TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER SUPPLY

DISINFECTANT MONITORING AND MRDL COMPLIANCE REPORT

APR 0 5 2024

PWSID # 0 0 0 0 3 6 0

ENTRY POINT: B

PUBLIC WATER SYSTEM NAME AND ADDRESS

KINGSTON WATER DPT. SPRING SUPPLY
900 WATERFORD PLACE
KINGSTON, TN 37763

SAMPLE PERIOD

START DATE: 0 2 0 1 2 4 (m m d d y y)

END DATE: 0 2 2 9 2 4 (m m d d y y)

I. SYSTEMS USING CHLORINE OR CHLORAMINES (1)

A. Distribution System Monitoring

Number of Samples Required (1)	Number of Samples Taken	Lowest Residual Measured (mg/L)	Average Residual Measured (mg/L)	Number of Samples below 0.2 mg/L	% of Samples 0.2 mg/L or higher
010	010	2.20	2.50	000	100.0

B. Entry Point Monitoring (For Sub Part H Systems(2) Only)

Number of Days Residual Measurements Required (3)	Number of Days Residual Measurements Taken	Type of Monitoring Conducted: Grab	Type of Monitoring Conducted: Continuous	Lowest Residual Measured Entering the D.S.	Was the Continuous Chlorine Analyzer out of service more than 5 consecutive days while this facility was in operation?
31	31	X	X	2.30 mg/L	N ("Y" for yes, or "N" for no)

II. SYSTEMS USING CHLORINE DIOXIDE

A. Entry Point Monitoring

Number of Days Residual Measurements Required	Number of Days Residual Measurements Taken	Highest Residual Measured Entering the D.S.	Number of Days Residual Measured > MRDL	Number of Consecutive Days Residual Measured > MRDL
		. mg/L		

B. Distribution System Monitoring

1. Systems Not Utilizing Disinfection Booster Stations

Date E.P. Sample Exceeded MRDL	Date of Follow-Up Sampling (4)	Time of First Sample	Time of Second Sample	Time of Third Sample
		Result (mg/L) .	Result (mg/L) .	Result (mg/L) .

2. Systems Utilizing Disinfection Booster Stations

Date E.P. Sample Exceeded MRDL	Date Follow-Up Sampling (5)	Sample Results (mg/L) at: Closest Customer	Average Point	Maximum Residence Time
		.	.	.

Notes:
(1) Disinfection residuals must be measured at the same frequency and locations for all total coliform samples that are taken. The number of required samples is the total number of routine and repeat total coliform samples taken during the reporting period.
(2) Subpart H Systems are public water systems that treat surface water and/or ground water under the direct influence of surface water.
(3) Disinfection residuals must be measured continuously for chlorine for systems serving more than 3,330 persons at the entry point to the distribution system each day of operation. Grab sampling may be conducted at the rate specified in the regulations for systems serving less than 3,300.
(4) For systems using chlorine dioxide, and not utilizing booster chlorination facilities in the distribution system, if an entry point sample exceeds the MRDL, a three-sample set of measurements must be taken the day after the exceedance at a point closest to the first customer at six-hour intervals. Analysis must be by Ion Chromatography.
(5) For systems using chlorine dioxide, and which utilize booster chlorination facilities in the distribution system, if an entry point sample exceeds the MRDL, a three-sample set of measurements must be taken the day after the exceedance at the following locations: 1) a point closest to the first customer, 2) a point reflecting the average residence time, and, 3) a point reflecting the maximum residence time. Analysis must be by Ion Chromatography.

I CERTIFY THAT THE INFORMATION LISTED ON THIS FORM ACCURATELY CORRESPONDS TO THE OPERATION OF THIS FACILITY FOR THE REPORTING PERIOD SPECIFIED HEREIN.

PREPARED BY John M. Poole DATE 04/02/24 APPROVED BY John M. Poole DATE 04/02/24

(continued on reverse)

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES – WATER SUPPLY SECTION
6th Floor, L & C Tower, 401 Church Street
Nashville, Tennessee 327243

APR 0 5 2024

MONTHLY DISTRIBUTION SYSTEM FLUORIDE SAMPLING SUMMARY and QUARTERLY CHECK SAMPLE REPORTING

PUBLIC WATER SYSTEM NAME & ADDRESS
KINGSTON WATER DEPARTMENT
900 WATERFORD PLACE
KINGSTON, TN 37763
Contact Person: John M. Poole

PWS ID Number: TN0000360 **County:** ROANE

	Month (1)	Average for Month mg/L (2)	Highest Fluoride Measurement mg/L (3)	Lowest Fluoride Measurement mg/L (4)	Number of Days Fluoride Measured (5)
1.	January	0.60	0.69	0.48	31
2.	February	0.53	0.63	0.46	29
3.	March	0.52	0.62	0.42	31
4.	April				
5.	May				
6.	June				
7.	July				
8.	August				
9.	September				
10.	October				
11.	November				
12.	December				

Instructions:
This form is to be completed by all community water systems that add fluoride to their finished water. It may be submitted monthly or quarterly to the Division of Water Supply at the address listed below.

(1) Enter the month for which the results are being reported.
(2) Enter the arithmetic average of all distribution system fluoride measurements taken during the month.
(3) Enter the highest fluoride value measured during the month in the distribution system.
(4) Enter the lowest fluoride value measured during the month in the distribution system.
(5) Enter the number of days fluoride samples were taken in the distribution system.
(6) **Mail form to the above address**. For assistance or questions call 1-888-891-8332

Quarterly Check Samples:

Collection Date	Address	PWS Result (ppm)	Certified Lab	Certified Lab Result (ppm)
02/06/24	181 High Street	0.63	Pace Analytical / ESC Labs	0.35
			Pace Analytical / ESC Labs	
			Pace Analytical / ESC Labs	
			Pace Analytical / ESC Labs	

I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

n.
Certified Operator: John M. Poole Signature: _____ Date: 04/02/24
Phone: 865-376-7187

CN–1258 (rev 09-12)

RDA 2853

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER SUPPLY

DISINFECTANT MONITORING AND MRDL COMPLIANCE REPORT

APR 0 5 2024

PWSID # 0 0 0 0 3 6 0

ENTRY POINT: A

PUBLIC WATER SYSTEM NAME AND ADDRESS

KINGSTON WATER DEPARTMENT
900 WATERFORD PLACE
KINGSTON, TN 37763

SAMPLE PERIOD

START DATE (mm dd yy): 03 01 24

END DATE (mm dd yy): 03 31 24

I. SYSTEMS USING CHLORINE OR CHLORAMINES (1)

A. Distribution System Monitoring

Number of Samples Required (1)	Number of Samples Taken	Lowest Residual Measured (mg/L)	Average Residual Measured (mg/L)	Number of Samples below 0.2 mg/L	% of Samples 0.2 mg/L or higher
010	010	2.20	2.50	000	100.0

B. Entry Point Monitoring (For Sub Part H Systems(2) Only)

Number of Days Residual Measurements Required (3)	Number of Days Residual Measurements Taken	Type of Monitoring Conducted: Grab	Type of Monitoring Conducted: Continuous	Lowest Residual Measured Entering the D.S.	Was the Continuous Chlorine Analyzer out of service more than 5 consecutive days while this facility was in operation?
31	31	X	X	2.30 mg/L	N ("Y" for yes, or "N" for no)

II. SYSTEMS USING CHLORINE DIOXIDE

A. Entry Point Monitoring

Number of Days Residual Measurements Required	Number of Days Residual Measurements Taken	Highest Residual Measured Entering the D.S.	Number of Days Residual Measured > MRDL	Number of Consecutive Days Residual Measured > MRDL
		. mg/L		

B. Distribution System Monitoring

1. Systems Not Utilizing Disinfection Booster Stations

Date E.P. Sample Exceeded MRDL	Date of Follow-Up Sampling (4)	Time of First Sample	Time of Second Sample	Time of Third Sample
		Result (mg/L) .	Result (mg/L) .	Result (mg/L) .

2. Systems Utilizing Disinfection Booster Stations

Date E.P. Sample Exceeded MRDL	Date Follow-Up Sampling (5)	Sample Results (mg/L) at: Closest Customer	Average Point	Maximum Residence Time
		.	.	.

Notes:
(1) Disinfection residuals must be measured at the same frequency and locations for all total coliform samples that are taken. The number of required samples is the total number of routine and repeat total coliform samples taken during the reporting period.
(2) Subpart H Systems are public water systems that treat surface water and/or ground water under the direct influence of surface water.
(3) Disinfection residuals must be measured continuously for chlorine for systems serving more than 3,330 persons at the entry point to the distribution system each day of operation. Grab sampling may be conducted at the rate specified in the regulations for systems serving less than 3,300.
(4) For systems using chlorine dioxide, and not utilizing booster chlorination facilities in the distribution system, if an entry point sample exceeds the MRDL, a three-sample set of measurements must be taken the day after the exceedance at a point closest to the first customer at six-hour intervals. Analysis must be by Ion Chromatography.
(5) For systems using chlorine dioxide, and which utilize booster chlorination facilities in the distribution system, if an entry point sample exceeds the MRDL, a three-sample set of measurements must be taken the day after the exceedance at the following locations: 1) a point closest to the first customer, 2) a point reflecting the average residence time, and, 3) a point reflecting the maximum residence time. Analysis must be by Ion Chromatography.

I CERTIFY THAT THE INFORMATION LISTED ON THIS FORM ACCURATELY CORRESPONDS TO THE OPERATION OF THIS FACILITY FOR THE REPORTING PERIOD SPECIFIED HEREIN.

PREPARED BY John M. Poole DATE 04/02/24 APPROVED BY John M. Poole DATE 04/02/24

(continued on reverse)

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES, WATER SUPPLY SECTION

INTERIM ENHANCED SURFACE WATER TREATMENT RULE FILTER PERFORMANCE REPORT (1)

APR 0 5 2024

PUBLIC WATER SYSTEM NAME AND ADDRESS

KINGSTON WATER DEPARTMENT
900 WATERFORD PLACE
KINGSTON, TN 37763

PWSID #	ENTRY POINT	SAMPLE PERIOD START DATE	SAMPLE PERIOD END DATE	TOTAL HOURS PLANT OPERATED THIS MONTH	LABORATORY ID
0000360	A	030124	033124	207	00342

REPORTABLE SAMPLES (2) REQUIRED	REPORTABLE SAMPLES (2) TAKEN	NUMBER OF REPORTABLE SAMPLES LESS THAN OR EQUAL TO THE LOWER NTU STANDARD (3)	PERCENT OF REPORTABLE SAMPLES LESS THAN OR EQUAL TO THE LOWER NTU STANDARD	NUMBER OF REPORTABLE SAMPLES EXCEEDING THE UPPER NTU STANDARD (4) (LIST DATES ON BACK)	HIGHEST FINISHED WATER TURBIDITY THIS MONTH
052	080	080	100.01	000	00.132

Notes:
(1) This form applies to filtration systems utilizing either a surface water supply or a source that has been designated groundwater under the direct influence of surface water.
(2) Systems utilizing cartridge filtration must at a minimum, measure turbidity once per day while treating water. Systems required to measure and record finished water turbidity every 4 hours that the plant is in operation, shall report the highest value measured during each 4-hour period. Systems utilizing continuous monitoring turbidimeters shall report the highest recorded value for every 4 hour period.
(3) NTU standards vary depending on the type of filtration treatment provided, and include a lower limit that must be met in 95% of the reportable samples, and an upper limit that cannot be exceeded without receiving a treatment technique violation. Use the lower NTU standard applicable to this facility for this calculation.
(4) Indicate the number of reportable samples that exceeded the upper NTU standard. On the back of this form, indicate the dates when a sample exceeded the upper NTU standard, and the date the state was notified of the exceedance.

	Y or N
Did this facility meet the CT requirements for each day it was in operation?	Y

A. FOR ALL FILTERS AT THIS FACILITY

	Y or N
1. Was turbidity monitored continuously and the results recorded for each filter effluent line?	Y
2. If the answer to question number 1 is no, was grab sampling conducted for every 4 hours the continuous monitor was out of service?	N
3. If the answer to question number 2 is yes, was grab sampling conducted for more than 5 consecutive days on any individual filter?	N

B. FOR ANY FILTER AT THIS FACILITY (5)

Were any 2 consecutive filter effluent measurements taken 15 minutes apart:	Y or N	Filter Numbers (maximum of four filters)
1. Greater than 0.5 NTU after the first 4 hours of operation?	N	01, 02
2. Greater than 1.0 NTU?	N	01, 02
3. Greater than 1.0 NTU in each of 3 consecutive months?	N	01, 02
4. Greater than 2.0 NTU in two consecutive months?	N	01, 02

Note:
(5) If this facility answered "Yes" to any question listed in Section B. above, then the system must submit a "Monthly Turbidity Exceedance Report" (CN-1196) for the individual filter that met at least one of the conditions listed.

I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

PREPARED BY: John M. Poole DATE: 04/02/24 PHONE: (865) 376-7187 APPROVED BY: John M. Poole DATE: 04/02/24 PHONE: (865) 376-7187

(continued on reverse)

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES, WATER SUPPLY SECTION

Total Organic Carbon (TOC) and Enhanced Coagulation Report

APR 0 5 2024

PWSID # 0 0 0 0 3 6 0

ENTRY POINT: A

REPORTING PERIOD
START DATE (m m d d y y): 0 1 0 1 2 4
END DATE (m m d d y y): 1 2 3 1 2 4

PUBLIC WATER SYSTEM NAME AND ADDRESS

Kingston Water Department
900 Waterford Place
Kingston, TN 37763

TOC and Enhanced Coagulation Calculations

Sample Date	A Treated Water		B Source Water			C	D	E	Alternative Compliance Criteria Used	F
	TOC	Magnesium Hardness (as CaCO3)	TOC	Alkalinity	Magnesium Hardness (as CaCO3)	Reduction of TOC as a Percent	Required TOC Removal (%)	Column C Divided by Column D		
03/06/24	1.06		1.66	68		36%	25%	1.44		
										Sum of Column E Divided by the Number of Paired Samples Or Alternative Compliance Value
Average										
	Paired Samples					(1-A/B) x 100	(See TOC Removal table on back of form)			Compliance achieved if value >= 1.0

I certify that U.S.E.P.A. approved methods were used to conduct TOC analysis performed by: Pace Analytical / ESC Labs, and that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

PREPARED BY: John M. Poole DATE: 04/02/24 PHONE: (865) 376-7187 APPROVED BY: John M. Poole DATE: 04/02/24 PHONE: (865) 376-7187

(continued on reverse)

APR 0 5 2024

TOC and Enhanced Coagulation Monthly Calculations

Month *	Compliance Value from Column F
Current	
Previous	
3rd	
4th	
5th	
6th	
7th	
8th	
9th	
10th	
11th	
12th	
Total	
Total divided by 12	

* Current month compliance value, previous month value, and continuing back for previous 12 months.

Has system maintained compliance for the last 12 months? (Total divided by 12 must be greater than or equal to 1.0) Y or N

TOC and Enhanced Coagulation Quarterly Calculations

Quarter *	Compliance Value from Column F
Current	
Previous	
3rd	
4th	
Total	
Total divided by 4	

* Current quarter compliance value, previous quarter value, and continuing back for previous 4 quarters.

Has system maintained compliance for the last four quarters? (Total divided by 4 must be greater than or equal to 1.0) Y or N

Required Percentage of TOC Removal

Source Water TOC (mg/L)	Source Water Alkalinity, mg/L as CaCO3		
	0-60 mg/L	>60-120 mg/L	>120 mg/L *
>2.0 - 4.0	35.0%	25.0%	15.0%
>4.0 - 8.0	45.0%	35.0%	25.0%
>8.0	50.0%	40.0%	30.0%

* Systems practicing softening must meet the TOC removal requirements in this column.

Monthly Alternative Compliance Criteria **

Subrule	Criteria
.36(9)(c)(2)(i)	Treated or Source water TOC < 2.0 mg/L.
.36(9)(c)(2)(ii)	Softening System removing at least 10 mg/L of magnesium hardness.
.36(9)(c)(2)(iii)	Source water SUVA prior to treatment <= 2.0 L/mg-m.
.36(9)(c)(2)(iv)	Finished water SUVA prior to treatment <= 2.0 L/mg-m.
.36(9)(c)(2)(v)	Enhanced Softening which lowers alkalinity below 60 mg/L.

** Systems meeting at least one of the conditions in paragraph (9)(c)2(i)-(v) may assign a monthly value of 1.0 in lieu of the value calculated in paragraph (9)(c)1.

Annual Alternative Compliance Criteria (1)(2)

Subrule	Criteria
.36(9)(a)(2)(i)	Running annual average of source water TOC < 2.0 mg/L.
.36(9)(a)(2)(ii)	Running annual average of treated water TOC < 2.0 mg/L calculated quarterly.
.36(9) (a)(2)(iii)	Running annual average of source water TOC < 4.0 mg/L calculated quarterly, and; Running annual average of source water alkalinity > 60 mg/L. calculated quarterly, and; Running annual average of Total Trihalomethanes <= 0.040 mg/L, or, Running annual average of Total Haloacetic Acids <= 0.030 mg/L.
.36(9) (a)(2)(iv)	Running annual average of Total Trihalomethanes <= 0.040 mg/L, and, Running annual average of Total Haloacetic Acids<= 0.030 mg/L. and, Only chlorine used as a primary disinfectant.
.36(9) (a)(2)(v)	Running annual average of source water SUVA <= 2.0 L/mg-m measured monthly and calculated quarterly.
.36(9) (a)(2)(vi)	Running annual average of treated water SUVA < 2.0 L/mg-m measured monthly and calculated quarterly.
.36(9) (a)(3)(i)	Softening treatment that result in a running annual average of treated water alkalinity < 60 mg/L (as CaCO3) measured monthly, and calculated quarterly as an annual running average.
.36(9) (a)(3)(ii)	Softening treatment that results in removing at least 10 mg/L of magnesium hardness (as CaCO3) measured monthly and calculated quarterly as an annual running average.

Notes

(1) Systems meeting at least one of the conditions in paragraph (9)(a)2(i)-(iv) are not required to operate with enhanced coagulation.
(2) Softening systems meeting one of the alternative compliance criteria in paragraph (9)(a)3 are not required to operate with enhanced coagulation.

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER SUPPLY
L & C Tower, 6th Floor
401 Church Street
Nashville, Tennessee 37243

APR 0 5 2024

MONTHLY MICROBIOLOGICAL and DISINFECTANT MONITORING REPORT

Public Water System Name: KINGSTON WATER DEPARTMENT
Phone: (865) 376-7187
Address: 900 WATERFORD PLACE, KINGSTON, TN 37763
County: ROANE

Bacteriological Monitoring (1)

PWSID	Contaminant ID	Analysis Method	Sample Period Begin	Sample Period End
0000360	3100	9223	030124	033124

Total Number Of Routine Distribution Samples Analyzed	Total Number Of Positive Samples Analyzed (2)	Total Number Of Repeat Samples Analyzed (2)	Laboratory ID	Laboratory Name
010	000	000	03121	KINGSTON WTP 1318 S.KENTUCKY ST KINGSTON, TN 37763

Date of First Sample	Date of Last Sample
031224	031924

Disinfectant Residual Monitoring (3)

Lowest Residual Measured (mg/L)	Average Residual Measured (mg/L)	Number of Samples below 0.2 mg/L	% of Samples 0.2 mg/L or higher
2.20	2.50	000	100.0

Notes

(1) This form is to be submitted for systems reporting 10 or more bacteriological compliance samples during the reporting period.

(2) All positive and repeat samples must be reported on Form CN-0800, Bacteriological Analysis Detail.

(3) Systems supplying chlorinated water must monitor disinfectant residuals at the same locations and frequencies as total coliform sampling is required.

Administrative Information

I certify the information listed on this form accurately corresponds to the operation of this facility for the reporting period specified herein.

Responsible Official: John M. Poole Phone: (865) 376-7187

Program Contact: John M. Poole Phone: (865) 376-7187

Technical Contact: John M. Poole Phone: (865) 376-7187

Return to: Tennessee Division of Water Supply, 6th Floor, L & C Tower, 401 Church Street, Nashville TN, 37243

Instructions for Form CN-0780

APR 0 5 2024

Bacteriological Monitoring

PWSID	Enter the PWSID number of the water system whose results are being reported.	
Contaminant ID	For monitoring under the Total Coliform Rule, enter "3100".	
Analysis Method	Enter one of the following method code values indicating the type of method used to analyze the sample:	9221 – Multiple Tube Fermentation 9222 – Membrane Filtration 9223 – Coliform Presence/Absence
Sample Period		
Begin	Enter the first date of the sampling period for which results are being reported (mmddyy)	
End	Enter the last date of the sampling period for which results are being reported (mmddyy)	
Total Number of Routine Distribution Samples Analyzed	Enter the number of routine distribution samples analyzed during this reporting period.	
Total Number of Repeat Samples Analyzed	Enter the number of repeat samples analyzed during this reporting period.	
Total Number of Positive Samples	Enter the total number of positive distribution and repeat samples analyzed during this reporting period. Note: Form CN-0800 must be completed for all positive and repeat samples.	
Laboratory ID	Enter the ID number and name of the laboratory performing the analysis.	
Date of First Sample	Enter the sample date of the **first** TCR sample taken during this reporting period.	
Date of Last Sample	Enter the sample date of the **last** TCR sample taken during this reporting period.	

Disinfectant Residual Monitoring

Lowest Residual:	Enter the lowest residual measured from all distribution system measurements.
Average Residual:	Enter the arithmetic average residual calculated from all distribution system measurements.
Number below 0.2 mg/L:	Enter the number of residual measurements below 0.2 mg/L.
% of Samples 0.2 mg/L or higher:	Enter the calculated percentage of measurements that were 0.2 mg/L or higher. Example: 35 measurements above 0.2 mg/L divided by 40 measurements = 87.5 %.

APR 0 5 2024

TENNESSEE DEPARTMENT OF ENVIRONMENT

DIVISION OF WATER SUPPLY

COMPREHENSIVE MONTHLY OPERATION REPORT

NAME OF WATER UTILITY KINGSTON WATER DEPARTMENT PWSID 360

NAME OF WATER TREATMENT PLANT KINGSTON SPRING SUPPLY COUNTY Roane

MONTH OF March Year 2024

DATE	WATER TREATED GALLONS	FINISHED TURBIDITY NTU	CHLORINE		FLUORIDE			ALKALINITY MG/L		pH		HARDNESS MG/L		PO4 MG/L		Iron			Manganese			CORROSION CONTROL
			POUNDS OR GAS USED 12.5%	FREE RESIDUAL MG/L DIST. SYSTEM	POUNDS OR GALLON USED	CALCULATED DOSAGE MG/L	DISTRIBUTION SYSTEM MG/L	TOTAL RAW	TOTAL FINISHED	RAW	FINISHED	RAW	FINSIHED	DIST. PO4 MG/L	SPRING PO4 MG/L	RAW	FINISHED	DIST. SYSTEM	GRAV. FED LINE	SPRING	DIST. SYSTEM	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	448	0.70	60.0	2.9	10	0.49	0.51		112		7.30		124.00	0.08	0.09							
2	415	0.78	60.0	2.5	11	0.58	0.54		106		7.28		108.00	0.10	0.14		0.01	0.01		0.010	0.012	
3	434	0.77	60.0	3.1	10	0.50	0.62		100		7.24		90.00	0.10	0.16		0.01	0.01		0.010	0.012	
4	459	0.87	60.0	3.1	11	0.52	0.55		115		7.28		110.00	0.15	0.11							
5	417	0.71	60.0	3.0	10	0.52	0.47		120		7.30		113.00	0.10	0.15							
6	419	0.88	60.0	2.7	9	0.47	0.51		116		7.27		110.00	0.15	0.12							
7	435	0.51	60.0	2.7	10	0.50	0.54		120		7.33		116.00	0.12	0.10							
8	439	0.88	60.0	2.7	11	0.55	0.51		116		7.27		110.00	0.10	0.15							
9	447	1.10	60.0	2.8	7	0.34	0.48		108		7.28		106.00	0.15	0.14							
10	384	1.45	60.0	2.8	10	0.57	0.54		109		7.29		118.00	0.07	0.12		0.05	0.06		0.017	0.015	
11	458	1.67	60.0	2.6	10	0.48	0.53		100		7.25		110.00	0.07	0.12		0.00	0.00		..001	0.000	
12	409	1.94	60.0	3.0	9	0.48	0.51		100		7.26		110.00	0.16	0.18							
13	430	0.99	60.0	2.7	11	0.56	0.51		110		7.19		120.00	0.14	0.13							
14	467	1.64	60.0	2.9	11	0.51	0.59		100		7.32		100.00	0.17	0.16							
15	497	1.34	60.0	2.6	8	0.35	0.47		102		7.35		108.00	0.17	0.22							
16	440	1.46	60.0	2.7	8	0.40	0.45		100		7.34		96.00	0.20	0.20		0.03	0.05		0.005	0.004	
17	426	1.63	60.0	2.3	9	0.43	0.51		92		7.23		90.00	0.20	0.20		0.05	0.02		0.008	0.013	
18	453	2.19	60.0	2.6	10	0.48	0.48		88		7.20		90.00	0.10	0.20							
19	444	2.13	60.0	2.7	11	0.54	0.46		88		7.23		104.00	0.19	0.14							
20	463	1.62	60.0	2.6	11	0.52	0.59		85		7.27		90.00	0.14	0.19							
21	465	1.64	60.0	3.1	9	0.46	0.48		100		7.28		100.00	0.16	0.19							
22	431	1.32	60.0	3.0	10	0.51	0.54		103		7.26		107.00	0.14	0.15							
23	450	1.01	60.0	2.8	9	0.44	0.49		102		7.29		106.00	0.12	0.14		0.02	0.03		0.005	0.007	
24	464	0.81	60.0	2.9	11	0.52	0.52		104		7.33		110.00	0.11	0.10		0.03	0.04		0.007	0.005	
25	461	1.09	60.0	2.8	10	0.47	0.49		99		7.30		102.00	0.20	0.10							
26	438	0.96	60.0	2.9	9	0.45	0.49		103		7.30		108.00	0.20	0.20							
27	457	0.92	60.0	2.9	10	0.48	0.49		105		7.42		116.00	0.21	0.19							
28	452	1.28	60.0	2.9	9	0.43	0.42		100		7.35		100.00	0.16	0.20							
29	467	0.88	60.0	2.8	10	0.47	0.50		106		7.31		114.00	0.17	0.16							
30	463	0.79	60.0	3.1	12	0.57	0.48		104		7.34		110.00	0.18	0.13		0.04	0.02		0.006	0.004	
31	438	0.71	60.0	2.8	12	0.60	0.59		108		7.27		112.00	0.16	0.14		0.03	0.01		0.006	0.002	
TOTAL	13770	36.7	1860.00	87.00	308.00	15.19	15.87	0.00	3221.00	0.00	225.93	0.00	3308.00	0.08	4.72	0.00	0.27	0.25	0.00	0.074	0.07	0.00
AVE.	444	1.18	60.00	2.81	9.94	0.49	0.51	0.00	103.90	0.00	7.29	0.00	106.71	0.14	0.15	0.00	0.03	0.03	0.00	0.008	0.007	0.00
MAX.	497	2.19	60.00	3.10	12.00	0.60	0.62	0.00	120.00	0.00	7.42	0.00	124.00	0.21	0.22	0.00	0.05	0.06	0.00	0.017	0.015	0.00
MIN.	384	0.51	60.00	2.30	7.00	0.34	0.42	0.00	85.00	0.00	7.19	0.00	90.00	0.07	0.09	0.00	0.00	0.00	0.00	0.005	0.000	0.00

REMARKS

Certified Operator

Johnny Poole

Signature

PH-0342
Rev 8/88

This form must be received by the appropriate field office by the 10th of the following

APR 0 5 2024

DATE	BACTERIOLOGICAL EXAMINATION		
	DATE SAMPLE COLLECTED	FREE CHLORINE MG/L AT POINT OF SAMPLING	LOCATION OF SAMPLING POINT FROM DISTRIBUTION SYSTEM
24	25	26	27
1	1-Mar	2.2	900 Waterford Place
2	2-Mar	2.7	# 1 Pumo Station
3	3-Mar	2.8	# 2 Pump Station
4	4-Mar	2.9	Morrison Hill Tank
5	5-Mar	1.9	Ridgecrest Tank
6	6-Mar	2.1	614 N Kentucky St
7	7-Mar	2.3	430 Ladd Landing
8	8-Mar	1.9	Hwy 70 & Gallaaher
9	9-Mar	2.1	Pouplar Springs P.S.
10	10-Mar	1.3	Lakeside Dr.
11	11-Mar	2.4	Ladd Landing Tank
12	12-Mar	2.4	2623 Lawnville Rd.
13	13-Mar	2.5	935 N Kentucky St
14	14-Mar	2.4	# 2 Pump Station
15	15-Mar	2.3	1503 James Ferry Rd.
16	16-Mar	2.1	Morrison Hill Tank
17	17-Mar	2	430 Ladd Landing
18	18-Mar	1.7	Lakeside Drive
19	19-Mar	2.4	166 Vancon Dr.
20	20-Mar	2.2	Rockwood Interconnect
21	21-Mar	2.4	Hwy 70 & Gallaaher
22	22-Mar	2.4	Pouplar Springs P.S.
23	23-Mar	2.3	1452 Lawnville Rd.
24	24-Mar	2.3	614 N Kentucky St
25	25-Mar	1.8	1403 James Ferry Rd
26	26-Mar	2.6	#2 Sewer P/S
27	27-Mar	2	Ridgecrest Tank
28	28-Mar	2.8	1503 James Ferry Rd.
29	29-Mar	2.5	308 W. Race Street
30	30-Mar	2.6	#2 Sewer P/S
31	31-Mar	2.6	1452 Lawnville Rd.
TOTAL		70.9	
AVE.		2.29	
MAX.		2.9	
MIN.		1.3	

Form created by T.A.U.D.

APR 0 5 2024

:PARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Water Supply
REHENSIVE MONTHLY OPERATION REPORT

MONTH OF March YEAR 2024

HARACTERISTICS													CHEMICALS USED														
HARDNESS MG/L		PO4 MG/L		H2O2 MG/L		IRON MG/L	MANGANESE MG/L			FLUORIDE MG/L			POUNDS PER 24 HOURS								CALCULATED DOSAGE MG/L						
RAW	FINISHED	FINISH	DISTRIBUTION	mL/min	ENDPOINT RESIDUAL	FINISH	RAW	FINISH	DIST. SYSTEM	RAW	FINISHED	DISTRIBUTION SYSTEM	EC675 COAGULANT - COAGULANT AID	DISINFECTION PRE 12.5% BLEACH	DISINFECTION POST 12.5% BLEACH	pH ADJUSTMENT	FLUORIDE	H2O2 TASTE AND ODOR	MINERALISOFTENING OXIDATION	SeaQuest STABILIZATION AND CORROSION CONTROL PO4	COAGULANT - COAGULANT AID	DISINFECTION	pH ADJUSTMENT	FLUORIDE	TASTE AND ODOR	OXIDATION H2O2	STABILIZATION AND CORROSION CONTROL / PO4
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
94.0	94.0	0.1	0.1	3.8	0.2						0.5	0.5	84.0	147.0	121.0		11.0	4.6		3.5	15.9	6.4		0.4	0.17	0.87	0.8
71.0	75.0	0.1	0.1	3.8	0.2	0.01	0.05	0.00	0.01		0.5	0.5	97.0	155.0	132.0		13.0	4.8		3.6	16.9	6.3		0.4	0.17	0.83	0.6
70.0	80.0	0.1	0.1	3.8	0.2	0.00	0.05	0.00	0.01		0.6	0.6	104.0	164.0	132.0		13.0	5.3		4.1	17.1	6.1		0.4	0.17	0.87	0.8
70.0	80.0	0.1	0.1	3.8	0.2					0.1	0.5	0.6	99.0	159.0	140.0		15.0	5.2		4.0	15.7	5.9		0.4	0.17	0.83	0.6
65.0	62.0	0.1	0.2	3.8	0.2						0.4	0.5	75.0	138.0	108.0		11.0	4.4		3.4	14.2	5.8		0.4	0.17	0.84	0.7
64.0	62.0	0.1	0.1	3.8	0.2						0.5	0.5	80.0	151.0	128.0		13.0	5.0		3.8	13.4	5.8		0.4	0.17	0.84	0.6
66.0	64.0	0.1	0.1	3.8	0.2						0.5	0.5	55.0	95.0	79.0		9.0	3.2		2.4	14.5	5.7		0.4	0.17	0.84	0.6
66.0	68.0	0.1	0.1	3.8	0.2						0.5	0.5	58.0	103.0	88.0		9.0	3.3		2.5	14.9	6.1		0.4	0.17	0.84	0.6
65.0	62.0	0.1	0.2	3.8	0.2	0.03	0.09	0.04	0.02		0.4	0.5	43.0	87.0	71.0		7.0	2.7		2.0	13.6	6.2		0.4	0.17	0.84	0.6
94.0	80.0	0.2	0.1	3.8	0.2	0.00	0.05	0.00	0.00		0.5	0.5	64.0	135.0	95.0		9.0	4.1		3.1	13.1	5.9		0.4	0.17	0.83	0.8
60.0	70.0	0.1	0.1	3.8	0.2					0.0	0.5	0.5	39.0	89.0	69.0		8.0	2.8		2.1	11.8	6.0		0.4	0.17	0.84	0.6
60.0	66.0	0.1	0.2	3.8	0.2						0.5	0.5	52.0	107.0	86.0		9.0	3.4		2.6	12.8	5.9		0.4	0.17	0.83	0.6
70.0	70.0	0.1	0.1	3.8	0.2						0.6	0.5	49.0	112.0	81.0		9.0	3.5		2.7	11.6	5.7		0.5	0.17	0.84	0.8
60.0	70.0	0.2	0.2	3.8	0.2						0.5	0.6	60.0	108.0	83.0		8.0	3.3		2.5	15.2	6.1		0.4	0.17	0.83	0.6
74.0	82.0	0.2	0.2	3.8	0.2						0.5	0.5	54.0	98.0	77.0		8.0	2.9		2.3	15.2	6.1		0.4	0.17	0.82	0.6
66.0	70.0	0.1	0.2	3.8	0.2	0.01	0.07	0.00	0.01		0.5	0.5	47.0	84.0	63.0		7.0	2.5		1.9	15.7	6.1		0.4	0.17	0.83	0.6
68.0	72.0	0.2	0.2	3.8	0.2	0.03	0.07	0.00	0.01	0.0	0.4	0.5	69.0	128.0	91.0		9.0	3.9		3.0	14.7	5.8		0.4	0.16	0.82	0.7
60.0	70.0	0.2	0.2	3.8	0.2						0.5	0.5	51.0	118.0	89.0		9.0	3.5		2.7	12.2	6.2		0.4	0.17	0.83	0.6
70.0	72.0	0.2	0.1	3.8	0.2						0.4	0.5	35.0	91.0	69.0		7.0	2.7		2.1	10.6	6.1		0.4	0.17	0.83	0.6
60.0	60.0	0.2	0.2	3.8	0.2						0.5	0.6	47.0	118.0	91.0		10.0	3.6		2.8	10.8	6.0		0.4	0.17	0.83	0.6
60.0	50.0	0.1	0.2	3.8	0.2						0.5	0.5	40.0	93.0	72.0		8.0	2.9		2.3	11.2	5.8		0.4	0.17	0.82	0.6
65.0	54.0	0.1	0.2	3.8	0.2						0.5	0.5	57.0	127.0	119.0		9.0	4.0		3.1	11.7	6.3		0.4	0.17	0.83	0.8
64.0	58.0	0.1	0.1	3.8	0.2	0.01	0.04	0.00	0.01		0.5	0.6	47.0	99.0	76.0		8.0	3.2		2.5	12.0	5.6		0.4	0.16	0.83	0.6
66.0	62.0	0.1	0.1	3.8	0.2	0.01	0.04	0.00	0.01		0.6	0.6	54.0	117.0	85.0		11.0	3.8		2.9	11.9	5.6		0.4	0.17	0.83	0.6
60.0	66.0	0.1	0.2	3.8	0.2					0.0	0.5	0.6	41.0	100.0	76.0		8.0	3.0		2.3	11.5	6.2		0.4	0.17	0.83	0.6
68.0	70.0	0.1	0.2	3.8	0.2						0.5	0.5	58.0	129.0	82.0		9.0	4.0		3.0	12.2	5.5		0.4	0.17	0.83	0.8
80.0	68.0	0.2	0.2	3.8	0.2						0.5	0.5	61.0	121.0	109.0		10.0	3.7		2.8	13.6	6.4		0.4	0.17	0.83	0.6
60.0	70.0	0.2	0.2	3.8	0.2						0.5	0.4	63.0	116.0	104.0		10.0	3.7		2.8	14.3	6.3		0.4	0.17	0.83	0.6
78.0	72.0	0.2	0.2	3.8	0.2						0.5	0.5	64.0	126.0	109.0		9.0	3.7		2.8	14.2	6.5		0.4	0.16	0.82	0.6
76.0	72.0	0.2	0.1	3.8	0.2	0.00	0.04	0.00	0.00		0.5	0.5	89.0	144.0	112.0		11.0	4.4		3.3	16.9	6.1		0.5	0.17	0.83	0.8
72.0	74.0	0.1	0.1	3.8	0.2	0.01	0.04	0.00	0.00		0.6	0.6	90.0	129.0	112.0		11.0	3.9		3.0	19.1	6.4		0.4	0.16	0.82	0.6
2122.0	2145.0	4.1	4.7	116.4	6.2	0.11	0.53	0.06	0.08	0.1	15.2	16.0	1926.0	3688.0	2949.0		298.0	114.9	0.0	87.8	428.4	186.9	0.0	12.9	5.2	25.8	20.8
68.5	69.2	0.1	0.2	3.8	0.2	0.01	0.05	0.01	0.01	0.0	0.5	0.5	62.1	119.0	95.1		9.6	3.7	0.0	2.8	13.8	6.0	0.0	0.4	0.2	0.8	0.7
94.0	94.0	0.2	0.2	3.8	0.2	0.03	0.09	0.04	0.02	0.1	0.6	0.6	104.0	164.0	140.0		15.0	5.3	0.0	4.1	19.1	6.5	0.0	0.5	0.2	0.9	0.8
60.0	50.0	0.1	0.1	3.8	0.2	0.00	0.04	0.00	0.00	0.0	0.4	0.4	35.0	84.0	63.0		7.0	2.5	0.0	1.9	10.6	5.5	0.0	0.4	0.2	0.8	0.6

I certify that the data provided accurately represents the water quality, quantity, treatment, operational practices, and other activities for the reporting period specified herein.

CERTIFIED OPERATOR

SIGNATURE

John M Poole

PRINT

APR 0 5 2024

ER DATA	FILTER OPERATION DATA										DINSINFECTION AND CT VALUES												MICROBIOLOGICAL EXAMINATION AND SYSTEM PRESSURE					
											FIRST DISINFECTION SEQUENCE					SECOND DISINFECTION SEQUENCE					CT CALC. / CT REQ						
PLICABLE BLANKS	NUMBER OF FILTERS USED	FILTER HOURS= COL 54 x HOURS RUN	AVERAGE LENGTH FILTER RUN - HOURS	RATE-OF-FLOW GAUGES WORKING	LOSS-OF-HEAD GAUGES WORKING	TURNIDIMETERS WORKING	BACKWASH RATE gpm/ft2	BACKWASH WATER USED - 1,000 gallons		FREE CHLORINE END OF SEQUENCE C	CONTACT TIME IN MINUTES T	END OF SEQUENCE pH	CALCULATED CT	REQUIRED CT	FREE CHLORINE END OF SEQUENCE C	CONTACT TIME IN MINUTES T	END OF SEQUENCE pH	CALCULATED CT	REQUIRED CT	TOTAL INACTIVATION RATIO	RAW	PLANT EFFLUENT	DISTRIBUTION SYSTEM	FREE CHLORINE MG/L AT POINT OF SAMPLING & DISTRIBUTION SYSTEM	BT Results	Location of sampling point in distribution system. **Must vary within system.**
53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	
	2	14.94	7.47	ok	ok	ok	18	50							3.0	74.4	7.7	223.2	34	6.56	248	0				
(x) gravity g	2	17.66	8.83	ok	ok	ok	18								3.0	74.4	7.7	223.2	34	6.56	236	0				
( )	2	17.76	8.88	ok	ok	ok	18	54							2.8	74.4	7.8	208.3	33	6.31	205	0		2.8	N	121 Lakewood Landing
	2	19.44	9.72	ok	ok	ok	18								2.9	74.4	7.8	215.8	33	6.54	261	0		2.4	N	Waterford across City Hall
	2	14.3	7.15	ok	ok	ok	18	42							2.6	74.4	7.8	193.4	22	8.79	210	0		2.4	N	2623 Lawnville Rd.
174sqft 1	2	18.54	9.27	ok	ok	ok	18								2.8	74.4	7.8	208.3	22	9.47	131	0		2.5	N	Bonneyview Tank
	2	11.84	5.92	ok	ok	ok	18								2.5	74.4	7.6	186.0	18	10.33	261	0		2.5	N	Kingston Hgts. Pump Station
174sqft 1	2	12.06	6.03	ok	ok	ok	18								2.5	74.4	7.8	186.0	22	8.45	517	0				
	2	9.9	4.95	ok	ok	ok	18								2.7	74.4	7.8	200.9	22	9.13	365	0				
348sqft 3	2	13.2	6.6	ok	ok	ok	18	53							3.0	74.4	7.8	223.2	22	10.15	214	0		2.4	N	166 Vancon Dr.
	2	10.26	5.13	ok	ok	ok	18								2.6	74.4	7.8	193.4	32	6.05	261	0		2.2	N	181 High St.
4gpm/ft2 4	2	12.54	6.27	ok	ok	ok	18								2.7	74.4	7.8	200.9	32	6.28	225	0		2.3	N	391 Oak Leaf St.
	2	13.14	6.57	ok	ok	ok	18	40							2.5	74.4	7.7	186.0	26	7.15	214	0		2.4	N	161 Hartford Village Way
4gpm/ft2 4	2	12.1	6.05	ok	ok	ok	18								2.7	74.4	7.8	200.9	22	9.13	225	0		2.7	N	1512 Roane State Hwy.
	2	10.9	5.45	ok	ok	ok	18								2.7	74.4	7.8	200.9	22	9.13	579	0				
700gpm 7	2	9.2	4.6	ok	ok	ok	18								2.9	74.4	7.8	215.8	22	9.81	1203	0				
700gpm 7	2	13.3	6.65	ok	ok	o k	18	40							2.9	74.4	7.8	215.8	22	9.81	1553	0				
rate	2	12.86	6.43	ok	ok	ok	18								2.6	74.4	7.8	193.4	22	8.79	517	0				
Salt ( )	2	10.1	5.05	ok	ok	ok	18								2.9	74.4	7.9	215.8	22	9.81	276	0				
14 ( )	2	13.44	6.72	ok	ok	ok	18								3.1	74.4	7.8	230.6	19	12.14	214	0				
( )	2	10.9	5.45	ok	ok	ok	18								2.7	74.4	7.9	200.9	18	11.16	248	0				
	2	12.76	6.38	ok	ok	ok	18	61							2.8	74.4	7.9	208.3	22	9.47	205	0				
	2	11.96	5.98	ok	ok	ok	18								2.8	74.4	7.5	208.3	33	6.31	291	0				
	2	14	7	ok	ok	ok	18								2.8	74.4	7.7	208.3	33	6.31	308	0				
	2	10.96	5.48	ok	ok	ok	18								2.4	74.4	8.0	178.6	22	8.12	276	0				
	2	13.66	6.83	ok	ok	ok	18								2.7	74.4	8.0	200.9	22	9.13	517	0				
	2	13.74	6.87	ok	ok	ok	18								2.3	74.4	8.0	171.1	21	8.15	172	0				
	2	13.54	6.77	ok	ok	ok	18								3.0	74.4	8.0	223.2	22	10.15	228	0				
	2	13.8	6.9	ok	ok	ok	18								2.8	74.4	7.6	208.3	22	9.47	201	0				
	2	16.2	8.1	ok	ok	ok	18	53							3.0	74.4	7.7	223.2	22	10.15	411	0				
	2	14.44	7.22	ok	ok	ok	18								3.0	74.4	7.7	223.2	22	10.15	308	0				
		413	207					393																24.6		
		13	7					49																2.5		
		15	7					50																2.8		
		9	9					0																2.2		

Remarks: _____