ANNUAL WATER OUALITY REPORT

Water Testing Performed in 2016



Presented By
Davidson Water, Inc.

We've Come a Long Way

We are proud to present our annual water quality report covering the period between January 1 and December 31, 2016. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Our exceptional staff continues to work hard every day and hour to deliver the highest-quality drinking water without interruption. Although the challenges ahead are many, we feel that by relentlessly investing in customer outreach and education, new treatment technologies, system upgrades, and training, the payoff will be reliable, high-quality tap water delivered to you and your family.

THIS INSTITUTION IS AN EQUAL OPPORTUNITY PROVIDER

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at http://www.ascr.usda.gov/complaint_filing_cust.html and at any USDA office, or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the form, call (866) 632-9992. Submit your completed form or letter to the USDA by mail to U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue SW, Washington, D.C. 20250-9410; by fax (202) 690-7442; or by email at program.intake@usda.gov.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer undergoing chemotherapy, those 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 or http://water.epa.gov/drink/hotline.

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 that 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.



Davidson Water, Inc., Operations and System Improvements

I am pleased to report to the membership that Davidson Water, Inc., has 60,847 total connections and 53,983 active meters. That is an increase of 585 active taps over the prior year. We added 463 new water taps in the past year, which is an increase of 81 over the prior year and the highest number since 2008. Currently, we have 71 full-time employees and 4 part-time employees.

The Gregg Stabler Water Plant ran an average of 9.56 million gallons a day (mgd), with a maximum daily production of 13.236 mgd. This is slightly down from the prior year in spite of our being up in customers. The combination of low-flow fixtures and customer conservation is greatly contributing to this downward trend. We have maintained full compliance with all state-mandated tests. We partnered with North Carolina Rural Water Association and conducted a B-Surface school in which four operators participated. Operational changes to our dechlorination process were put in place, allowing a savings of over \$25,000 annually. A substantial project underway is a 12-filter rehabilitation in the C.O. Pickle Water Plant. Rehab will include demolition of existing filters, recoating of pipe gallery infrastructure, and a new under-drain and air scour system. This project is budgeted at \$2.35 million.

Our distribution system saw line upgrades, line extensions, and pipe relocation of 22,500' or 4.26 miles. Projects included Ronniedale Road, Remer Regan Road, Beckner Road, Riverwood Drive, and Walkabout Lane. In addition to these projects, we completed 5 NC DOT projects requiring line relocations and 6 different new or expanded subdivision projects. Our main project right now is a replacement of our Hyattown Pump Station, through which 70% of our daily water passes. This pump station is receiving new, more efficient pumps, new electrical equipment, a larger generator for back-up power, and larger piping, with the room to add on more. This project will replace 1970s equipment. We estimate the new station will carry us out to the year 2060.

Our meter department installed 4,044 radio-read meters, bringing the total number in our system to 42,842. We plan to have all meters replaced with AMR technology by the end of 2018. These meters are very accurate, have a 10-year warranty, and are the best value for the company to measure and bill for water.

Office and customer service upgrades included work-order migration software, annual meeting proxies presented online, new wiring and data/server room, and numerous billing dashboard features. Other customer service measures implemented were email notification for high bill consumption and past due accounts. Also, our staff has been very busy working through two different bank mergers.

Effective on January 1, 2017, we instituted the Water Loss Protection Plan (WLPP) for our customers. This opt-out program gives a member relief from an unanticipated high water bill in any given 24-month period of time. The charge is .50 per month.

Davidson Water employees have demonstrated an admirable willingness to give back to the community in more ways than one. We set a record in employee giving in our annual United Way campaign. Our employees partnered with RCR Racing in donating water and clothing to flood victims in West Virginia. Also, we partnered with Western North Carolina United Methodist Church in donating 253 buckets of cleaning supplies for flood relief in eastern North Carolina from Hurricane Matthew. And our annual Food Drive at Christmas is always a huge success. Our employees contributed \$353 in cash and 374 lbs of food for Greater Outreach Ministry in Welcome.





Our company is fortunate to have community stewards serve on our board of directors. I want to recognize Barbara Ewings for 23 years of service on the board. Barbara has served as a Director since 1994. During this tenure, she has participated in numerous industry conferences, served on multiple committees, most notably the Scholarship Committee where she served as Chair for many years. We thank Barbara for her service.

I want to emphasize our commitment to our mission of providing safe, reliable water to our members at the lowest possible cost. We will continue to do that with the leadership of our board and management, the expert guidance of our professional staff, the dedication and expertise of our employees, and the support of our members. Thank you for your support.

Ron Sink General Manager

New Deposits for Existing Customers

Davidson Water, Inc., is a private non-profit membership corporation. Our Bylaws and Rules and Regulations require a separate membership deposit for every meter. The membership deposit cannot be transferred from one meter to another. If you are an existing customer and moving to a new location on our water system, the bylaws require

that you pay a new membership deposit for the new meter. When and if you have your previous account disconnected, anything owing on your final bill would be deducted from that membership deposit and a refund check or final bill would be mailed. Members with more than one meter in their name would have multiple deposits.

Source Water Assessment

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

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

The assessment finds are summarized in this table:

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

http://www.ncwater.org/?page=600

Enter our PWSID number "0229025" when asked to enter Public Water Supply system name or number, and then click Get Report.

E-Billing

Davidson Water, Inc., offers e-billing, in which invoices are delivered by email rather than by mail. This billing system is quicker, more convenient, and environmentally friendly. If you wish to participate in Davidson Water's online billing system, simply contact our office at (336) 731-5505, and a Customer Service Representative will be glad to assist you.

Benefits of E-Billing

- Fast and Convenient Members who are signed up for e-billing will receive an email notification when their bill is available, with a link for easy access to our Web site with no time delay. E-bills are available 24 hours a day, 7 days a week, making it convenient to pay online with no additional charge.
- Additional Online Services and Communication – Email services allow you to receive electronic reminders if an account is overdue, and to receive notification if the account shows unusually high consumption.
- Environmental Friendly By reducing the usage of paper, you contribute to protecting the environment.

Payment options:

- Online at www.davidsonwater.com
- Automatic Bank Draft
- Mail: P.O. Box 969, Welcome, NC 27374
- Phone: Call (336) 731-5505 during regular business hours. We accept Visa, Discover, and MasterCard.
- Payment Stations: See our Web site for details.
- Payment Drop Box

Lead in Home Plumbing

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 home plumbing. We are responsible for providing high-quality drinking water, but we 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 2 minutes before using 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 or at www.epa.gov/lead.



Annual Meeting

Davidson Water, Inc.'s annual meeting is held on the second Monday in March. A notice with a proxy statement is mailed 2 months prior to the meeting. The annual meeting this year was held on March 13, 2017, at the Mary E. Rittling Conference Center on the campus of Davidson County Community College. President Lee Comer presided. Ben Hege, Secretary, read the minutes from the 2016 meeting. Craig Adcock from Turlington & Company went over the financial statements and year-end audit. Mr. Adcock stated the company was in sound financial shape. Ron Sink, General Manager, reported on operations and maintenance of the water system along with capital improvements to the system.

The following people were elected to serve threeyear terms on the Board of Directors of Davidson Water, Inc.:

Gregg Stabler	Zone 1
Sheila Potter	Zone 2
Lee Comer	Zone 3
Jason Hedgecock	Zone 4
LeeAnn Tuttle-Thomas	At Large

Where Does My Water Come From?

The Gregg W. Stabler and C.O. Pickle Water Treatment Plants are located on Koontz Road near Highway 64 West, Lexington, NC. 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 W. Kerr 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 that 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 325,000 gallons.) A minimum flow must be released through the dam to keep a constant supply of water flowing down the Yadkin.

During 2016, Davidson Water purchased water from the City of Winston-Salem and the City of Archdale to supplement peak usage or emergency needs. To obtain a Water Quality Report from the City of Winston-Salem or the City of Archdale, please contact them:

City of Winston-Salem: (336) 727-8000 City of Archdale: (336) 434-7364

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Brandon Garner, Water Plant Superintendent, or Craig Koonts, Assistant Water Plant Superintendent, at (336) 731-5585 or email waterplant@davidsonwater.com.

Test Results

ur water is monitored for many different kinds of contaminants on a very strict sampling schedule. The information below represents only those substances that were detected; our goal is to keep all detects below their respective maximum allowed levels. The State recommends monitoring for certain substances less often 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	CES							
SUBSTANCE (UNIT OF MEASURE)		YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Atrazine (ppb)		2016	æ	E	ON	NA	%	Runoff from herbicide used on row crops
Chlorine (ppm)		2016	[4]	[4]	1.7	1.3–1.7	Š	Water additive used to control microbes
Chlorite (ppm)		2016	1	8.0	0.29	0-0.29	No	By-product of drinking water disinfection
Chromium (ppb)		2016	100	100	QN	NA	Š	Discharge from steel and pulp mills; Erosion of natural deposits
Fecal coliform and E . $coli$ (# positive samples)	(# positive	2016	0	0	0	NA	°N	Human and animal fecal waste
Fluoride (ppm)		2016	4	4	0.525	0.525-0.525	°N	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	(pdd)	2016	09	NA	31	11.4–59	N _o	By-product of drinking water disinfection
Nitrate (ppm)		2016	10	10	QN	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] ¹ (ppb)	thanes]¹ (ppb)	2016	80	NA	44	12.5–97	No	By-product of drinking water disinfection
Total Coliform Bacteria (Positive samples)	Positive samples)	2016	TT	NA	0	NA	Š	Naturally present in the environment
Total Organic Carbon [TOC] ² (ppm)	OC] ² (ppm)	2016	TT	NA	1.063	0-1.1	No	Naturally present in the environment
Turbidity ³ (NTU)		2016	TT = 1 NTU	NA	0.183	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	y percent of	2016	TT = 95% of samples meet the limit	s NA	100	NA	%	Soil runoff
Tap water samples were collected for lead and copper analyses from sample sites throughout the community.	ed for lead and copper	analyses from sa	imple sites throughout th	he community.				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	AMOUN MCLG (90]	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	AL/ S VIOLATION		TYPICAL SOURCE
Copper (ppm)	2016	1.3	1.3	980.0	0/20	No		Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2016	15	0	ND	0/20	No		Corrosion of household plumbing systems; Erosion of natural deposits
SECONDARY SUBSTANCES	VCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	A MCLG DE	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	RCE
Manganese (ppb)	2016	50	NA	ND	NA	No	Leaching fro	Leaching from natural deposits
Sulfate (ppm)	2016	250	NA	24.5	NA	No	Runoff/leac	Runoff/leaching from natural deposits; Industrial wastes
pH (Units)	2016	6.5–8.5	NA	6.77	6.5–8.5	No	Naturally occurring	ccurring

UNREGULATED CONTAMINANT MON	ANT MONITORING RULE - PART 3 (UCMR3) 4	.RT 3 (UCMR3) ⁴		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT	LQ	RANGE LOW-HIGH
Chlorate (ppb)	2015	110		86 - 110
Chromium-6 (ppb)	2015	0.05		0.04 - 0.05
Strontium (ppb)	2015	47.9		46.8 - 47.9
UNREGULATED SUBSTANCES 4	S ⁴			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Sodium (ppm)	2016	16.2	NA	NA

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their livers, kidneys, or central nervous systems, and may

have an increased risk of getting cancer.

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 is an alternative % removal. If we fail to meet the alternative % removal, we are in violation of a Treatment Technique.

Depending on the TOC in our source water, the system MUST have a certain % removal of TOC or must achieve alternative compliance criteria. If we do not achieve that % removal, there

Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of monitoring unregulated contaminants is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted. the monthly samples must be less than or equal to 0.3 NTU.

Definitions

AL (**Action Level**): The concentration of a

JRAA (Locational Running Annual Average): The

MCL (Maximum Contaminant Level): The highest

MCLG (Maximum Contaminant Level Goal): The

MRDL (Maximum Residual Disinfectant Level):

nealth. MRDLGs do not reflect the benefits of the use MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant

NTU (Nephelometric Turbidity Units):

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

SMCL (Secondary Maximum Contaminant Level):

IT (Treatment Technique): A required process intended