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**CONSUMER CONFIDENCE REPORT**

United Water New Jersey / Vernon Hills  
Barry Lakes System (PWSID #1922001)  
2010

**Dear Customer:**

At United Water we are dedicated to providing you and your family with water that is safe and healthy. We regularly test the water to be sure that your water meets the safety standards. All the test results are on file with the New Jersey Department of Environmental Protection (NJDEP), the agency that monitors and regulates drinking water quality in our state. The United States Environmental Protection Agency (EPA) and the NJDEP establish these regulations. They also require water suppliers to mail a Consumer Confidence Report (CCR) to customers on an annual basis. This CCR provides important information about your drinking water. Please read it carefully and feel free to call us at 888.770.6030 if you have any questions about your water or your water service. Or, you can call the EPA Safe Drinking Water Hotline at 800.426.4791. In addition, you can also write to us at the above address. If you have specific questions about water as it relates to your personal health, we suggest that you contact your health care provider.

**Bottled Water or Tap 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at 800.426.4791.

The sources of drinking water (for both tap 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 can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operation, 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.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that the water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. So, what's the bottom line? If bottled and tap water meet the federal standards, they are both safe to drink. However, your tap water is substantially less expensive than bottled water.

## United Water New Jersey / Vernon Hills

United Water Vernon Hills, Barry Lakes System, is a private utility owned and operated by United Water New Jersey. The company serves 511 customers, 50 in the Barry Lakes System. Our three wells are approximately 100 to 230 feet deep. We also treat it with a corrosion inhibitor to reduce the possibility of lead and copper dissolving into the water from household plumbing. To further ensure the safety of your water we monitor it before, during and after the treatment process.

### Water Quality Table

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/CDC guidelines on appropriate means to lessen the risk of infections by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 800.426.4791.

This table shows how the quality of your drinking water compared to the primary standards set by the EPA and the NJDEP as outlined in the Safe Drinking Water Act. The state allows monitoring for some contaminants less than once a year because these results do not change frequently. Therefore, some data, though representative, are more than one year old.

#### Primary Standards – Directly related to the safety of drinking water

<b>Inorganic Chemicals</b>	<b>MCLG</b>	<b>MCL</b>	<b>Highest Result</b>	<b>Range of Results</b>	<b>Violation</b>	<b>Likely Source</b>
Antimony ppb (2009)	6	6	< 1	N/A	No	Erosion of natural deposits
Arsenic ppb (2009)	0	10	< 1	N/A	No	Erosion of natural deposits
Asbestos mfl	7	7	<0.2	N/A	No	Erosion of AC Pipe
Barium ppm (2009)	2	2	0.018	0.003 - 0.018	No	Erosion of natural deposits
Beryllium ppb (2009)	4	4	< 1	N/A	No	Erosion of natural deposits
Cadmium ppb (2009)	5	5	< 1	< 0.5 - < 1	No	Erosion of natural deposits
Chromium ppb (2009)	100	100	3.2	2 - 3.2	No	Erosion of natural deposits
Cyanide ppb (2009)	200	200	< 25	N/A	No	Erosion of natural deposits
Fluoride ppm (2009)	2.2	2.2	0.088	< 0.05 - 0.088	No	Erosion of natural deposits
Mercury ppb (2009)	2	2	< 2	N/A	No	Erosion of natural deposits
Nitrate ppm	10	10	2.58	1.04 - 2.58	No	Erosion of natural deposits and fertilizer usage
Nitrite ppm	1	1	< 0.01	N/A	No	Erosion of natural deposits and fertilizer usage
Selenium ppb (2009)	50	50	< 5	N/A	No	Erosion of natural deposits
Thallium ppb (2009)	0.5	2	< 1	N/A	No	Erosion of natural deposits

<b>Disinfectant Residual</b>	<b>MRDLG</b>	<b>MRDL</b>	<b>Highest Result</b>	<b>Range of Results</b>	<b>Violation</b>	<b>Likely Source</b>
Distribution Disinfectant Residual ppm	N/A	4	1.2383	0.51 - 1.36	No	Treatment Process

<b>Organic Disinfection By-products</b>	<b>MCLG</b>	<b>MCL</b>	<b>Highest Result</b>	<b>Range of Results</b>	<b>Violation</b>	<b>Likely Source</b>
HAA5 ppb (Total Haloacetic Acids)	N/A	60	11.8	3.8 - 11.8	No	Disinfection by-product
THM4 ppb (Total Trihalomethanes)	N/A	80	14.9	10.2 - 14.9	No	Disinfection by-product

#### Monitoring Violation

United Water New Jersey Mid Atlantic is required to monitor your drinking water for disinfection byproducts (Total Trihalomethanes [TTHMs] and Haloacetic acids-five [HAA5]) every year. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the compliance period of July 1, 2004 through September 30, 2004, and July 1, 2005 through September 30, 2005 the Water System inadvertently missed the required number of samples for your area and therefore we cannot be sure of the quality of your drinking water during that time. Necessary action was taken immediately prevent monitoring lapses from recurring. Should you have any questions, please contact United Water New Jersey Mid Atlantic at 973-764-9708.

Stage 1 Disinfection By products rule became effective in January 2004. United Water New Jersey Mid Atlantic was conducting 1 sample/year in the distribution system. The formation of disinfection by-products is a greater concern for water systems that use surface water, such as rivers, lakes, and streams. Ground water naturally contains very low organic matter content and is generally not at risk. The current level of TTHM and HAA5 found in the UWNJMA distribution is 6.7 ppm and 3.2 ppm respectively while the MCL for the same is 80 ppm and 60 ppm.

<b>Radionuclides (2006)</b>	<b>MCLG</b>	<b>MCL</b>	<b>Highest Result*</b>	<b>Range of Results</b>	<b>Violation</b>	<b>Likely Source</b>
Gross Alpha pCi/L	0	15	2.1	0.15 - 2.1	No	Erosion of natural deposits
Radium-226 pCi/L	N/A	5	0.31	0.06 - 0.31	No	Erosion of natural deposits
Radium-228 pCi/L	N/A	5	4.12	-0.09 - 4.12	No	Erosion of natural deposits
Uranium mg/L	N/A	30	0.002	0.0017 - 0.002	No	Erosion of natural deposits

<b>Lead and Copper</b>	<b>MCLG</b>	<b>AL</b>	<b>90th Percentile</b>	<b>Range of Results</b>	<b>Samples &gt; AL</b>	<b>Exceedance of Action Level</b>	<b>Likely Source</b>
Copper ppm^	1.3	1.3	0.18	0.05 - 0.38	0	No	Corrosion of household plumbing
Lead ppb^	0	15	4.1	0.5 - 6.9	0	No	Corrosion of household plumbing

A corrosion control system has been implemented effective February 2009 to help control the leaching of lead and copper from household plumbing.

\*Highest results are based upon the highest single sample. Violations are determined by the average of all samples during the monitoring period.

## Secondary Standards – Related to the aesthetic quality of drinking water

<b>Substance</b>	<b>NJ RUL</b>	<b>Highest Result</b>	<b>Range of Results</b>	<b>Likely Source</b>
Aluminum ppb (2009)	200	< 10	N/A	Treatment process
Chloride ppm (2009)	250	218	116 - 218	Natural mineral, road salt
Color CU (2009)	10	3	N/A	Natural characteristic
Corrosivity (2009)	+/-1.0	0.3	-0.2 - 0.3	Erosion of household plumbing
Fluoride ppm (2009)	1.2	0.09	< 0.05 - 0.09	Erosion of natural deposits
Foaming Agents ppb (ABS/L.A.S) (2009)	500	< 50	N/A	Detergents
Hardness as CaCO3 ppm (2009)	50 - 250	344	206 - 344	Natural mineral
Iron ppb (2009)	300	10	< 10 - 10	Natural mineral
Manganese ppb (2009)	50	< 10	N/A	Natural mineral
Odor (2009)	3	N	N/A	Natural characteristic
pH (2009)	6.5 - 8.5	8.0	7.0 - 8.0	Treatment process
Silver ppb (2009)	100	< 1	< 0.5 - < 1	Natural mineral
Sodium ppm**#	50	134	116 - 134	Natural mineral, road salt
Sulfate ppm (2009)	250	24	14 - 24	Natural mineral
Total Dissolved Solids ppm# (2009)	500	568	476 - 568	Natural mineral
Zinc ppm (2009)	5	0.51	0.1 - 0.51	Natural mineral

### \*\*Sodium

We exceeded the NJ Recommended Upper Limit (RUL) for sodium. For healthy individuals the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the RUL may be of concern to individuals on a sodium restricted diet. See insert for additional information on sodium.

### ^ Lead and Copper

*Copper:* Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

*Lead:* Infants and children who drink water containing lead in excess of the action level could experience delays in their physical and mental development. Children could show slight deficits in attention span and learning abilities. Adults who this water over many years could develop kidney problems or high blood pressure.

*United Water is in the process of implementing a Corrosion Control plan to increase the amount of pH going into the system in order to reduce the amount of lead and copper being delivered to the customer.*

### # Note on Secondary Exceedances:

Secondary standards are non-mandatory guidelines to assist public water systems for aesthetic considerations, such as taste, color and odor. These contaminants are not considered to present a risk to human health.

### Definitions:

*Action Level (AL) :* The concentration of a contaminant, which, if exceeded triggers treatment or other requirements which a water system must follow.

*Maximum Contaminant Level Goal (MCLG):* The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLs allow for a margin of safety.

*Maximum Contaminant Level (MCL):* The highest level at which a contaminant is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment.

NA: Not applicable.

ppb: part per billion. The equivalent of one second in 32 years.

ppm: parts per million. The equivalent of one second in 12 days.

pCi/L: picocuries per liter. The equivalent of one second in 320,000 centuries.

RUL: Recommended Upper Limit

## SUSCEPTIBILITY RATINGS FOR UNITED WATER NEW JERSEY – BARRY LAKES WATER SOURCES

The New Jersey Department of Environmental Protection (DEP) has completed and issued the Source Water Assessment Report and Summary for this public water system, which is available at [www.state.nj.us/dep/swap/](http://www.state.nj.us/dep/swap/) or by contacting the NJDEP, Bureau of Safe Drinking Water at 609.292.5550.

The table below illustrates the susceptibility rating for each individual source for each of the contaminant categories in the United Water New Jersey – Barry Lakes system. For susceptibility ratings of purchased water, refer to the specific water system’s source water assessment report. DEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category. For the purpose of Source Water Assessment Program, radionuclides are more of a concern for ground water than surface water. As a result, surface water intakes’ susceptibility to radionuclides was not determined and they all received a low rating.

**If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water.** The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, DEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

If you have questions regarding the source water assessment report or summary please contact the Bureau of Safe Drinking Water at [swap@dep.state.nj.us](mailto:swap@dep.state.nj.us) or 609.292.5550. The source water assessment performed on our three sources of water determined the following:

### Susceptibility Rating for United Water New Jersey – Barry Lakes Sources

EPTDS ID	Source ID	Source Name	Pathogens Rating	Nutrients Rating	Pesticides Rating	VOCs Rating	Inorganics Rating	Radionuclides Rating	Radon Rating	DBPs Rating
01	004	WELL 1/ROBIN HOOD LANE	L	H	L	L	L	M	M	M
01	007	WELL 2/ROBIN HOOD LANE	L	M	L	L	L	M	M	M
02	006	WELL 3/CLUBHOUSE LANE	M	M	L	L	L	M	M	M

*L (Low), M (Medium), H (High) susceptibility*

*Pathogens:* Disease-causing organisms such as bacteria and viruses. Common sources are animal and human wastes.

*Nutrients:* Compounds, minerals and elements that aid growth, that are both naturally occurring and man-made. Examples include nitrogen and phosphorus.

*Volatile Organic Compounds (VOCs):* Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.

*Pesticides:* Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.

*Inorganics:* Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.

*Radionuclides:* Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.

*Radon:* Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to <http://www.nj.gov/dep/rpp/radon/index.htm> or call 800.648.0394.

*Disinfection Byproduct Precursors (DBPs):* A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.

### Important Information

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Your water is lead free when it leaves our treatment plant. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. United Water is responsible for providing high quality drinking water, but can not 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 second to 2 minutes before using water for drinking and 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>.