NORTH CHEROKEE WATER SUPPLY CORPORATION

2018 CONSUMER CONFIDENCE REPORT

2018 Consumer Confidence Report for Public Water System NORTH CHEROKEE WSC

This is your water quality report for January 1 to December 31, 2018

NORTH CHEROKEE WSC provides surface water and ground water from [Lake Jacksonville / Carrizo-Wilcox aquifer] **located in** [Cherokee County]**.**

North Cherokee WSC has a regularly scheduled board meeting the second Monday of each month at 7:00 p.m. at the corner of US 69 and FM 177.

For more information regarding this report contact:

Name Scott Alexander

Phone 903-894-3385

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (800) 426-4791.

Definitions and Abbreviations

Definitions and Abbreviations	The following tables contain scientific terms and measures, some of which may require explanation.
Action Level:	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Action Level Goal (ALG):	The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Level 1 Assessment:	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
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 or 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 or 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.
Maximum residual disinfectant level or 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 disinfectant level goal or 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.
MFL	million fibers per liter (a measure of asbestos)
mrem:	millirems per year (a measure of radiation absorbed by the body)
na:	not applicable.

NTU	nephelometric turbidity units (a measure of turbidity)
pCi/L	picocuries per liter (a measure of radioactivity)

ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
ppq	parts per quadrillion, or picograms per liter (pg/L)
ppt	parts per trillion, or nanograms per liter (ng/L)
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

Information about your Drinking Water

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.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

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 storm water 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 storm water 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 storm water runoff, and septic systems.

- 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.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium 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. 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 http://www.epa.gov/safewater/lead.

Information about Source Water

NORTH CHEROKEE WSC purchases water from CITY OF JACKSONVILLE. CITY OF JACKSONVILLE provides purchase ground water from **[Carizzo-Wilcox aquifer]** located in **[Cherokee County]**.

NORTH CHEROKEE WSC purchases water from CITY OF JACKSONVILLE. CITY OF JACKSONVILLE provides purchase surface water from **[Lake Jacksonville]** located in **[Cherokee County]**.

'No Source Water Assessment for your drinking water source(s) has been conducted by the TCEQ for your water system. The report describes the susceptibility and the types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information in this assessment allows us to focus our source water protection strategies.'

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/07/2016	1.3	1.3	0.26	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	09/07/2016	0	15	1.7	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

2018 Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2018	22	13.8 - 24.5	No goal for the total	60	ppb	N	By-product of drinking water disinfection.

'* The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year'

Total Trihalomethanes (TTHM)	2018	50	35.2 - 61.5	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

'* The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year'

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	04/07/2016	0.023	0.023 - 0.023	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	04/07/2016	2.1	2.1 - 2.1	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	04/07/2016	0.244	0.244 - 0.244	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2018	0.0444	0.0272 - 0.0444	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Disinfectant Residual

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chlorine	2018	**1.18**	**.2-2.2**	4	4	**ppm**	N	Water additive used to control microbes.

Violations

Chlorine

Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Violation Type	Violation Begin	Violation End	Violation Explanation
Disinfectant Level Quarterly Operating Report (DLQOR).	01/01/2018	03/31/2018	We failed to submit the report by the required deadline. All daily distribution required residuals were taken, and monitored on a daily basis.

CITY OF JACKSONVILLE
DRINKING WATER SAMPLING RESULTS
January 1, 2018 to December 31, 2018

Regulated Parameters

Regulated at the Customer's Tap

Lead/Copper	Units	90th Percentile	MCL	MCLG	# of Sites Exceeding AL	Sources in Drinking Water	Rule Results
Copper	ppm	0.34	AL - 1.3	1.3			Corrosion of customer plumbing
Lead	ppb	1.70	AL - 15.0	0	0		Corrosion of customer plumbing

The City of Jacksonville's last Lead and Copper Rule sampling was in September 2016. Due to an excellent compliance history, the City's sampling schedule has been reduced to once every three (3) years. Lead was below the MCL in all treatment plant samples in 2016.

Regulated in the Distribution System

	Units	Result	Range	MCL	MCLG	Source
Total Trihalomethanes	ppb	42.3	23.5 - 61.1	80		Chlorination by-product
Total Haloacetic Acids	ppb	19.6	11.1 -28.	60	0	Chlorination by-product
Chlorine	ppm	1.15	0.20 -2.10	4	4	Disinfectant used to control microbes

Regulated at the Treatment Plant

	Units		Result	MCL	MCLG	Source
Turbidity	NTU	Max	0.10	TT = 1.0 NTU	N/A	Soil runoff
		LMPS	100 0/0	TT = <0.3 NTU in 95% of samples		

Measuring turbidity is required by state and federal law and aids the City in determining the effectiveness of our clarification and filtration processes in removing particulate matter from drinking water. The City met all turbidity requirements in 2018.

Regulated at the Treatment Plants and Wells

Parameters	Units	Max	Range	MCL	MCLG	Source
Fluoride	ppm	0.77	0.296 - 0.77	4	4	Drinking water additive
Nitrate	ppm	0.0266	0.01 - 0.0266	10	10	Runoff from fertilizer use, Erosion of natural deposits
Barium	ppm	0.043	0.011 - 0.043	2	2	Erosion of natural deposits

Regulated at the Treatment Plants and Wells (Cont'd.)						
Parameters	Units	Max	Range	MCL	MCLG	Source
Total Organic Carbon	ppm	2.80	1 .70 - 2.80	N/A	N/A	Naturally present in the environment

Unregulated Parameters					
Parameters	Units	Avg.	Range	MCL	MCLG
Bromodichloromethane	ppb	14.47	2.94-26	N/A	N/A
Chloroform	ppb	32.76	7.11-58.4	N/A	N/A
Dibromochloromethane	ppb	5.93	1.15-10.7	N/A	N/A
Bromoform	ppb	<1.0	0-<1.0	N/A	N/A

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 regulation is warranted.

DEFINITIONS

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

Contaminant — Any physical, chemical, biological or radiological substance or matter in water.

LMPS (Lowest Monthly Percentage of Samples) — The lowest of the monthly percentage of samples that meets the turbidity limit of <0.3 NTU.

MCL (Maximum Contaminant Level) — The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to 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.

N/A - Not Applicable

NTU (Nephelometric Turbidity Unit) — A unit of turbidity determined by measuring the side scattering of light caused by particulate matter.

pCi/l (Picocuries per liter) - A measure of radioactivity

ppb (Parts per Billion) - In drinking water, one atom or molecule of a substance in one billion molecules of water. Example: One cent in 10 million dollars equals one ppb.

ppm (Parts per Million) - In drinking water, one atom or molecule of a substance in one million molecules of water. Example: One cent in 10 thousand dollars equals one ppm.

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

umho/cm - A unit of measurement for conductivity.

90th Percentile - The value determined by ranking and numbering sample results from highest to lowest (lowest = 1), multiplying the total number of samples by 0.90 (90%), and determining the sample result at the calculated ranking. Example: If 30 samples are collected, the 90th percentile would be the 27th highest sample result.

< (less than sign) - The sign indicating the value was 'less than' or not detected at the detection limit of the analytical method or 'less than' the regulatory limit.

ADDITIONAL INFORMATION

EPA and/or TCEQ requires that the following information be provided by all water utilities:

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.

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).

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact Randall Chandler, Associate Dir. of Community Services, at 903-589-3510.

TCEQ completed an assessment of your source water and the results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants will be found in this water quality report. For more information on source water assessments and protection efforts at our system contact 903-589-3510.

The public may participate in City Council meetings held every second Tuesday at 6:00 p.m. involving water quality matters. If you would like additional information concerning this report of the quality of your drinking water, please contact Randall Chandler, Associate Dir. of Community Services at 903-589-3510.