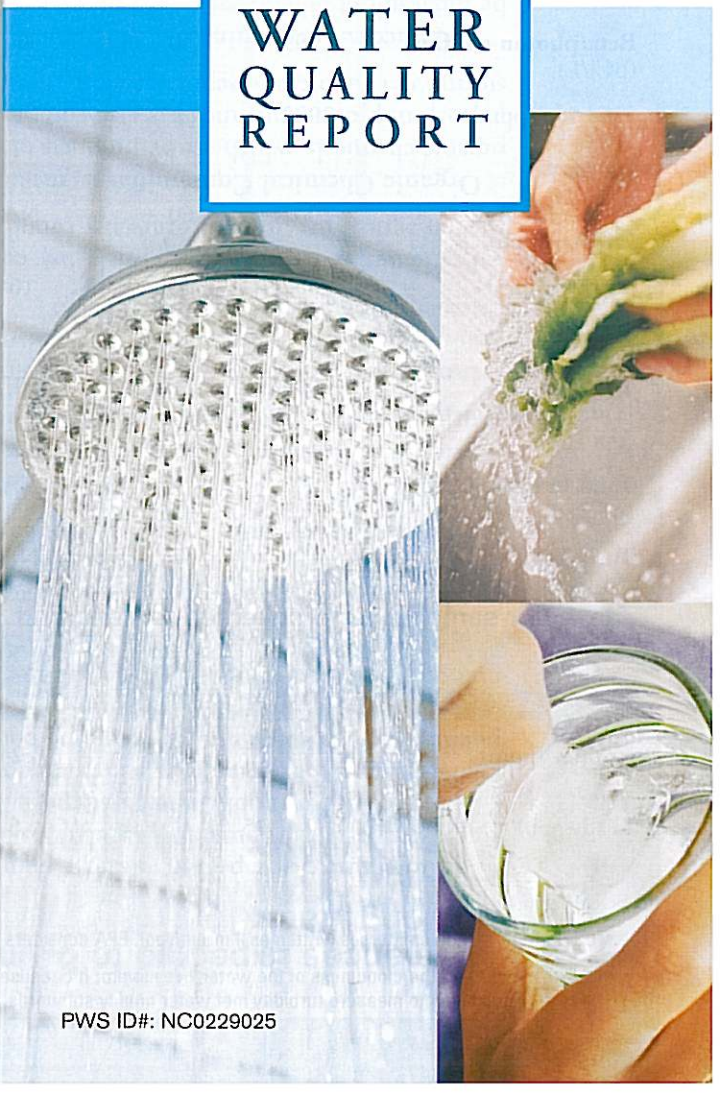


Proudly presented by

**Davidson Water, Inc.**

2002

**WATER  
QUALITY  
REPORT**



## Continuing Our Commitment

Once again we proudly present our annual water quality report. This edition covers all testing completed from January through December 2002. As in the past, we are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

For more information about this report, or for any questions relating to your drinking water, please call Ron Farnsworth, Plant Superintendent, or Tim Gwaltney at (336) 787-5800 or e-mail to [waterplant@davidsonwater.com](mailto:waterplant@davidsonwater.com).

## How Is My Water Treated And Purified?

The treatment process consists of a series of steps. First, raw water is drawn from our water source, the Yadkin River. The water is then pumped into three holding ponds to give the sediment time to settle out. The water is then pumped to the plant where ferric chloride is added. This causes the small particles to adhere to one another (called "floc"), making them heavy enough to settle into a basin from which sediment is removed. Chlorine is then added for disinfection. At this point, the water is filtered through layers of fine coal, gravel and silicate sand. As smaller, suspended particles are removed, turbidity disappears and clear water emerges. Chlorine is added again as a precaution against any bacteria that may still be present. (We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water without compromising taste.) Finally, sodium hydroxide is added to adjust the pH and alkalinity. Fluoride (used to prevent tooth decay) and a corrosion inhibitor (used to protect distribution system pipes) are added before the water is pumped to sanitized water towers and into your home or business.



Davidson Water, Inc. is a non-profit company dedicated to providing safe quality water to our members. Because of these uncertain times, Davidson Water, Inc. is implementing a vulnerability assessment to ensure the safety of your drinking water. We feel it is important to our members to be prepared for any potential hazards. Also, all Davidson Water employees have now been issued photo identifications.

Due to severe drought conditions in our area, Davidson Water found it necessary this past summer to impose mandatory water restrictions. It was necessary to restrict the outdoor use of water so that there would be water available for all of our customers. We would like to thank all of our customers for their help in getting through these months.

The ice storms this past winter presented different problems. Like many of our customers, Davidson Water, Inc. was without power except for the locations where we had permanent generators in place: our office, water plant and several of our major pump stations. We were able to pull portable generators to other pump stations, as needed. Even with the icy roads and downed trees, it was still necessary for our employees to transport fuel for the generators in order to keep our customers in water. There were areas with lower pressure than normal, but having a Board of Directors seeing the need for emergency power, being prepared and having capable dedicated employees that worked long hours, ensured a reliable water supply to our members during the ice storms.

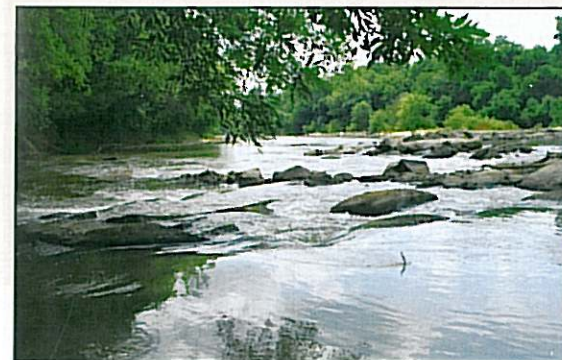
For the convenience of our customers, Davidson Water, Inc. is now offering online payments for your water bill. For more information contact our office or logon to our website at [www.davidsonwater.com](http://www.davidsonwater.com). We also have collections stations for paying your water bill at the following locations - Midway Mobile Mart, Thomasville; Smileys, Southmont; or LSB at the following branches: South Lexington, Thomasville, Wallburg, Midway, Arcadia, and Tyro. Visa or MasterCard payments are accepted at our office in Welcome.

Davidson Water, Inc. has established a scholarship program in memory of all past board members who volunteered their time, knowledge and expertise to form and administer a water system in order to provide safe water of high quality for present and future generations. Four scholarships of \$1,000 each were awarded for the school year 2003-04

This is an Equal Opportunity facility. Federal Law prohibits discrimination. To file a complaint of discrimination write: USDA Director of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410.

## Where Does My Water Come From?

Davidson Water, Inc.'s water plant is located on Koontz Road near Hwy 64 West. Our source of water is the Yadkin River. The Yadkin River begins in Blowing Rock, where it starts out as a small stream and follows along Hwy 321 and then along state road 268 deepening as other tributaries feed into the Yadkin. The Yadkin then feeds into W. Kerr Scott Dam Reservoir. W. Kerr Scott Dam is an earthen dam built in 1960 by the Army Corps of Engineers for flood control. It has 125 miles of shoreline and holds up to 112,000 acre feet of water or 36.5 billion gallons (an acre-foot is one acre of water one foot deep, or 325,800 gallons). A minimum flow must be released through the dam to keep a constant supply of water flowing down the Yadkin.



## What's In My Water?

We are pleased to report that during the past year, the water delivered to your home or business complied with, or did better than, all state and federal drinking water requirements. For your information, we have compiled a list in the table below showing what substances were detected in our drinking water during 2002. Although all of the substances listed below are under the Maximum Contaminant Level (MCL) set by the U.S. EPA, we feel it is important that you know exactly what was detected and how much of the substance was present in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

### REGULATED SUBSTANCES

SUBSTANCE (UNITS)	YEAR SAMPLED	MCL	MCLG	AMOUNT DETECTED	RANGE (LOW-HIGH)	VIOLATION	TYPICAL SOURCE
Alpha emitters (pCi/L)	1999	15	0	1	NA	No	Erosion of natural deposits
Barium (ppm)	2002	2	2	0.020	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/photon emitters (pCi/L) <sup>1</sup>	1999	50	0	1.02	NA	No	Decay of natural and man-made deposits
Fluoride (ppm)	2002	4	4	1.00	NA	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids (HAAs) (ppb)	2002	60	NA	47.3	21-87.1	No	By-product of drinking water disinfection
Nitrate (ppm)	2002	10	10	1.86	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2002	80	0	48.5	14.8-108.9	No	By-product of drinking water disinfection
Total Organic Carbon (ppm)	2002	TT	NA	1.8	0.9-3.45	No	Naturally present in the environment
Turbidity (NTU) <sup>2</sup>	2002	TT	NA	0.28	0.03-0.28	No	Soil runoff

Tap water samples were collected for lead and copper analyses from 30 homes throughout the service area

SUBSTANCE (UNITS)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	NO. OF HOMES ABOVE AL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2001	1.3	1.3	0.249	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2001	15	0	5	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

<sup>1</sup>The MCL for Beta/photon emitters is written as 4 mrem/year. EPA considers 50 pCi/L as the level of concern for beta emitters.

<sup>2</sup>Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. During the reporting year, a minimum of 100% of all samples taken to measure turbidity met water quality standards.

## Table Definitions

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

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

**MCLG (Maximum Contaminant Level Goal):** 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.

**NA:** Not applicable

**ND:** Not detected

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.

## Substances Expected to be in Drinking Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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 can acquire naturally occurring minerals, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity. Substances 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 operations, or wildlife;

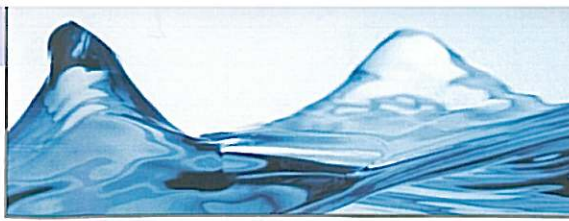
**Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

**Pesticides and Herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

**Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems;

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

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.



## Special Health Information



Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA and CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Our water system had a reporting violation in the year 2002. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the three month compliance period beginning January 1, 2002 and ending March 31, 2002, we did not monitor for Total Organic Carbon and therefore cannot be sure of the quality of our drinking water during that time.

There is nothing you need to do at this time. Prior to January 2002, we were monitoring for Total Organic Carbon (TOC) even though it was not required. All samples taken during this period showed levels below the Maximum Contaminant Level. In January 2002 monitoring for TOCs became mandatory. Through an oversight we neglected to monitor and submit TOC removal rates for the first three months of 2002. One sample set was required to be collected per month. We collected one sample set per week for the remainder of the year of 2002. We do not believe that this violation had any adverse effects on public health. (Source water samples must be tested for Total Organic Carbon (TOC) and Alkalinity. Treated water samples must be tested for TOC. Source water samples and treated water sampled must be collected on the same day.) In the future, we will be reporting all our TOC sample results to the state on time.

For more information please contact, Ron Farnsworth, Plant Superintendent, Davidson Water, Inc., (336) 787-5800, PO Box 969, Welcome, NC 27374. System ID #0229025.

As a result of an oversight, we neglected to submit a disinfection byproduct monitoring plan to the state by April 10, 2002. This plan has since been submitted. At no time did this incident pose a threat to public health and safety, nor did it have any impact on the high-quality drinking water provided to our customers.

Due to a typographical error by our contract laboratory, a parameter was not reported in our Inorganic Analysis schedule for the calendar year of 2002 causing us to acquire a reporting violation.

## Community Participation

If you want to learn more, please attend any of our regularly scheduled meetings by appointment. They are held the fourth Monday of each month at 7:30 p.m. at our Operations Facility, 7040 Old US Hwy 52, Welcome. We also hold an annual meeting on the second Monday in March at either Lexington or Thomasville Court House. A notice is mailed immediately prior to the annual meeting. This year's annual meeting was held at the Court Room, City Hall, Thomasville, NC. President Thad K. Hartley presided. John Greer, Secretary, read the minutes from last year; Bob Biesecker, from Turlington and Company, went over our financial statements; and Gregg Stabler, our manager, reported on operations and maintenance of the water system along with capital improvements to the system. Five board members were reelected to serve three-year terms on the Board of Directors of Davidson Water, Inc.. Section 1 - J. F. Hanes, Section 2 - John A. Sharpe, Section 3 - John W. Greer, Section 4 - Richard Lee Motsinger, At Large - Danny Fitzgerald.

## Information on the Internet

U.S. EPA office of Water (www.epa.gov/watrhome) and the Centers for Disease Control and Prevention (www.cdc.gov) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation and public health. A copy of this report and other important information about our water system is available on our website at [www.davidsonwater.com](http://www.davidsonwater.com).

