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This **Annual Water Quality Report** has been developed to keep you informed about Augusta Water's drinking water quality. Augusta Water is committed to supplying safe water that meets or exceeds state and federal regulations and achieves the highest standards of customer satisfaction.

Please take a few minutes to read this report.

About Your Water...

We are proud to report that the water provided by Augusta Water to our Deerfield customers for 2022 met all federal and state standards.

This report includes details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies.

Where Does Your Water Come From? The source of the Deerfield Water System's drinking water is groundwater from a well or spring.

Source Water Assessment

A source water assessment has been completed by the Virginia Department of Health. More specific information may be obtained by contacting Augusta Water at (540) 245-5670.

How Is Your Water Treated?

The water is filtered through membrane filtration, then chlorine is added to kill any disease-causing organisms and fluoride is added for cavity prevention.

The treated water is distributed through pipes and is delivered to your home.

Stay Informed!

Augusta Water is committed to providing you with information about your water supply, because customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards. Refer to the following resources for additional information on drinking water.

American Water Works Association (AWWA) at www.awwa.org/

Water Environment Federation (WEF) at www.wef.org/

waterdata.usgs.gov and www.epa.gov/ground-water-and-drinking-water/

Safe Drinking Water Hotline (800) 426-4791

Virginia State Health Department (Lexington) (540) 463-7136 www.vdh.virginia.gov/drinking-water/

Monthly Board Meetings are held on the third Thursday of each month at the Augusta County Government Center in Verona. Meetings start at 1:30 p.m.

Substances Expected To Be In Drinking Water

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 land's surface or through the ground, it dissolves naturally occurring minerals and radioactive material, and can be polluted by animals or human activity.

Contaminants that may be present in source water include:

<u>Microbiological contaminants</u>, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

<u>Inorganic contaminants</u>, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic waste water discharges, oil and gas production, mining, or farming.

<u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

<u>Organic chemical contaminants</u>, 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.

<u>Radioactive materials</u>, which can be naturally occurring or be the result of oil and gas production and mining activities.

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791) or the Virginia State Health Department (540-463-7136).

Lead Contaminants

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. Augusta Water 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 15 to 30 seconds or until it becomes cold or reaches a steady temperature 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 to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791) or at <u>http://www.epa.gov/safewater/lead</u>.

Who's Most Vulnerable?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer under- going 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. Environmental Protection Agency (EPA) and Centers for Disease Control (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 (800-426-4791).

We constantly mo	onitor for various co	ontaminants in the w	ater supp	ly to n	neet all regula	ntory requirement	nts. This table lists only the	
				-	•	• •	een analyzed but were not	
present or were be	elow the detection l	limits of the lab equi	pment.					
		Treated V	Water Q	uality	Roundup			
	It also at Level I deal Goals			vale		Date Most		
	Highest Level	Highest Level	(EPA's	Dais		Recent Testing		
Substance	Allowed (EPA's MCL*)	Detected	MCLGs	*)	Meets EPA Standards	Completed	Possible Sources	
	/				ment Plant	ł		
Chlorine	MRDL = 4ppm	Avg: 1.6 ppm Range: 1.1-2.4 ppm	MRDLG = 4ppm		\checkmark	2022, Daily	Water additive used to control microbes	
Barium	2 ppm	0.027 ppm	2 ppm		\checkmark	July 2022	Erosion of natural deposits	
Combined		1.2 0.4	0.0.1		\checkmark	1 1 2021		
Radium***	5 pCi/L	1.3 pCi/L Avg.: 0.7 ppm	0 pCi/L		•	July 2021	Erosion of natural deposits	
		Range: 0.5-1.0			,			
Fluoride	4 ppm	ppm	4 ppm		\checkmark	2022, Daily	Water additive	
Nitrate Plus Nitrite							Runoff from fertilizer use: leaching sewer; erosion of	
as Nitrogen	10 ppm	0.68 ppm	10 ppm		\checkmark	July 2022	natural deposits	
		0.08 Max. NTU						
Turbidity**	TT = 0.3 NTU	100%**	N/A		\checkmark	2022, Daily	Soil runoff	
, and the second s		Regulated	at the	Custo	mers' Tap	· ¥		
Regulated at the Customers' Tap Next Scheduled Sampling Date: July 2023								
Lead *** (90th Percentile)	15 ppb Action Level (AL)	3 ppb None of the 5 samples collected exceeded the AL	0 ppb		\checkmark	July 2020	Customer plumbing and service connection	
Copper *** (90th Percentile)	1.3 ppm Action Level (AL)	0.573 ppm None of the 5 samples collected exceeded the AL	1.3 ppm		V	July 2020		
Regulated in the Distribution System								
Total Trihalomethanes (TTHM)	80 ppb	16.2 ppb	0 ppb		\checkmark	August 2022	By-product of drinking water	
Haloacetic Acid	00 pp0	10.2 pp0	~ Pho			1 105001 2022	chlorination	
(HAA)	60 ppb	4 ppb	0 ppb		\checkmark	August 2022		
*Definitions:				(MRDLG) Maximum Residual Disinfectant Level Goal - The level of a drinking				
					water disinfectant below which there is no known or expected health risk. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial			
(MCL) Maximum Contaminant Level - Highest level of a contaminant that contamination.								
is allowed by EPA in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. <u>ND</u> – None detected (<u>NTU</u>) Nephelometric Turbidity Unit - A measure of the clarity of water.								
as feasible using the best available treatment technology. (MCLG) Maximum Contaminant Level Goal - The level of a contaminant in Turbidity in excess of 5 NTU is just noticeable to the average person.								
drinking water below which there is no known or expected risk to health. $\underline{pCi/L}$ - Picocuries per liter is a measure of the radioactivity in water.								
MCLGs allow for a ma				<u>ppb</u> - one part per billion, example is a single penny in \$10,000,000.				
(MRDL) Maximum Residual Disinfectant Level - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that (TT) Treatment Technique - A required process intended to reduce the								
addition of a disinfectant is necessary for control of microbial contaminants.								
**Percent (%) represents the lowest monthly percentage samples which met the turbidity limits. Compliance for turbidity is based on the								

**Percent (%) represents the lowest monthly percentage samples which met the turbidity limits. Compliance for turbidity is based on the level being less than or equal to 0.3 NTU in 95% of the measures taken each month. Turbidity has no health effects; however, it can interfere with disinfection and provide a medium for bacterial growth.

***Data presented in the table are the most recent testing performed in accordance with federal and state regulations. The state allows us to monitor for some contaminants less than once a year because the concentrations of these contaminants do not change frequently Some of our data, though accurate, is more than one year old.

Additional Water Quality Parameters

Parameter	Detected Level	Suggested Limit	
Alkalinity	92 ppm	No Standard	
Color	<5 Color Units (CU)	15 CU	
Hardness	90 ppm*	No Standard	
Sodium	3.22 ppm	No Standard	
Manganese	<0.005 ppm	0.05 ppm	
Iron	<0.01 ppm	0.3 ppm	

*This water is considered moderately hard. (equivalent to 5.3 grains per gallon)