

ANNUAL

WATER QUALITY REPORT

Water testing performed in 2008



DAVIDSON WATER, INC.

PWS ID#: 0229025

Meeting the Challenge

We are once again proud to present to you our annual water quality report. This edition covers all testing completed from January 1, 2008 through December 31, 2008. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal drinking water standards. We continually strive to adopt new and better methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please share with us your thoughts about the information in this report. After all, well-informed customers are our best allies.

Important 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. The U.S. 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 at (800) 426-4791.

Forty Years

On May 2, 2009, Davidson Water, Inc. celebrated 40 Years of Quality on Tap with a dinner at Center United Methodist Church Christian Fellowship Center. During the last 40 years, we have produced 97,409,283,755 gallons of water. We expect to reach 100 billion gallons produced in January 2010. With over 58,000 connections spanning 1,800 miles of water pipe, Davidson Water, Inc. has become one of the largest, privately owned, rural water systems in the world. A special thanks to all of our customers for the last 40 years. We look forward to providing you safe, potable water for another 40 years and beyond.

Substances That Could Be in 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 dissolves 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.

Lawn Irrigation Systems

Davidson Water, Inc. implemented a cross-connection control policy effective January 1, 2008, which requires all lawn irrigation systems to install and maintain backflow prevention assemblies. Backflow preventers have internal seals, springs, and moving parts that are subject to fouling, wear, or fatigue. Therefore, they must be tested annually to ensure they are functioning properly. Visit www.davidsonwater.com for more information on backflow prevention and a list of approved testers. New legislation enacted due to past drought conditions now requires all in-ground irrigation systems to have their own meters.

Where Does My Water Come From?

The Davidson Water, Inc. 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. Kerr Scott Dam Reservoir. The Army Corps of Engineers built the W. Kerr Scott Dam in 1960 for flood control. It is an earthen dam. 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 the volume of water that would cover one acre to a depth of 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.

Source Water Assessment

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply Section, Source Water Assessment Program (SWAP) assessed all water sources across North Carolina. The assessments determined the susceptibility of each drinking water source to potential contaminants.



It is important to understand that a high susceptibility rating does not imply poor water quality. Susceptibility is an indication of a water supply's potential to become contaminated by the identified Potential Contaminant Sources (PCSs) within the assessment area.

The assessment finds are summarized in the table below:

Source	Yadkin River
Inherent Vulnerability	High
Contaminant Rating	Moderate
Susceptibility Rating	High

The complete SWAP Assessment Report for Davidson Water, Inc., Public Water Source ID No. 0229025, may be viewed on the Web at www.deh.enr.state.nc.us/pws/swap.

Community Participation

If you want to learn more, you may 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 U.S. Highway 52, Welcome, North Carolina.

We also hold an annual meeting on the second Monday in March at the courthouse in either Lexington or Thomasville, North Carolina. A notice is mailed immediately prior to the annual meeting. The annual meeting in 2009 was held at the courthouse in Thomasville. President Ron Sink presided. John Greer, Secretary, read the minutes from the previous 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. They are:



Ben Hege Section 1

Reid Smith Section 2

John Greer Section 3

Richard Motsinger Section 4

Danny Fitzgerald At Large

Questions?

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) 731-5571, or e-mail [waterplant@davidsonwater.com](mailto:waterplant@ davidsonwater.com).



Source Water Protection

“An ounce of prevention is worth a pound of cure.” When it comes to providing you safe, affordable water, Davidson Water, Inc., has developed a Source Water Protection Plan that has been approved by the North Carolina Department of Environment and Natural Resources, Division of Environmental Health. Help keep our waterways clean. For more information, our Source Water Protection Plan is available on our Web site, www.davidsonwater.com.

Remember:

- Don't Litter
- Don't over Fertilize
- Repair Septic Systems
- Prevent Soil Erosion
- Properly Dispose of All Things Harmful to Our Environment

Working Hard For You

In March of 1985, John Sharpe became a Board Member of Davidson Water, Inc. He has provided leadership and support. His innate, God-given qualities have appeared at the most appropriate times during Board Meetings. This will be his 302 board meeting and 25th annual meeting. "No one is useless in this world who lightens the burden of another." For almost 25 years John Sharpe has exemplified this by helping us at Davidson Water, Inc. to help provide one of God's most precious resources, water, to our membership.

This year we will be celebrating 40 years of providing water services to you, our membership. We have grown from 2,800 connections to over 58,000, providing service to a population of 140,000 in four different counties plus portions or all of seven municipalities while providing commercial and industrial growth as well. Long before the movie "Field of Dreams" our past General Manager, J. A. Younts, said, "Build a water line and customers will come." How right he was 58,000 plus connections.

During the past 40 years, we have gone through several recessions, severe droughts, major ice storms, a hurricane, and saw our nation attacked on U.S. soil for the first time. Each of these adversities has led to system improvements and tighter security.

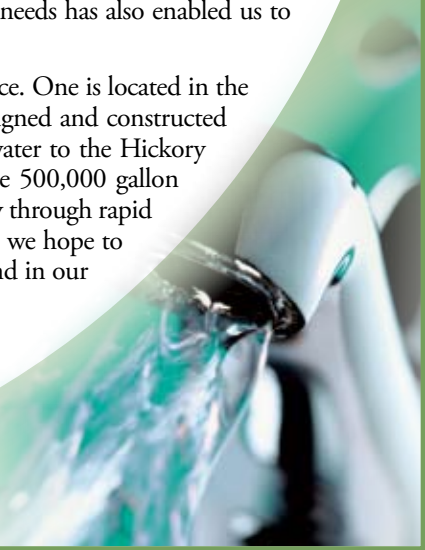
Our water plant has been expanded six times from 2 mgd to our present capacity of 20 mgd. We now have over 1,500 miles of water lines from 2 inches through 30 inches diameter. Our system includes 30 tanks holding 19,125,000 gallons of water, three reservoirs holding a combined total of 77 million gallons, 22 remote pump stations with 55 pumps, plus seven raw water pumps, six river pumps, and 15 high-service pumps located at our water plant. We truly have been blessed over the past 40 years due to visionary leadership and the leadership of our Board, management, and dedicated, skilled employees.

This past year we obtained permits from the Army Corps of Engineers for a new river intake and are awaiting final State approval before beginning construction. The new intake will operate more efficiently and under much lower river levels. Our rate structure has been changed to emphasize conservation. We are still under voluntary conservation measures and if river flows dictate, we will initiate stricter conservation measures. We are continuing to work on our IBT issues by exploring many options. Our GIS program is getting closer to reality. Meters, valves, hydrants, and other facilities have now been GPSed and software purchased.

This past year we received \$27,112 of generator credits at our Hyattown and office facilities and were able to reduce our plant electrical costs by an additional \$170,000 by load management with our two plant generators. We produced 4,079,958,000 gallons of water in 2008, billing for 3,485,416,000 gallons with a water loss of 14.6%. We have continued our capital improvement program, completing an eight-inch line on Hampton Road that replaced a six-inch line. We also replaced lines that were giving us trouble on Howard Black Road and County Home Road. Our service leaks have been reduced from a high of 1,214 in 1997 to only 13 in 2008. This past year, along with 13 services repaired, we repaired 459 main line leaks, plus an additional 16 leaks caused by contractors, moved 15 meters, repaired 23 hydrants, and made 574 water taps; 210 valve boxes were raised and realigned, and 73 valves were repaired or replaced. We continue with our meter replacement program changing out 6,083 meters. We are continuing with our automatic meter read program and now have 22,643 in use. Over 635,000 meters were read and billed with payments posted; 6,200 meters were cut off for nonpayment, and 6,049 readings were obtained when customers moved in or out. We continue to add new sign-up and payment options enabling us to provide better customer service. Our new phone system that includes additional lines and options for our customers' needs has also enabled us to provide better customer service.

The two new one-million-gallon tanks that we opened for bidding on March 21, 2007 are now in service. One is located in the Welcome zone and the other in the Hickory Tree zone. A new 20-inch transmission line has been designed and constructed from our three-million-gallon reservoir to provide more water to the Welcome zone, which provides water to the Hickory Tree, Wallburg, Hasty, and Prospect zones. The new pump station that was designed to go under the 500,000 gallon elevated tank in Trinity is now in service. The pump station will provide better pressure and water quality through rapid turnover of the water and help to meet peak demands now and in the future. Through these initiatives, we hope to provide better service to you, our members, now and in the future. Continued growth and water demand in our service area will require us to continue making plans for a new water plant and larger reservoir.

The value of life-sustaining water, conservation measures, source water protection, and the need to develop new sources need to continue to be communicated to our users. "It's better to look ahead and prepare than to look back and regret." "Today's preparation determines tomorrow's achievements."



Lead and Drinking Water

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 your home's plumbing. Davidson Water, Inc. 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 30 seconds to two minutes before using the 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 you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater/lead.

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.

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 (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2008	[4]	[4]	2.6	1.3–3.2	No	Water additive used to control microbes
Fluoride (ppm)	2008	4	4	1.03	0.11–1.43	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA] (ppb)	2008	60	NA	45.0	28.3–64.8	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	2008	80	NA	55.4	30.3–107.0	No	By-product of drinking water chlorination
Total Organic Carbon [TOC]¹ (ppm)	2008	TT	NA	1.26	1.1–1.54	No	Naturally present in the environment
Turbidity² (NTU)	2008	TT = 1 NTU	NA	0.18	0.04–0.18	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2008	TT	NA	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2007	1.3	1.3	0.094	0/50	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2007	15	0	5	1/50	No	Corrosion of household plumbing systems; Erosion of natural deposits

¹ Depending on the TOC in our source water, the system MUST have a certain percent removal of TOC or must achieve alternative compliance criteria. If we do not achieve that percent removal, there is an alternative percent removal. If we fail to meet the alternative percent removal, we are in violation of a Treatment Technique.

² 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. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU.

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.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable.

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

Turbidity in excess of 5 NTU is just noticeable to the average person.

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).

removal ratio: A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

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