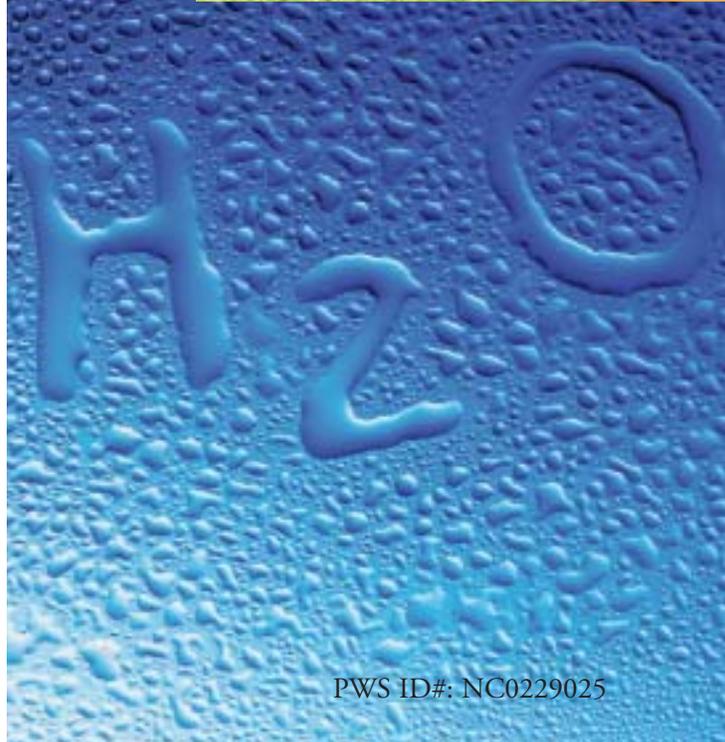




Annual Water Quality Report

Water testing performed in 2004

Davidson Water, Inc.
Welcome, NC



PWS ID#: NC0229025

Continuing Our Commitment

Once again we proudly present our annual water quality report. This edition covers all testing completed from January through December 2004. We are pleased to tell you that our compliance with all state and federal drinking water laws remains exemplary. 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 [waterplant@davidsonwater.com](mailto:waterplant@ davidsonwater.com).



Where Does My Water Come From?

The Davidson Water, Inc.'s, water plant is located on Koontz Road near Highway 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 Highway 321 and then along State Road 268, deepening as other tributaries feed into the Yadkin. The Yadkin then feeds into the W. Keer Scott Dam Reservoir. The W. Keer Scott Dam is an earthen dam built in 1960 by the Army Corps of Engineers for flood control. The reservoir 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 Makes Water "Hard"?

If substantial amounts of either calcium or magnesium, both nontoxic minerals, are present in drinking water, the water is said to be "hard." Hard water does not dissolve soap readily so making a lather for washing and cleaning is difficult (hard). Conversely, water containing little calcium or magnesium is called "soft" water. Davidson Water, Inc.'s water is has approximately 20 parts per million or 1.2 grains per gallon, which is considered very soft water.

System Improvements

This past year we continued our capital improvement program, completing replacement of water lines on Hwy 47 and Hoover Hill Road, two roads that had excessive leaks and that needed larger lines due to growth. We are in the process of replacing a six-inch polyvinyl chloride (PVC) pipe on Old 29 with an eight-inch ductile line because of excessive leaks. We also have earmarked Meadowbrook Road in Randolph County for replacement because of excessive leaks. We will continue to evaluate areas with abnormally high leaks for replacement. Improvements were also made on Shirley Road, Floyd Church Road, Bethany Church Road, Palmer Road, Silver Hill Mine Road, and the major 24-inch and 16-inch transmission lines from our Hyattown pump station to the Holly Grove/Lopp Road pump stations is 70% complete. An agreement has been worked out with Trinity, Archdale and Randolph County to run a major transmission line from County Line Road to Meadowbrook Road on Hwy 62. This line will help provide better pressure to our existing and future customers during peak demand and will also provide for a commercial-industrial growth corridor. Improvements in Davidson County have already started that will coincide with the improvements along Hwy 62 in Randolph County that is being contracted out. The West Lexington pump station that was started last year is now finished, along with the upgrade to the Kennedy pump station. Our service change-out project should be complete by the end of this fiscal year, with remaining service change-outs to be done in-house. Service leaks have been reduced from a high of 1,214 in 1997 to only 276 in 2004. This past year, along with the 276 services repaired, we repaired 513 main line leaks, plus 80 caused by contractors. In addition, we changed 4,216 plastic services to copper, moved 65 meters, repaired 9 hydrants, made 729 water taps, raised and realigned 500 valve boxes and repaired or replaced 44 valves. We continued with our meter replacement program, changing out 4,198 meters. We are continuing with our automatic meter read pilot, now having approximately 5,000 in use. More than 567,000 meters were read, billed, and payments posted. More than 5,000 meters were cut off for failure to pay bills, and 6,207 final readings were obtained when customers moved. Those accounts also had to be reinstated and processed by our office personnel as new customers moved in. Payments by automatic draft, the Internet, and our drive-through window continue to increase.

Additional office space is being planned for our Therrell Grimes Operating Center. At the C.O. Pickle Water Plant, we are repairing our reservoirs and stabilizing their banks. The sludge lagoons and weirs are being revitalized and improved. The caustic containment is being replaced and more storage added. We continue to look for ways to better serve you, our members.

Davidson Water, Inc., Scholarship Program

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 that provides safe, high quality water for present and future generations. Each year, four \$1,000 scholarships are awarded to deserving high school seniors who plan to enter a four-year degree program. Applications are available at your high school guidance office.

Tribute to Robert C. Hedrick

In 1965, four years before we served our first customer with water, a meeting was held in the Village of Welcome concerning incorporation, but what was determined was the need for a dependable safe water supply. C. Boyce Sink, a concerned citizen and future president of North Davidson Water and Davidson Water, Inc., and Clyde Pickle, a Farmers Home representative, approached Robert Hedrick, a young attorney, to see if he would provide free legal assistance in forming a water system. Robert agreed to work pro bono, accepting payment only if and when a water system was created and financing became available through Farmers Home Administration. The relationship with Hedrick lasted forty years. He helped us to become organized and chartered through the state of North Carolina as a nonprofit corporation created to serve our membership with water services. In addition, he helped us with the consolidation of five small systems into the present Davidson Water, Inc., and with the creation and organization of the North Carolina Rural Water Association, for which he served as lawyer for many years. Bylaws, rules and regulations, employee handbooks, employee safety book, annual meetings, easements, contractual agreements, refinancing of debt, and good, good advice given over the years have helped Davidson Water, Inc., to grow and provide water services to more than 125,000 people in Davidson, Randolph and Forsyth counties.

On March 14 Robert C. Hedrick, Attorney at Law, will be attending his 37th and his last annual meeting representing Davidson Water, Inc. Robert has taken the position of Davidson county attorney, the first full-time attorney for the county. We thank him for all of his years of service and dedication to Davidson Water, Inc., and the people we serve. We wish the best for Robert and his wife, Jane. We will truly miss Robert's presence at our board meetings in the C. Boyce Sink Board Room.

Source Water Assessment

The North Carolina Department of Environment and Natural Resources (DENR) has conducted a Source Water Assessment of our drinking water source. The purpose of the assessment was to determine the susceptibility of the drinking water source to potential contamination. The assessment reported a susceptibility rating of "higher" for the Yadkin River. This rating does not imply poor water quality; rather, it signifies the system's potential to become contaminated. The complete report may be viewed on the Web at www.deh.enr.state.nc.us/pws/swap. If you have any questions about the assessment please contact us during regular business hours.



Community Participation

To learn more about your water, 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 courthouse. A notice is mailed immediately prior to the annual meeting. This year's annual meeting was held at the courthouse in Thomasville, NC. President Thad Hartlye presided. John Greer, Secretary, read the minutes from last year; Bob Biesecker from Turlington and Company went over our financial statements; and Gregg Stabler, Manager, reported on operations and maintenance of the water system along with capital improvements to the system. Five board members were elected to serve three-year terms on the Board of Directors of Davidson Water, Inc.: Section 1- Ron Sink; Section 2 – R. V. Potter Jr.; Section 3 – F. Lee Comer; Section 4 - Roger Hedgecock; At Large - Barbara Ewings.

Substances Expected to Be in Drinking Water

To ensure that tap water is safe to drink, 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 which 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. EPA/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 (800-426-4791).

Contamination from Cross-connections

Cross-connections that could contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems) or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand) causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continually jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have installed backflow preventors (dual checks) on new services since 1992. We currently have an initiative to replace approximately 10 to 15 thousand meter setters with a setter that has a backflow preventor (dual check). Adding a dual-check valve to the service connection will increase protection of our system by preventing backflow.

The installation of a dual check may cause a situation called **thermal expansion**, which may cause the relief valve on your hot water tank to leak. One solution, if you experience thermal expansion, would be to install a thermal expansion tank. A thermal expansion tank has been a part of the building code since about 1992. You may want to consider installing one before you have a problem.

For more information, concerning thermal expansion, log on to our Web site at www.davidsonwater.com or visit the Web site of the American Backflow Prevention Association (www.abpa.org) for a discussion on current issues.

Water Conservation Tips

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but also can save you money by reducing your water bill. Here are a few suggestions:

Conservation measures you can use inside your home:

- Fix leaking faucets, pipes, toilets, etc.
- Replace old fixtures; install water-saving devices in faucets, toilets and appliances.
- Wash only full loads of laundry.
- Do not use the toilet for trash disposal.
- Take shorter showers.
- Do not let the water run while shaving or brushing teeth.
- Soak dishes before washing.
- Run the dishwasher only when full.

You can conserve outdoors as well:

- Water the lawn and garden in the early morning or evening.
- Use mulch around plants and shrubs.
- Repair leaks in faucets and hoses.
- Use water-saving nozzles.
- Use water from a bucket to wash your car, and save the hose for rinsing.

Information on other ways that you can help conserve water can be found at www.epa.gov/safewater/publicoutreach/index.html.



Information on the Internet

The 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 Web site at www.davidsonwater.com.

Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. Although all of the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

REGULATED SUBSTANCES

SUBSTANCE (UNITS)	YEAR SAMPLED	MCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Fluoride (ppm)	2004	4	4	0.85	NA	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids (HAAs) (ppb)	2004	60	NA	22.1	6.1-47.9	No	By-product of drinking water disinfection
Total Organic Carbon (ppm)	2004	TT	NA	0.92	0.56-1.17	No	Naturally present in the environment
TTHMs [Total Trihalomethanes] (ppb)	2004	80	NA	26.3	7.3-60.9	No	By-product of drinking water disinfection
Turbidity ¹ (NTU)	2004	TT	NA	0.13	0.03-0.13	No	Soil runoff

Tap water samples were collected for lead and copper analyses from 50 homes throughout the service area

SUBSTANCE (UNITS)	YEAR SAMPLED	ACTION LEVEL	MCLG	AMOUNT DETECTED (90th%TILE)	HOMES ABOVE ACTION LEVEL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2004	1.3	1.3	0.105	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead ² (ppb)	2004	15	0	4	3	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

¹Turbidity 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, 100% of all samples taken to measure turbidity met water quality standards.

²Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline at (800) 426-4791.

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

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

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.