2018 Annual Drinking Water Quality Report
City of Lincolnton
NC0155010

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 Robert Pearson, Water Resources Director at (704) 736-8970. We want our valued customers to be informed about their water utility.**

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. The City of Lincolnton 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 which comes from the South Fork of the Catawba River. It originates in the South Mountain area in southern Burke County. Its two major headwater tributaries are Jacob Fork and Henry Fork. Our intake is located above Clark's Creek.

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 of Lincolnton 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
South Fork River	Moderate	September 2017

The complete SWAP Assessment report for City of Lincolnton may be viewed on the Web at: https://www.ncwater.org/files/swap/SWAP_Reports/0155010_9_1_2017_11_17.pdf 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 "moderate" 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

Protection of drinking water is everyone's responsibility. 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.).

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, 2018.** 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.

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.

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.

***Level 2 Assessment* -** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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.

***Cysts/L / oocysts/L* -** The number of cysts per liter of water is the same as the number of Giardia organisms per liter of water

REVISED TOTAL COLIFORM RULE:

Microbiological Contaminants in the Distribution System

Contaminant (units)	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N	0	0	TT*	Naturally present in the environment

E. coli (presence or absence)	N	0	0	Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli* Note: If either an original routine sample and/or its repeat samples(s) are *E. coli* 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, an assessment is required.

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	0.156 NTU	N/A	Turbidity > 1 NTU	Soil runoff
Turbidity (NTU) - Lowest monthly percentage (%) of samples meeting turbidity limits	N	100%	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.

Nitrate/Nitrite Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Nitrate (as Nitrogen) (ppm)	Feb 2018	N	ND	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	Feb 2018	N	ND	N/A	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Asbestos Contaminant

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Total Asbestos (MFL)	Oct. 2011	N	ND	N/A	7	7	Decay of asbestos cement water mains; erosion of natural deposits

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) (90th percentile)	June 2017	0.12	1	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90th percentile)	June 2017	1.6	2	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

Inorganic Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Antimony (ppb)	Feb 2018	N	ND	N/A	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	Feb 2018	N	ND	N/A	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	Feb 2018	N	ND	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium (ppb)	Feb 2018	N	ND	N/A	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	Feb 2018	N	ND	N/A	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)	Feb 2018	N	ND	N/A	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide (ppb)	Feb 2018	N	ND	N/A	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm)	Feb 2018	N	0.64	N/A	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Mercury (inorganic) (ppb)	Feb 2018	N	ND	N/A	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Selenium (ppb)	Feb 2018	N	ND	N/A	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Thallium (ppb)	Feb 2018	N	ND	N/A	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories

Synthetic Organic Chemical (SOC) Contaminants Including Pesticides and Herbicides

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
2,4-D (ppb)	Feb/May 2017	N	ND	N/A	70	70	Runoff from herbicide used on row crops
2,4,5-TP (Silvex) (ppb)	Feb/May 2017	N	ND	N/A	50	50	Residue of banned herbicide
Alachlor (ppb)	Feb/May 2017	N	ND	N/A	0	2	Runoff from herbicide used on row crops
Atrazine (ppb)	Feb/May 2017	N	ND	N/A	3	3	Runoff from herbicide used on row crops
Benzo(a)pyrene (PAH) (ppt)	Feb/May 2017	N	ND	N/A	0	200	Leaching from linings of water storage tanks and distribution lines
Carbofuran (ppb)	Feb/May 2017	N	ND	N/A	40	40	Leaching of soil fumigant used on rice and alfalfa
Chlordane (ppb)	Feb/May 2017	N	ND	N/A	0	2	Residue of banned termiticide
Dalapon (ppb)	Feb/May 2017	N	ND	N/A	200	200	Runoff from herbicide used on rights of way
Di(2-ethylhexyl) adipate (ppb)	Feb/May 2017	N	ND	N/A	400	400	Discharge from chemical factories
Di(2-ethylhexyl) phthalate (ppb)	Feb/May 2017	N	ND	N/A	0	6	Discharge from rubber and chemical factories
DBCP [Dibromochloropropane] (ppt)	Feb/May 2017	N	ND	N/A	0	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dinoseb (ppb)	Feb/May 2017	N	ND	N/A	7	7	Runoff from herbicide used on soybeans and vegetables

Endrin (ppb)	Feb/May 2017	N	ND	N/A	2	2	Residue of banned insecticide
EDB [Ethylene dibromide] (ppt)	Feb/May 2017	N	ND	N/A	0	50	Discharge from petroleum refineries
Heptachlor (ppt)	Feb/May 2017	N	ND	N/A	0	400	Residue of banned pesticide
Heptachlor epoxide (ppt)	Feb/May 2017	N	ND	N/A	0	200	Breakdown of heptachlor
Hexachlorobenzene (ppb)	Feb/May 2017	N	ND	N/A	0	1	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclo-pentadiene (ppb)	Feb/May 2017	N	ND	N/A	50	50	Discharge from chemical factories
Lindane (ppt)	Feb/May 2017	N	ND	N/A	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor (ppb)	Feb/May 2017	N	ND	N/A	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Oxamyl [Vydate] (ppb)	Feb/May 2017	N	ND	N/A	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
PCBs [Polychlorinated biphenyls] (ppt)	Feb/May 2017	N	ND	N/A	0	500	Runoff from landfills; discharge of waste chemicals
Pentachlorophenol (ppb)	Feb/May 2017	N	ND	N/A	0	1	Discharge from wood preserving factories
Picloram (ppb)	Feb/May 2017	N	ND	N/A	500	500	Herbicide runoff
Simazine (ppb)	Feb/May 2017	N	ND	N/A	4	4	Herbicide runoff
Toxaphene (ppb)	Feb/May 2017	N	ND	N/A	0	3	Runoff/leaching from insecticide used on cotton and cattle

Volatile Organic Chemical (VOC) Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Benzene (ppb)	Feb 2018	N	ND	N/A	0	5	Discharge from factories; leaching from gas storage tanks and landfills
Carbon tetrachloride (ppb)	Feb 2018	N	ND	N/A	0	5	Discharge from chemical plants and other industrial activities
Chlorobenzene (ppb)	Feb 2018	N	ND	N/A	100	100	Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene (ppb)	Feb 2018	N	ND	N/A	600	600	Discharge from industrial chemical factories
p-Dichlorobenzene (ppb)	Feb 2018	N	ND	N/A	75	75	Discharge from industrial chemical factories
1,2 – Dichloroethane (ppb)	Feb 2018	N	ND	N/A	0	5	Discharge from industrial chemical factories
1,1 – Dichloroethylene (ppb)	Feb 2018	N	ND	N/A	7	7	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene (ppb)	Feb 2018	N	ND	N/A	70	70	Discharge from industrial chemical factories
trans-1,2-Dichloroethylene (ppb)	Feb 2018	N	ND	N/A	100	100	Discharge from industrial chemical factories
Dichloromethane (ppb)	Feb 2018	N	ND	N/A	0	5	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane (ppb)	Feb 2018	N	ND	N/A	0	5	Discharge from industrial chemical factories
Ethylbenzene (ppb)	Feb 2018	N	ND	N/A	700	700	Discharge from petroleum refineries
Styrene (ppb)	Feb 2018	N	ND	N/A	100	100	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene (ppb)	Feb 2018	N	ND	N/A	0	5	Discharge from factories and dry cleaners
1,2,4 –Trichlorobenzene (ppb)	Feb 2018	N	ND	N/A	70	70	Discharge from textile-finishing factories
1,1,1 – Trichloroethane (ppb)	Feb 2018	N	ND	N/A	200	200	Discharge from metal degreasing sites and other factories
1,1,2 –Trichloroethane (ppb)	Feb 2018	N	ND	N/A	3	5	Discharge from industrial chemical factories

Trichloroethylene (ppb)	Feb 2018	N	ND	N/A	0	5	Discharge from metal degreasing sites and other factories
Toluene (ppm)	Feb 2018	N	ND	N/A	1	1	Discharge from petroleum factories
Vinyl Chloride (ppb)	Feb 2018	N	ND	N/A	0	2	Leaching from PVC piping; discharge from plastics factories
Xylenes (Total) (ppm)	Feb 2018	N	ND	N/A	10	10	Discharge from petroleum factories; discharge from chemical factories

Radiological Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/L)	Feb 2016	N	N/D	N/A	0	15	Erosion of natural deposits
Beta/photon emitters (pCi/L)	Feb 2016	N	N/D	N/A	0	50 *	Decay of natural and man-made deposits
Combined radium (pCi/L)	Feb 2016	N	<1.0pCi/L	N/A	0	5	Erosion of natural deposits
Uranium (pCi/L)	Feb 2016	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 (ACC# 2)
Total Organic Carbon (removal ratio) (TOC)-TREATED	N	2.02	0.64 / 2.86	N/A	TT	Naturally present in the environment	ACC #2

Disinfectant Residuals Summary

Contaminant (units)	Year Sampled	MRDL Violation Y/N	Your Water (highest RAA)	Range Low High	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	2018	N	1.21	1.09/1.33	4	4.0	Water additive used to control microbes

Disinfection Byproducts Contaminants

Total Trihalomethane Monitoring Results* (in ppb)	**1st quarter 2018**	**2nd quarter 2018**	**3rd quarter 2018**	**4th quarter 2018**
Site BO1 Quarterly Results	21	41	72	57
Site BO1- LRAA*	49	46	44	48
Site BO2 Quarterly Results	20	38	71	47
Site BO2- LRAA*	46	43	41	44
Site BO3 Quarterly Results	18	34	65	45
Site BO3- LRAA*	39	36	37	41
Site BO4 Quarterly Results	23	36	70	53
Site BO4- LRAA*	50	47	42	46

Total HAA5 Monitoring Results* (in ppb)	1st quarter 2018	2nd quarter 2018	3rd quarter 2018	4th quarter 2018
Site B01 Quarterly Results	24	39	47	28
Site B01- LRAA*	37	37	37	35
SitB02 Quarterly Results	11	29	51	29
Site B02- LRAA*	32	30	30	30
Site B03 Quarterly Results	14	31	59	28
Site B03- LRAA*	32	30	33	33
Site B04 Quarterly Results	30	36	39	29
Site B04- LRAA*	34	33	33	34

Disinfection Byproduct	Year Sampled	MCL Violation Y/N	Your Water (highest LRAA)	Range Low High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb)					N/A	80	Byproduct of drinking water disinfection
Location BO1	2018	N	49	21/72			
Location BO2	2018	N	46	20/71			
Location BO3	2018	N	41	18/65			
Location BO4	2018	N	50	23/70			
HAA5 (ppb)					N/A	60	Byproduct of drinking water disinfection
Location BO1	2018	N	37	24/47			
Location BO2	2018	N	32	11/51			
Location BO3	2018	N	33	14/59			
Location BO4	2018	N	34	29/39			

The PWS Section requires monitoring for other miscellaneous 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)	Feb 2018	N/D	N/D	0.3 mg/L
Manganese (ppm)	Feb 2018	N/D	N/D	0.05 mg/L
Nickel (ppm)	Feb 2018	N/D	N/D	N/A
Sodium (ppm)	Feb 2018	11.7	N/A	N/A
Sulfate (ppm)	Feb 2018	N/D	N/D	250 mg/L
pH	2018	7.29	7.00/7.7	6.5 to 8.5

UCMR 4 - Unregulated Contaminant Monitoring Rule 4 Assessment Monitoring

Contaminants and Analytical Results

(EP1) Clearwell Effluent

Contaminant (units)	Sample Date	Your Water
Manganese (ppb)	5/18	**0.42**
Manganese (ppb)	8/18	**1.7**
Manganese (ppb)	11/18	**0.53**

(RW1) Raw Sample Pump

Contaminant (units)	Sample Date	Your Water (average)	Range Low High
Total Organic Carbon (ppm)	5/18 8/18 11/18	**1495**	1083-1651
Bromide (ppb)	5/18 8/18 11/18	**ND**	ND

(B01) Ross Street Tank

Contaminant (units)	Sample Date	Your Water (average)	Range Low High
Monochloroacetic Acid (ppb)	5/18 8/18 11/18	**1.53**	ND/4.6
Monobromoacetic Acid (ppb)	5/18 8/18 11/18	**ND**	ND
Dichloroacetic Acid (ppb)	5/18 8/18 11/18	**18.33**	14/21
Trichloroacetic Acid (ppb)	5/18 8/18 11/18	**19**	14/24
Bromochloroacetic Acid (ppb)	5/18 8/18 11/18	**2.9**	2.1/3.6
Dibromoacetic Acid (ppb)	5/18 8/18 11/18	**ND**	ND
Bromodichloroacetic Acid (ppb)	5/18 8/18 11/18	**2.57**	1.6/3.3
Chlorodibromoacetic Acid (ppb)	5/18 8/18 11/18	**ND**	ND
Tribromoacetic Acid (ppb)	5/18 8/18 11/18	**ND**	ND
Total haloacetic Acids (ppb)	5/18 8/18 11/18	**39.33**	29/45
Total haloacetic Acids-UCMR4 (ppb)	5/18 8/18 11/18	**44.33**	32/51
Total haloacetic Acids-Br (ppb)	5/18 8/18 11/18	**5.47**	3.7/6.9

(B02) City Fire Dept.

Contaminant (units)	Sample Date	Your Water (average)	Range Low High
Monochloroacetic Acid (ppb)	5/18 8/18 11/18	**1.07**	ND/3.2
Monobromoacetic Acid (ppb)	5/18 8/18 11/18	**ND**	ND
Dichloroacetic Acid (ppb)	5/18 8/18 11/18	**24.33**	13/37
Trichloroacetic Acid (ppb)	5/18 8/18 11/18	**18**	14/24
Bromochloroacetic Acid (ppb)	5/18 8/18 11/18	**2.87**	2/3.7
Dibromoacetic Acid (ppb)	5/18 8/18 11/18	**ND**	ND
Bromodichloroacetic Acid (ppb)	5/18 8/18 11/18	**2.27**	1.5/3.7
Chlorodibromoacetic Acid (ppb)	5/18 8/18 11/18	**ND**	ND
Tribromoacetic Acid (ppb)	5/18 8/18 11/18	**ND**	ND
Total haloacetic Acids (ppb)	5/18 8/18 11/18	**43.33**	27/53
Total haloacetic Acids-UCMR4 (ppb)	5/18 8/18 11/18	**43.67**	31/58
Total haloacetic Acids-Br (ppb)	5/18 8/18 11/18	**5.13**	3.6/7.4

(B03) Public Housing Auth.

Contaminant (units)	Sample Date	Your Water (average)	Range Low High
Monochloroacetic Acid (ppb)	5/18 8/18 11/18	**2.4**	ND/3.9
Monobromoacetic Acid (ppb)	5/18 8/18 11/18	**ND**	ND
Dichloroacetic Acid (ppb)	5/18 8/18 11/18	**18.33**	14/24
Trichloroacetic Acid (ppb)	5/18 8/18 11/18	**18.67**	14/26
Bromochloroacetic Acid (ppb)	5/18 8/18 11/18	**2.9**	2/3.8
Dibromoacetic Acid (ppb)	5/18 8/18 11/18	**ND**	ND
Bromodichloroacetic Acid (ppb)	5/18 8/18 11/18	**2.67**	1.6/3.8
Chlorodibromoacetic Acid (ppb)	5/18 8/18 11/18	**ND**	ND
Tribromoacetic Acid (ppb)	5/18 8/18 11/18	**ND**	ND
Total haloacetic Acids (ppb)	5/18 8/18 11/18	**39**	37/53
Total haloacetic Acids-UCMR4 (ppb)	5/18 8/18 11/18	**45**	31/61
Total haloacetic Acids-Br (ppb)	5/18 8/18 11/18	**5.57**	3.6/7.6

(B04) First Baptist Church

Contaminant (units)	Sample Date	Your Water (average)	Range Low High
Monochloroacetic Acid (ppb)	5/18 8/18 11/18	**2.23**	ND/3.6
Monobromoacetic Acid (ppb)	5/18 8/18 11/18	**ND**	ND
Dichloroacetic Acid (ppb)	5/18 8/18 11/18	**19**	14/23
Trichloroacetic Acid (ppb)	5/18 8/18 11/18	**19.67**	15/26
Bromochloroacetic Acid (ppb)	5/18 8/18 11/18	**3.13**	2.1/4.3
Dibromoacetic Acid (ppb)	5/18 8/18 11/18	**ND**	ND
Bromodichloroacetic Acid (ppb)	5/18 8/18 11/18	**2.8**	1.7/3.7
Chlorodibromoacetic Acid (ppb)	5/18 8/18 11/18	**0.1**	ND/0.3
Tribromoacetic Acid (ppb)	5/18 8/18 11/18	**ND**	ND
Total haloacetic Acids (ppb)	5/18 8/18 11/18	**40.67**	29/52
Total haloacetic Acids-UCMR4 (ppb)	5/18 8/18 11/18	**46.67**	33/60
Total haloacetic Acids-Br (ppb)	5/18 8/18 11/18	**6.0**	3.8/7.9

Giardia lamblia: Giardia Lamblia was detected and the results are in the following chart

Sampling Month	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
Giardia lamblia	0.286 cysts/L	0.667 cysts/L	0.762 cysts/L	0	0	0	0.381 cysts/L	0.190 cysts/L	0

Our system monitored for ***Cryptosporidium*** and the results are in the following chart

Cryptosporidium

Sampling Month	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
Cryptosporidium	0	0	0	0	0	0.095 oocysts /L	0	0	0

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.

Message from the Water Resources Director / ORC of the Water Treatment Plant – Robert Pearson

We are committed at the City of Lincolnton Water Treatment Plant to producing the safest, cleanest drinking water possible and customer satisfaction. We set our standard for turbidity (the presence of matter in water) higher than that required by our governing bodies. For this reason, we are one of only a few water treatment plants in this area to receive the AWOP award (Area Wide Optimization Program). This award is given to treatment plants that achieve higher removal of turbidity in the settled and tap water of the treatment process. We have received this prestigious award for sixteen consecutive years. The plant operates 24 hours a day, 7 days a week and is never left unattended. Should you ever have a question or concerns about your water, please call me at 704-736-8970 or the Public Works department at 704-736-8940. I can also be reached by email at robertpearson@ci.lincolnton.nc.us .

Robert Pearson, Water Resources Director /ORC

All of the water treatment operators are certified by the state of North Carolina and attend recertification classes annually. Listed below is the staff of the Water Treatment Plant and as you can see by the years of service provided they are a group of dedicated employees.

Robert Pearson
Water Resources Director/ORC
30 years

Jo Anne Sigmon
Senior Administrative
Support Assistant
26 years

Nolan Hallman
Chief WTP Operator
4 years

Todd Cochrane
WTP Laboratory Analyst
19 years

Jerry White, Jr.
Water Treatment Operator
25 years

James Moore
Water Treatment Operator
8 years

Billy Stallings, Jr.
Water Treatment Operator
9 years

Bryan Willis
Lead WTP
Maintenance Mechanic
6 years

Michael Myers
WTP Maintenance Mechanic
4 years

Question: The hot and cold water from our kitchen sink sometimes comes out very cloudy. If we leave the water in the container, it clears up quickly and the cloudiness disappears. Should we be using this water, even after it turns clear?

Answer: Cloudy water, also known as white water, is caused by air bubbles in the water. It is completely harmless.

It usually happens when it is very cold outside because the solubility of air in water increases as water pressure increases and/or water temperature decreases.

Cold water holds more air than warm water.

In the winter, water travels from the reservoir which is very cold and warms up during its travel to your tap. The air that is present is no longer soluble, and comes out of solution.

In addition, once water from our reservoir enters the transmission and distribution pipes, the water is pressurized. Water under pressure holds more air than water that is not pressurized.

Once the water comes out of your tap, the water is no longer under pressure and the air comes out of solution as bubbles (similar to a carbonated soft drink). The best thing to do is let it sit in an open container until the bubbles naturally disappear.

What Causes the Pink Stuff around the Bathroom Fixtures?

The reddish-pink color frequently noted in bathrooms on shower stalls, tubs, tile, toilets, sinks, toothbrush holders and on pets' water bowls is caused by the growth of the bacterium ***Serratia marcesens***. ***Serratia*** is commonly isolated from soil, water, plants, insects, and vertebrates (including man). The bacteria can be introduced into the house through any of the above mentioned sources. The bathroom provides a perfect environment (moist and warm) for bacteria to thrive.

The best solution to the problem is to continually clean and dry the involved surfaces to keep them free from bacteria. Chlorine-based compounds work best, but keep in mind that abrasive cleaners may scratch fixtures, making them more susceptible to bacterial growth. Chlorine bleach can be used periodically to disinfect the toilet and to help eliminate the occurrence of the pink residue. Keeping bathtubs and sinks wiped down using a solution that contains chlorine will also help minimize its occurrence.

Please note that ***Serratia*** will not survive in chlorinated drinking water.

What Causes the Grayish-Black ring in Toilet Bowls?

The grayish-black buildup in toilet bowls results from the growth of fungi. This growth may include several different fungi and other organisms. The source of the fungi is airborne fungal spores. The spores, which are microscopic, can spread throughout a house with air currents. When a house is vacant (due to vacations, etc.) the fungal spores can grow rapidly in toilets. The area under the inside lip of a toilet provides a refuge for the fungus. It is from here that the fungi can regrow after cleaning. In most cases, fungi reappear within several days after cleaning. The toilet bowl and the tank should be disinfected with chlorine bleach after cleaning by pouring bleach into the tank and bowl. A contact time of a half-hour or more should be allowed. This procedure might have to be repeated several times. It is important to disinfect all areas with fungi at the same time to eliminate cross contamination.