

# Deerfield Water System Water Quality Report 2008

## Consumer Confidence Report

An amendment to the Safe Drinking Water Act in 1996 required that water suppliers publish and furnish customers with a Consumer Confidence Report (CCR) every year beginning in 1999. Deerfield Water System is committed to ensuring the quality of your water, and we're proud that your drinking water meets or exceeds all federal and state requirements. The water that Deerfield Water System provides to its customers is safe. As you will see in this report, which shows results of our monitoring for the period of January 1 to December 31, 2007, our system had no water quality violations. As with all water systems, monitoring did detect the presence of some contaminants in small quantities, none exceeded the acceptable levels established by the EPA. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

## Where does my water come from?

Your water comes from one of the 10 wells located within the boundaries of Deerfield Resort. These wells range in depth from 150 to 700 feet in depth. A well by definition is *"A vertical bore hole into the earth's crust usually to a depth of less than 300 ft. for the purpose of accessing an underground water supply (aquifer). A pumping system generally of the submersible type is normally installed to bring the water to the surface under sufficient pressure to be used in a home."* These 10 wells and the distribution lines comprise the Deerfield Water System. Each of these wells is considered by the State of Tennessee, Division of Water Supply to be not under the influence of surface water. What this means is that rainwater, surface runoff and the lake do not directly impact the water that is supplied to your home.

## Is my drinking water safe?

Yes. Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. We conduct numerous and continuous tests on the 10 wells that comprise the Deerfield Resort Water System. Chlorine samples are taken daily from each well, and ongoing water quality testing is scheduled and monitored by the Tennessee Division of Water Supply. Each month ten samples (one from each well) are tested by the State Lab for total coliform. Our goal at the Deerfield Water System is to protect our water from contaminants... and we continually work with the State to determine the vulnerability of our water supply to contamination. In the latest study conducted by the State, a score of "Low Susceptibility to Contamination" [to groundwater contamination] was given. This is excellent news since it means that according to all evidence given, our water source will continue to be safe from groundwater contaminants.

## How is my water treated?

Deerfield Water System is treated with chlorine. We have recently installed additional chlorine metering pumps in order to be in compliance with State regulations that specify that there must be a backup source of disinfection installed before the water is introduced into the water system. These additional chlorinators assure that if one chlorinator fails... the other will maintain an acceptable level of chlorination in your water. Those levels are regulated by the state to be maintained between the levels of 0.2 parts per million and 4.0 parts per million. Our goal at Deerfield Water is to maintain our chlorine residual at 1.0. This assures more than adequate disinfection with little or no taste or odor.

## Why are there contaminants in my drinking water?

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 (EPA) Safe Drinking Water Hotline (800-426-4791).

## Do I need to take special precautions?

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/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 Water Drinking Hotline (800-426-4791).

## Monitoring and reporting of compliance data violations

From time to time, monthly coliform tests may show positive results. If a test receives a positive result, it is retested within 24 hours at the original location, as well as at two other locations in the immediate area. These positive results may be caused by mishandling of the test samples on our part, or by the lab personnel. Of the few times that positive results have been returned on Deerfield's water system, retesting has always netted negative results. On one occasion in 2007, a positive coliform test was not retested in a timely manner. The following test was negative, and has continued to be. It can therefore be concluded that the original positive result was in error.

## How can I get involved?

If you have any questions, complaints, suggestions, or you would like to become involved in our water system, please come by the Deerfield Resort Office at 1233 Deerfield Way, LaFollette, TN 37766.

## Is our water system meeting other rules that govern our operations?

The State and EPA require us to test and report on our water on a regular basis to ensure its safety. We have met these and all other requirements.

## Contact Information

For more information about

- Contaminants and potential health effects, call the EPA's Safe Drinking Water Hotline at 1-800-426-4791.
- Deerfield Water System's water or this report, contact Scott Fields at 423-592-4222 or visit our Web site at [www.deerfieldwater.com](http://www.deerfieldwater.com).

Deerfield Water System is a Public Water System serving approximately 400 homes in the Deerfield Community of Campbell County.

	Violation Y/N	Maximum Level Detected	Unit	Maximum Contaminant Level Goal	Maximum Contaminant Level	Likely Source of Contamination
<b>Volatile Organic Contaminants</b>						
Total Trihalomethanes	N	<.0005	MG/L			By-product of drinking water chlorination
Haloacetic Acids	N	<.0005	MG/L			By-product of drinking water chlorination
<b>Organic &amp; Inorganic Contaminants</b>						
<b>Nitrate (as Nitrogen)</b>						
Well 1	N	0.88	MG/L	0.88	10	Runoff from fertilizer use;
Well 2	N	0.87	MG/L	0.87	10	leaching from septic tanks;
Well 3	N	1.02	MG/L	1.02	10	sewage; erosion of natural deposits
Well 4	N	0.52	MG/L	0.52	10	
Well 5	N	0.34	MG/L	0.34	10	
Well 6	N	0.16	MG/L	0.16	10	
Well 7	N	0.17	MG/L	0.17	10	
Well 8	N	0.19	MG/L	0.19	10	
Well 9	N	0.11	MG/L	0.11	10	
Well 10	N	0.46	MG/L	0.46	10	
<b>Sodium</b>						
Well 1	N	2.72	MG/L			Can be used in treatment process
Well 2	N	0.69	MG/L			
Well 3	N	1.45	MG/L			
Well 4	N	0.58	MG/L			
Well 5	N	0.51	MG/L			
Well 6	N	1.94	MG/L			
Well 7	N	1.1	MG/L			
Well 8	N	0.48	MG/L			
Well 9	N	1.47	MG/L			
Well 10	N	0.55	MG/L			
<b>Lead</b>						
home 1	N	<.003	MG/L		0.015	
home 2	N	<.003	MG/L		0.015	
home 3	N	<.003	MG/L		0.015	
home 4	N	<.003	MG/L		0.015	
home 5	N	<.003	MG/L		0.015	
home 6	N	<.003	MG/L		0.015	
home 7	N	<.003	MG/L		0.015	
home 8	N	<.003	MG/L		0.015	
home 9	N	0.005	MG/L		0.015	
home 10	N	<.003	MG/L		0.015	

	Violation Y/N	Maximum Level Detected	Unit	Maximum Contaminant Level Goal	Maximum Contaminant Level	Likely Source of Contamination
<b>Copper</b>						
home 1	N	0.078	MG/L		1.3	
home 2	N	0.49	MG/L		1.3	
home 3	N	0.019	MG/L		1.3	
home 4	N	0.1	MG/L		1.3	
home 5	N	0.029	MG/L		1.3	
home 6	N	0.027	MG/L		1.3	

home 7	N	0.12	MG/L		1.3	
home 8	N	0.12	MG/L		1.3	
home 9	N	0.096	MG/L		1.3	
home 10	N	0.038	MG/L		1.3	
<b>MICROBIOLOGICAL CONTAMINANTS</b>						
<b>Total Chloriform Bacteria</b>	N			0	0	<i>Naturally present in the environment.</i>
<b>CHEMICAL MONITORING</b>						
<b>Chlorine-2006</b>						<i>Water additive used to control microbes</i>
Well 1	N	1.20	ppm	max 4ppm	min 0.2ppm	
Well 2	N	0.82	ppm	max 4ppm	min 0.2ppm	
Well 3	N	1.06	ppm	max 4ppm	min 0.2ppm	
Well 4	N	1.19	ppm	max 4ppm	min 0.2ppm	
Well 5	N	1.07	ppm	max 4ppm	min 0.2ppm	
Well 6	N	1.27	ppm	max 4ppm	min 0.2ppm	
Well 7	N	0.84	ppm	max 4ppm	min 0.2ppm	
Well 8	N	0.87	ppm	max 4ppm	min 0.2ppm	
Well 9	N	0.82	ppm	max 4ppm	min 0.2ppm	
Well 10	N	0.79	ppm	max 4ppm	min 0.2ppm	

Other tests performed and passed this year (I wanted to list results, but the list is too large... see Scott for results if you wish)  
 Arsenic, Barium, Cadmium, Chromium, Cyanide, Mercury, Nickel, Selenium, Antimony, Beryllium, Thallium, Aluminum  
 Chloride, Copper, Fluoride, Iron, Manganese, Silver, Sulfate, Zinc, Color, Odor, PH and Total dissolved solids.