. That means your drinking water has been delivered to you in impeccable condition and, therefore, yields no cause for health concerns.

### 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

Our water system has enlisted the professional services of Symple Water as a 3<sup>rd</sup> party quality control specialist. Symple 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. Symple 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.symplewater.com

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

# ABOUT YOUR SOURCE WATER In 2017 our water department distributed 309,000,000 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 1.000 gallons 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 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

finished water is pumped out of the water treatment facility and into the distribution system for delivery to homes and businesses

source water is pumped from rivers, lakes, or underground aquifers and into the water treatment facility

analytical tests are performed to determine the quality of the finished water analytical tests are performed to determine the quality of the source water

treatment techniques are applied in the water treatment facility in order to process the water according to EPA specifications

### 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 MICROORGANISMS Cryptosporidium 0.000 TT ppm Giardia lamblia 0.000 TT ppm Heterotrophic plate count NA TT ppm 0.000 TT Legionella ppm 0.000 Total Coliforms (including fecal coliform) 5 % total NA Turbidity TT ppm Viruses (enteric) 0.000 TT ppm **DISINFECTANTS** Chloramines (as Cl2) 4.0 ppm Chlorine (as Cl2) 4.0 4.0 ppm Chlorine dioxide (as ClO2) 0.8 0.8 ppm DISINFECTION BYPRODUCTS 0.000 0.010 Bromate ppm 0.800 Chlorite 1.000 ppm Haloacetic acids (HAA5) NA 0.060 ppm Total Trihalomethanes (TTHMs) NA 0.080 ppm INORGANIC CHEMICALS Antimony 0.006 0.006 ppm Arsenic 0.000 0.010 ppm 7.000 7.000 Asbestos (fiber >10 micrometers) MFL 2.000 Barium 2.000 ppm 0.004 0.004 Beryllium ppm 0.005 Cadmium 0.005 ppm Chromium (total) 0.100 0.100 ppm Copper 1.300 AL=1.3 ppm 0.200 0.200 Cyanide (as free cyanide) ppm Fluoride 4.000 4.000 ppm Lead 0.000 AL=0.015 ppm 0.002 0.002 Mercury (inorganic) ppm 10.000 10.000 Nitrate (measured as Nitrogen) ppm 1.000 Nitrite (measured as Nitrogen) 1.000 ppm 10.000 10.000 Total Nitrate + Nitrite ppm 0.050 0.050 Selenium ppm 0.001 Thallium 0.002 ppm ORGANIC CHEMICALS 0.000 Acrylamide TT ppm Alachlor 0.000 0.002 ppm 0.003 0.003 Atrazine ppm 0.000 0.005 Benzene ppm 0.000 Benzo(a)pyrene (PAHs) 0.200 ppb Carbofuran 0.040 0.040 ppm Carbon tetrachloride 0.000 0.005 ppm Chlordane 0.000 0.002 ppm 0.100 0.100 Chlorobenzene ppm 2,4-D 0.070 0.070 ppm Dalapon 0.200 0.200 ppm 0.000 0.200 ppb 1,2-Dibromo-3-chloropropane (DBCP)

CONTAMINANT	MCLG	MCL	UNITS	
ORGANIC CHEMICALS (continued)				
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 0.000	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 Vinyl chloride	0.000	0.005	ppm	
Vinyl chloride  Xylenes (total)	0.000	0.002	ppm	
Alpha particles				
Beta particles and photon emitters	0.0	4.0	mrem/yr	
Radium 226 and Radium 228 (combined)	0.0	5.0	pCi/L	
Uranium  Valum 228 (Combined)	0.0	30.0	pc//L ppb	
Cramani	0.0	50.0	Pho	

CONTAMINANT	MCLG	MCL	UNITS		
SECONDARY CONTAMINANTS					
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		
pН	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		
OTHER REGULATED	CONTAN	IINANTS			
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		

 $for \ more \ unregulated \ contaminants, \ please \ visit \ www.epa.gov/safewater$ 

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.

# FABLE 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.

Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits LIKELY SOURCE OF CONTAMINATION Corrosion of household plumbing systems; erosion of natural deposits OTHER REGULATED CONTAMINANTS DETECTED IN YOUR DRINKING WATER By-product of drinking water chlorination By-product of drinking water chlorination SECONDARY CONTAMINANTS DETECTED IN YOUR DRINKING WATER Water additive used to control microbes PRIMARY CONTAMINANTS DETECTED IN YOUR DRINKING WATER Naturally present in the environment Erosion of natural deposits known as alpha radiation Soil runoff Z z Z  $\succ$ Z Z Z Z Z Z  $\mathbf{z}$ Z Z Z  $\mathbf{z}$ Z  $\mathbf{z}$ Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z MRDL=4 AL = 1.315.0 NA 250 NA 250 500 NA  $_{\rm A}^{\rm N}$  $_{\rm AA}$  $_{\rm AA}$  $^{N}$ NA  $_{\rm AA}$  $^{NA}$ NA NA $^{N}$  $_{\rm A}^{\rm N}$  $_{\rm A}^{\rm N}$ NA NA NA NA 10 09 T 80 5.0 0.2 15  $_{\rm A}^{\rm N}$  $_{\mathsf{A}}^{\mathsf{N}}$ T MRDLG=4 MCLG Ϋ́ 0.0 0.0  $_{\rm A}^{\rm N}$ NA  $^{NA}$ ΝA NA NA NA NA Ϋ́ Ϋ́ NA  $_{\rm A}^{\rm N}$ NA  $^{NA}$ NA NA NA NA NA Ϋ́ Ϋ́ Ϋ́ NA NA Ν Ν 10 Ν 0 0 umhos/cm mdd mdd mdd mdd NTU pCi/L pCi/L ppm udd ppm mdd mdd mdd mdd mdd mdd mdd udd mdd udd ppb qdd qdd Gppb ppb qdd ppb ppb qdd qdd qdd S $\mathbf{S}$ 0.8 + /- 0.51.2 + /- 0.5AVG-1.69 0.002 56.36 10.26 13.82 46.49 16.42 42.41 5.64 8.47 0.00 22.51 0.00 0.54 22.0 18.0 6.57 12.2 1.32 3.50 3.37 17.5 73.3 148 0.00 1.5 1.8 0.01 1.41 78.1 241 0 running annual avg = 2.431.2 + /- 0.50.8 + / - 0.5184.00 14.30 79.30 12.70 MAX 66.30 94.40 11.70 -1.69 49.00 36.50 26.60 0.054 0.54 22.0 5.64 3.02 18.0 12.2 73.3 7.88 0.00 0.01 6.57 17.5 148 0.00 0.00 1.8 78.1 2.2 241 0 1.2 + /- 0.50.8 + / - 0.522.40 -1.69 15.90 MIN 22.0 5.64 0.00 15.60 0.00 0.00 8.76 7.16 0.00 18.0 12.2 73.3 1.00 0.54 0.00 17.5 148 5.44 0.00 0.00 S 1.8 0.01 6.57 1.3  $\frac{N}{N}$ 78.1 241 0 CONTAMINANT dichlorobromomethane chlorodibromomethane monochloroacetic acid monobromoacetic acid total suspended solids total haloacetic acids specific conductance total organic carbon total trihalomethanes dibromooacetic acid total dissolved solids hardness as CaCO3 dichloroacetic acid trichloroacetic acid total phosphorus \*alpha particles carbon dioxide langelier index total alkalinity radium 228 magnesium manganese chloroform promoform aluminum turbidity calcium chloride chlorine copper sodium sulfate nitrate color

<sup>\*</sup>data last obtained in previous year