

“2014” Annual Drinking Water Quality Report

“Town of Wadesboro”

Water System Number: “03-04-020”

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are details about your source(s) of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and to providing you with this information because informed customers are our best allies. **If you have any questions about this report or concerning your water, please contact Hugh James at (704)-694-5171. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held at [location/dates/time]Town Hall, the first Monday of every month.**

What EPA Wants You to Know

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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 infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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. [Name of Utility] 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 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 <http://www.epa.gov/safewater/lead>.

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 and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from 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 operations, and wildlife; inorganic contaminants, such as salts and metals, which can be naturally-occurring or 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 can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

When You Turn on Your Tap, Consider the Source .

The water that is used by this system is surface water from City Lake , a 100 acre lake.

Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower.

The relative susceptibility rating of each source for City Lake was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area). The assessment findings are summarized in the table below:

Susceptibility of Sources to Potential Contaminant Sources (PCSs)

Source Name	Susceptibility Rating	SWAP Report Date
City Lake	Moderate	March 2010

The complete SWAP Assessment report for Wadesboro Municipal Lake may be viewed on the Web at: www.ncwater.org/pws/swap. Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this web site may differ from the results that were available at the time this CCR was prepared. If you are unable to access your SWAP report on the web, you may mail a written request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email requests to swap@ncdenr.gov. Please indicate your system name, number, and provide your name, mailing address and phone number. If you have any questions about the SWAP report please contact the Source Water Assessment staff by phone at 919-707-9098.

It is important to understand that a susceptibility rating of “higher” does not imply poor water quality, only the system’s potential to become contaminated by PCSs in the assessment area.

Help Protect Your Source Water

**** New - Water systems are encouraged to use this report to inform consumers of source water protection actions that are in the planning stages or are already in place, to invite public participation in locally based source water protection efforts, and to provide tips on ways they can protect their source water. See paragraph below for suggested content.**

Protection of drinking water is everyone’s responsibility. We have implemented the following source water protection actions: You can help protect your community’s drinking water source(s) in several ways: (examples: dispose of chemicals properly; take used motor oil to a recycling center, volunteer in your community to participate in group efforts to protect your source, etc.).

Violations that Your Water System Received for the Report Year

The town purchased water from Anson County from August through December of 2014. We have not been notified of any violations from them during this period.

During (year), or during any compliance period that ended in (year), we received a [insert type] violation that covered the time period of [insert compliance period]. We are/have [insert information on corrective action] to assure this does not happen again.

Treatment Technique Violations

TT Violation	Explanation	Length of Violation	Steps Taken to Correct the Violation	Health Effects Language

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Violation Awareness Date: _____

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 compliance period specified in the table below, we [‘did not monitor or test’ or ‘did not complete all monitoring

or testing'] for the contaminants listed and therefore cannot be sure of the quality of your drinking water during that time.

CONTAMINANT GROUP**	FACILITY ID NO./ SAMPLE POINT ID	COMPLIANCE PERIOD BEGIN DATE	NUMBER OF SAMPLES/ SAMPLING FREQUENCY	WHEN SAMPLES WERE TAKEN (Returned to Compliance)

**Delete the contaminant listings below that do not apply to your violations.

(AS) Asbestos - includes testing for Chrysotile, Amphibole and Total Asbestos.

(BA) Total Coliform Bacteria - includes testing for Total Coliform bacteria and Fecal/*E.coli* bacteria. Testing for Fecal/*E.coli* bacteria is required if total coliform is present in the sample.

(BB) Bromate/Bromide - includes testing for Bromate and/or Bromide.

(CD) Chlorine Dioxide/Chlorite - includes testing for Chlorine Dioxide and/or Chlorite.

(DI) Disinfectant Residual must be tested with the collection of each compliance bacteriological sample, at the same time and site.

Fecal Indicators - includes *E.coli*, enterococci or coliphage.

(HAA5)- Haloacetic Acids - include Monochloroacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Monobromoacetic Acid, Dibromoacetic Acid.

(IOC) Inorganic chemicals - include Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cyanide, Fluoride, Iron, Manganese, Mercury, Nickel, pH, Selenium, Sodium, Sulfate, and Thallium.

(LC) Lead and Copper are tested by collecting the required number of samples and testing each of the samples for both lead and copper.

(NT) Nitrate/ (NI) Nitrite - includes testing for nitrate and/or nitrite.

(RA) Radionuclides - includes Gross Alpha, Radon, Uranium, Combined Radium, Radium 226, Radium 228, Potassium 40 (Total), Gross Beta, Tritium, Strontium 89, Strontium 90, Iodine 131, and Cesium 134.

(SOC) - Synthetic Organic Chemicals/Pesticides - include 2,4-D, 2,4,5-TP (Silvex), Alachlor, Atrazine, Benzo(a)pyrene, Carbofuran, Chlordane, Dalapon, Di(2-ethylhexyl)adipate, Di(2-ethylhexyl)phthalate, Dibromochloropropane (DBCP), Dinoseb, Endrin, Ethylene dibromide (EDB), Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, Oxamyl(vydate), PCBs, Pentachlorophenol, Picloram, Simazine, Toxaphene.

(TOC) - Total Organic Carbon - includes testing for Alkalinity, Dissolved Organic Carbon (DOC), Total Organic Carbon (TOC) and Ultraviolet Absorption 254 (UV254). Source water samples must be tested for both TOC and Alkalinity. Treated water samples must be tested for TOC. Source water samples and treated water samples must be collected on the same day.

(TTHM) - Total Trihalomethanes - include Chloroform, Bromoform, Bromodichloromethane, and Dibromochloromethane.

(VOC) - Volatile Organic Chemicals - include 1,2,4-Trichlorobenzene, Cis-1,2-Dichloroethylene, Xylenes (Total), Dichloromethane, o-Dichlorobenzene, p-Dichlorobenzene, Vinyl Chloride, 1,1,-Dichloroethylene, Trans-1,2,-Dichloroethylene, 1,2-Dichloroethane, 1,1,1-Trichloroethane, Carbon Tetrachloride, 1,2-Dichloropropane, Trichloroethylene, 1,1,2-Trichloroethane, Tetrachloroethylene, Chlorobenzene, Benzene, Toluene, Ethylbenzene, and Styrene.

(WQP) Water Quality Parameters (for Lead and Copper Rule) - includes Calcium, Orthophosphate (as PO₄), Silica, Conductivity, pH, Alkalinity and Water Temperature.

What should I do? There is nothing you need to do at this time.

What is being done? [Describe corrective action.]

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information about this violation, please contact the responsible person listed in the first paragraph of this report.

Water Quality Data Tables of Detected Contaminants

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The tables below list all the drinking water contaminants that we detected in the last round of sampling for **each** particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. **Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, (2014).** The EPA and the State allow us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

**** For detected unregulated contaminants for which monitoring is required (except *Cryptosporidium*), the table(s) must contain the average and range at which the contaminant was detected. The report may include a brief explanation of the reasons for monitoring for unregulated contaminants.**

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.

Important Drinking Water Definitions:

Not-Applicable (N/A) – Information not applicable/not required for that particular water system or for that particular rule.

Non-Detects (ND) - Laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used.

Parts per million (ppm) or Milligrams per liter (mg/L) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (ug/L) - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/L) - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/L) - One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.

Million Fibers per Liter (MFL) - Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

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

Maximum Residual Disinfection Level (MRDL) – 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.

Maximum Residual Disinfection Level Goal (MRDLG) – 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.

Locational Running Annual Average (LRAA) – The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters under the Stage 2 Disinfectants and Disinfection Byproducts Rule.

Maximum Contaminant Level (MCL) - 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.

Maximum Contaminant Level Goal (MCLG) - 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.

Tables of Detected Contaminants

Microbiological Contaminants in the Distribution System - For systems that collect *less than 40* samples per month

Contaminant (units)	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N	0	0	1 positive sample / month*	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (presence or absence)	N	0	0	Note: If either an original routine sample and/or its repeat samples(s) are fecal coliform or <i>E. coli</i> positive, a Tier 1 violation exists.	Human and animal fecal waste

* If a system collecting fewer than 40 samples per month has two or more positive samples in one month, the system has a MCL violation.

(A) potential health effects from the health effects language from Appendix A of Subpart O are as follows:

E.coli - Fecal coliforms and E.coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely-compromised immune systems.

Fecal Indicators (enterococci or coliphage) - Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

Turbidity*

Contaminant (units)	Treatment Technique (TT) Violation Y/N	Your Water	MCLG	Treatment Technique (TT) Violation if:	Likely Source of Contamination
Turbidity (NTU) - Highest single turbidity measurement	N	.31 NTU	N/A	Turbidity > 1 NTU	Soil runoff
Turbidity (NTU) - Lowest monthly percentage (%) of samples meeting turbidity limits	N	99 %	N/A	Less than 95% of monthly turbidity measurements are ≤ 0.3 NTU	

* 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.

Inorganic Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Fluoride (ppm)	5-1-14	N	N/D	0-1.45		4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Arsenic: While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Nitrate/Nitrite Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Nitrate (as Nitrogen) (ppm)	8-27-14	N	N/D	N/A		10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	8-27-14	N	N/D	N/A		1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Nitrate: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Asbestos Contaminant

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Total Asbestos (MFL)	12-27-12	N	< .1391	N/A		7	7	Decay of asbestos cement water mains; erosion of natural deposits

- ** For example: copper (action level is 1.3 ppm): Record the same as lead, but no conversion of units is required.
- ** If the system is required to only take 5 samples, calculate the average of the 2 highest results to get the 90th percentile “Your Water” value.

Lead and Copper Contaminants

Contaminant (units)	Sample Date	Your Water	Number of sites found above the AL	MCLG	AL	Likely Source of Contamination
Copper (ppm) (90 th percentile)	9-19-14	.109	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90 th percentile)	9/19/14	N/D	0	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

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Radiological Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Alpha emitters (pCi/L)	11-21-13	N	N/D	N/A		0	15	Erosion of natural deposits
Beta/photon emitters (pCi/L)	11-21-13	N	N/D	N/A		0	50 *	Decay of natural and man-made deposits
Combined radium (pCi/L)	11-21-13	N	N/D	N/A		0	5	Erosion of natural deposits
Uranium (pCi/L)	11-13-13	N	N/D	N/A		0	20.1	Erosion of natural deposits

* Note: The MCL for beta/photon emitters is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles.

Total Organic Carbon (TOC)

Contaminant (units)	TT Violation Y/N	Your Water (RAA Removal Ratio)	Range Monthly Removal Ratio Low - High	MCLG	TT	Likely Source of Contamination	Compliance Method (Step 1 or ACC#_)
Total Organic Carbon (removal ratio) (TOC)-TREATED	N	1.14	.95-1.24	N/A	TT	Naturally present in the environment	Step 1 and ACC 4

****Disinfectant Residuals:**

**For Disinfectant Residuals, record the highest running annual average (RAA) in "Your Water" column. The range should be the lowest to highest results of all compliance samples.

**Chlorine Dioxide is sampled at the EP and compliance is based on the results of 2 consecutive daily samples.

****Disinfectant Residuals – Reporting Example:**

- Monitoring for chloramines
- System size: 1,001-2,500 people
- Samples: 2 times per month
- Chloramines MRDL: 4 ppm
- MRDL in CCR units: 4 ppm

Example: 2014 Results:

Samples (ppm)	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept	Oct.	Nov.	Dec.
Sample 1	1.0	2.1	1.4	2.2	1.4	1.4	2.5	2.6	1.4	2.9	3.7	1.8
Sample 2	1.4	1.9	0.8	2.2	2.3	1.6	2.1	2.8	1.4	2.7	2.9	1.8
Monthly Average	1.2	2.0	1.1	2.2	1.9	1.5	2.3	2.7	1.4	2.8	3.3	1.8
Quarterly RAA*	1.7			2.3			1.9			2.0		

*Reported RAA for quarters 1-3 are based on results from previous quarters not reported on this table.

**Note: Gray highlighted numbers in table above represent the range and the highest RAA.

Disinfectant Residuals Summary

	Year Sampled	MRDL Violation Y/N	Your Water (highest RAA)	Range		MRDLG	MRDL	Likely Source of Contamination
				Low	High			
Chlorine (ppm)	2014	N	2.8	2.3	2.8	4	4.0	Water additive used to control microbes
Chloramines (ppm)	2014	N	2.5	1.6	2.8	4	4.0	Water additive used to control microbes
Chlorine dioxide (ppb)	2014	N				800	800	Water additive used to control microbes

**Stage 1 Disinfection Byproducts (Stage 1 DBPs):

**In "Your Water" column, for Stage 1 DBP compliance data, record the system-wide running annual average (RAA).

**The range should be the lowest to highest results of all compliance samples.

** If an MCL violation occurred, include a discussion of the MCL violation, including health effects language, below the appropriate table.

** Stage 1 DBPs – EXAMPLE WORKSHEET (not to be included in CCR):

- Total Trihalomethane monitoring under Stage 1 DBPR.
- TTHM MCL: 0.080 ppm
- MCL in CCR units: 80 ppb

Example: 2014 Results:

Total Trihalomethane Monitoring Results* (in ppb)	1st quarter 2014	2nd quarter 2014	3rd quarter 2014	4th quarter 2014
Site 1	53	62	125	70
Site 2	55	62	119	60
Site 3	50 (Low)	63	117	70
Site 4	54	69	135 (High)	84
System-wide Quarterly Average	53	64	124	71
System-wide Running Annual Average*	75	77	82	78 (RAA)

*Reported RAA for quarters 1-3 are based on results from previous quarters not reported on this table.

**Note: Gray highlighted numbers in the table above represent the range and the system-wide RAA of the results obtained during the calendar year.

**Also, since the 3rd quarter RAA of 82 ppb exceeds the TTHM MCL of 80 ppb, a discussion of the MCL, including health effects language should be included below the table.

Stage 1 Disinfection Byproduct Compliance - Based upon Running Annual Average (RAA)

Disinfection Byproduct	Year Sampled	MCL Violation Y/N	Your Water (highest RAA)	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
TTHM (ppb)	2014	N	46	30	46	N/A	80	Byproduct of drinking water disinfection

HAA5 (ppb)	2014	N	44	26 - 59	N/A	60	Byproduct of drinking water disinfection
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****Special Note:** If TTHMs are detected in any individual sample above 0.080 mg/L (ppm), or if HAA5s are detected in any individual sample above 0.060 mg/L (ppm), the corresponding health effects language below is required, even if their running annual averages (RAAs) are below the TTHM MCLs of 0.080 mg/L (80 ppb) or the HAA5 MCL of 0.060 mg/L (60 ppb). (Remove health effects language below, if not needed.)

For TTHM: *Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.*

For HAA5: *Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.*

****Stage 2 Disinfection Byproducts (Stage 2 DBPs):**

**In "Your Water" column, record the highest locational running annual average (LRAA).

**For each monitoring location, report the range (lowest to highest results) of all compliance samples.

** If an MCL violation occurred, include a discussion of the MCL violation, including health effects language, below the appropriate table. Systems with a LRAA MCL exceedance at more than one location, must report the highest LRAA for each location that exceeded the MCL.

**** Stage 2 DBPs –EXAMPLE WORKSHEET (not to be included in CCR):**

- Total Trihalomethane monitoring under Stage 2 DBPR
- TTHM MCL: 0.080 ppm
- MCL in CCR units: 80 ppb

Example: 2014 Results:

Total Trihalomethane Monitoring Results* (in ppb)	1 st quarter 2014	2 nd quarter 2014	3 rd quarter 2014	4 th quarter 2014
Site 1 Quarterly Results	62	65	125	100
Site 1- LRAA *	52	87	74	88
Site 2 Quarterly Results	40	55	115	60
Site 2- LRAA *	42	49	71	68
Site 3 Quarterly Results	45	60	105	70
Site 3- LRAA *	40	48	69	70
Site 4 Quarterly Results	50	65	135	62
Site 4- LRAA *	60	55	82	78

*Reported LRAA for quarters 1-3 are based on results from previous quarters not reported on this table.

**Include discussion of the TTHM MCL violation at Sites 1 and 4, including health effects language below the table.

Stage 2 Disinfection Byproduct Compliance - Based upon Locational Running Annual Average (LRAA)

Disinfection Byproduct	Year Sampled	MCL Violation Y/N	Your Water (highest LRAA)	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
TTHM (ppb)						N/A	80	Byproduct of drinking water disinfection
HAA5 (ppb)						N/A	60	Byproduct of drinking water disinfection
Location (Ex. B01)								

****Special Note:** If TTHMs are detected in any individual sample above 0.080 mg/L (ppm), or if HAA5s are detected in any individual sample above 0.060 mg/L (ppm), the corresponding health effects language below is required, even if their locational running annual averages (LRAAs) are below the TTHM MCLs of 0.080 mg/L (80 ppb) or the HAA5 MCL of 0.060 mg/L (60 ppb). (Remove health effects language below, if not needed.)

For TTHM: *Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.*

For HAA5: *Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.*

****Chlorite samples should be collected at the entry point (EP) and three points in the distribution system to get the three sample set average for “Your Water” value. If any EP chlorite sample exceeds the chlorite MCL [1.0 mg/L (ppm)], three distribution samples must be taken the next day and this average would be the “Your Water” value on the table.**

Other Disinfection Byproducts Contaminants

Contaminant (units)	MCL/MRDL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Bromate (ppb)				0	10	By-product of drinking water disinfection
Chlorite (ppm)				0.8	1.0	By-product of drinking water chlorination

The PWS Section requires monitoring for other misc. contaminants, some for which the EPA has set national secondary drinking water standards (SMCLs) because they may cause cosmetic effects or aesthetic effects (such as taste, odor, and/or color) in drinking water. The contaminants with SMCLs normally do not have any health effects and normally do not affect the safety of your water.

Other Miscellaneous Water Characteristics Contaminants

Contaminant (units)	Sample Date	Your Water	Range Low High	SMCL
Iron (ppm)	5-1-14	N/D	N/A	0.3 mg/L
Manganese (ppm)	5-1-14	.396	N/A	0.05 mg/L
Nickel (ppm)	5-1-14	N/D	N/A	N/A
Sodium (ppm)	5-1-14	10.27	N/A	N/A
Sulfate (ppm)	5-1-14	34	N/A	250 mg/L
pH	5-1-14	7.5	6.6 – 8.4	6.5 to 8.5

Cryptosporidium

Our system monitored for *Cryptosporidium* and found levels of *[insert data]*.

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

Radon

Our system monitored for Radon and found levels of *[insert data]*.

Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. (You should pursue radon removal for your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that are not too costly. For additional information, call your state radon program or call EPA's Radon Hotline (800-SOS-RADON).

Additional Monitoring of Other Contaminants

INSTRUCTIONS

Submittal of your CCR and Certification Form to the Public Water Supply Section

Since 2013, you may submit your CCR and Certification form by one of the methods described below. Follow the directions to ensure efficient tracking and receipt of your submittal and expedited review of report data by the Public Water Supply (PWS) Section for compliance with state and federal regulations.

➤ **By Email:**

- It is imperative that you provide your Water System Name and Water System Number as shown in this example: (e.g. **NC0101010 Water System Name** -) in the subject line of the email.
- If your CCR is displayed on a Web page, provide the direct URL for the report in the body of your email, and attach your completed Certification form to the email. (Note: Water systems without a web page/direct URL must attach both the CCR and the Certification form to the email as either a Word or PDF document.)
- Email your documents to: PWSS.CCR@ncdenr.gov (use 'Return Receipt Requested' to verify PWS Section's receipt.)

➤ **By Postal Mail:** Mail your CCR and Certification form to: Public Water Supply Section, 1634 Mail Service Center, Raleigh, NC 27699-1634, Attn: CCR Rule Manager. (Physical Location: Archdale Bldg. 13th floor, 512 N. Salisbury St., Raleigh, NC)

➤ **By FAX:** FAX your CCR and Certification form to (919) 715-6637, Attn: CCR Rule Manager

CCR Customer Direct Delivery Requirements (Based on Population)

- **Systems serving 100,000 or more persons must** post the CCR on a publicly-accessible Internet site using a direct URL.
- **Systems serving 10,000 or more persons must** distribute the CCR by mail or direct delivery.
- **Systems serving less than 10,000 persons but more than 500 persons must either:** (1) distribute the CCR by mail or direct delivery **OR** (2) notify their customers that the CCR is not being mailed, but it will be in what newspaper(s) and when (attach copy of notice). The complete CCR should be printed in the local newspaper, and a copy of the CCR must be made available upon request. *(The 2nd option is not acceptable if using the CCR for Tier 3 Public Notification!)*
- **Systems serving 500 or fewer persons must either:** (1) distribute the CCR by mail or direct delivery **OR** (2) notify their customers that the CCR is not being mailed, and a copy of the CCR must be made available upon request. *(The 2nd option is not acceptable if using the CCR for Tier 3 Public Notification!)*

CCR Direct Delivery Methods for Bill-Paying Customers

CCR DELIVERY METHOD	METHOD DESCRIPTION (Click link: EPA-CCR Rule Delivery Options Memo January 3, 2013 for referenced Appendix Figures below.)
Mail – paper copy	CWS mails a paper copy of the CCR to each bill-paying customer.
Mail – notification that CCR is available on web site via a direct URL	CWS mails to each bill-paying customer a notification that the CCR is available and provides a direct URL to the CCR on a publicly available site on the Internet where it can be viewed. A URL that navigates to a web page that requires a customer to search for the CCR or enter other information does not meet the “directly deliver” requirement. The mail method for the notification may be, but is not limited to, a water bill insert, statement on the water bill or community newsletter. See Figure 1 in the Appendix.
Email – direct URL to CCR	CWS emails to each bill-paying customer a notification that the CCR is available and provides a direct URL to the CCR on a publicly available site on the Internet. A URL that navigates to a web page that requires a customer to search for the CCR or enter other information does not meet the “directly deliver” requirement. This method may only be used for customers when a CWS has a valid email address to deliver the CCR electronically. See Figure 2 in the Appendix.
Email – CCR sent as an attachment to email	CWS emails the CCR as an electronic file email attachment [e.g., portable document format (PDF)]. This method may only be used for customers when a CWS has a valid email address to deliver the CCR electronically. See Figure 3 in the Appendix.
Email – CCR sent as an embedded image in an email	CWS emails the CCR text and tables inserted into the body of an email (not as an attachment.) This method may only be used for customers when a CWS has a valid email address to deliver the CCR electronically. See Figure 4 in the Appendix.
Additional electronic delivery that meets “otherwise directly deliver” requirement	CWS delivers CCR through a method that “otherwise directly delivers” to each bill-paying customer and in coordination with the primacy agency. This category is intended to encompass methods or technologies not included above. CWSs and primacy agencies considering new methods or technologies should consult with the EPA to ensure it meets the intent of “otherwise directly deliver.”

Note: Use of social media (e.g., Twitter or Facebook) or automated phone calls do not meet existing CCR distribution methods under the Rule.