

Renfrew Drinking Water System

Waterworks # 210001102
System Category – Large Municipal Residential

Annual Water Report

Prepared For: Municipality of the Town of Renfrew

Reporting Period of January 1st – December 31st 2023

Issued: February 28th, 2024

Revision: 0

Operating Authority:



This report has been prepared to satisfy the annual reporting requirements in O.Reg 170/03 Section 11 and Schedule 22

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Report Availability

This system does not serve more than 10,000 residences and the annual reports will be available to residents at the Town of Renfrew Municipal Office. Notification will be at the Municipal Office and copies provided free of charge if requested. The Town of Renfrew Municipal Office is located at 127 Raglan St. S., Renfrew, ON K7V 1P8.

Compliance Report Card

Compliance Event	# of Events
Ministry of Environment Inspections	Ministry Inspections on November 9 th 2023 <ul style="list-style-type: none">Report Received January 18, 2024<ul style="list-style-type: none">2 Non-Compliances noted in report
Ministry of Labour Inspections	No Inspections during the reporting period
QEMS External Audit	One (1) External On-Site Audit was completed
AWQI's	Quarter 1 Trihalomethane Exceedance
Non-Compliance	Missed Quarterly Nitrate Nitrite Samples
Spills	No spills during the reporting period

System Process Description

Raw Source

The source water for the Renfrew Drinking Water System (DWS) is the Bonnechere River. The low lift pumping station was constructed over the wet well, and is situated next to the Bonnechere River, across the street from the Renfrew DWS. The wet well is equipped with a bar screen. Raw water is drawn from the wet well and discharged into a raw water header and conveyed to the plant for treatment. Turbidity, pH and temperature meters are installed at this point to collect raw water data.

Treatment

Raw water is treated with coagulant and a coagulant aid (polymer). The powdered activated carbon (PAC) system is currently not in use. The raw water is directed to the flash mixers and proceeds through the Actiflo treatment system, which consists of coagulation, flocculation and sedimentation assisted by tube settlers.

Water is directed to three dual media (sand/anthracite) high-rate gravity filters. All three filters are connected to a common backwash system that includes filter-to-waste valves, backwash troughs and underdrain systems. The filters are equipped with one positive displacement air scour blower.

Filtered water is treated with chlorine gas (for disinfection), hydrated lime (for pH adjustments) and

Hydrofluosilicic acid (fluoride) just prior to being directed to the Clearwells. Two baffled Clearwells are in use to provide treated water storage and the treated water is pumped from the Clearwells to the distribution system.

There are two wastewater generating processes; filter backwashing and waste residuals from the Actiflo treatment system. Filter backwash effluent is directed to two settling tanks. The supernatant from the settling tank is discharged to the Bonnechere River via the municipal storm sewer and the sludge from the settling tank is pumped to the municipal sanitary sewer system.

Treatment Chemicals used during the reporting year:

Chemical Name	Use	Supplier
PAS-8	Primary Coagulation	Kemira
Polymer	Coagulant Aid	Northland Chemical Inc.
Hydrated Lime	pH Adjustment	M&R Feeds (Sylvite)
Chlorine Gas	Disinfection	Brenntag
Hydrofluosilic Acid	Fluoridation	Brenntag
Micro-Sand	Process	Veolia

Distribution

The distribution for the Town of Renfrew serves a population of approximately 8,000 residents. The system includes a 6,820 m³ capacity standpipe, located on O'Brien Road. There is also an in-line booster station.

Summary of Non-Compliance

Adverse Water Quality Incidents

Date	AWQI #	Details	Legislation	Corrective Action Taken
January – March Q1	164026	Rolling annual average for Trihalomethane (THM)	O.Reg. 170/03	Pre-chlorination is now turned off and only used for seasonal operational challenges

Non-Compliance

Legislation	Requirement(s) system failed to meet	Duration of the failure	Corrective Action	Status
Reg. 170.03	Quarterly Nitrate/Nitrite Samples	Quarter 3	Sampled in Q4	Closed

Spill Incident

Date	Location	Details	Corrective Action
No spills during the reporting period			

Non-Compliance Identified in a Ministry Inspection:

Legislation	requirement(s) system failed to meet	duration of the failure	Corrective Action	Status
O.Reg. 170/03 16-7	Trihalomethane Rolling Annual Average was not reported in the required timelines.	Q1 2023	Quarterly Work orders have been created and assigned.	Complete
O. Reg. 170/03 13-7	Nitrate samples were not tested in Q3-2023	Q3 2023	Laboratory is sending sampling confirmations and a staff training.	Complete

Flows

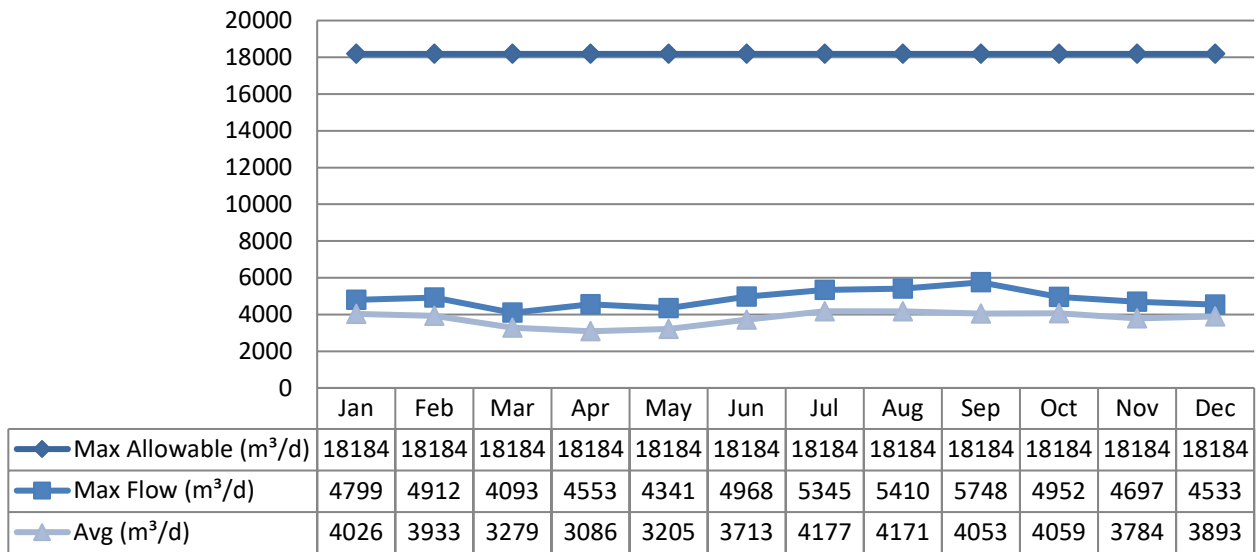
The Renfrew Drinking Water System is operating on average under half the rated capacity.

Raw Water Flows

The Raw Water flows are regulated under the Permit to Take Water. 2023 Raw Flow Data was submitted to the Ministry electronically under permit #8088-9AXJ6C. The confirmation is attached in Appendix A.

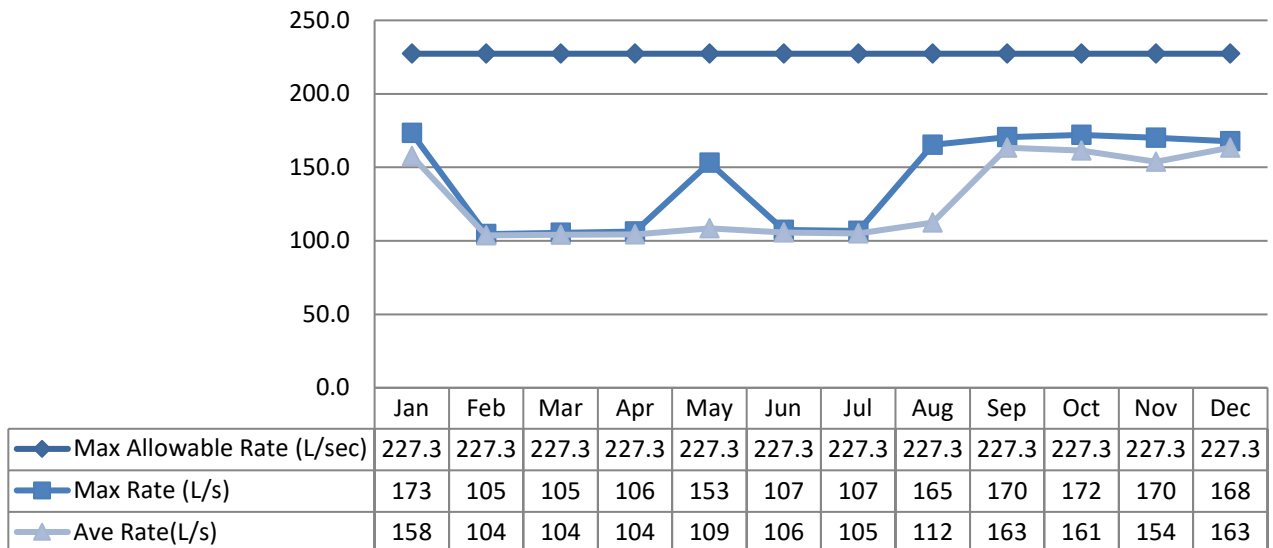
Total Monthly Flows (m³/d)

Max Allowable PTTW



Monthly Rated Flows (L/s)

Max allowable rate - PTTW

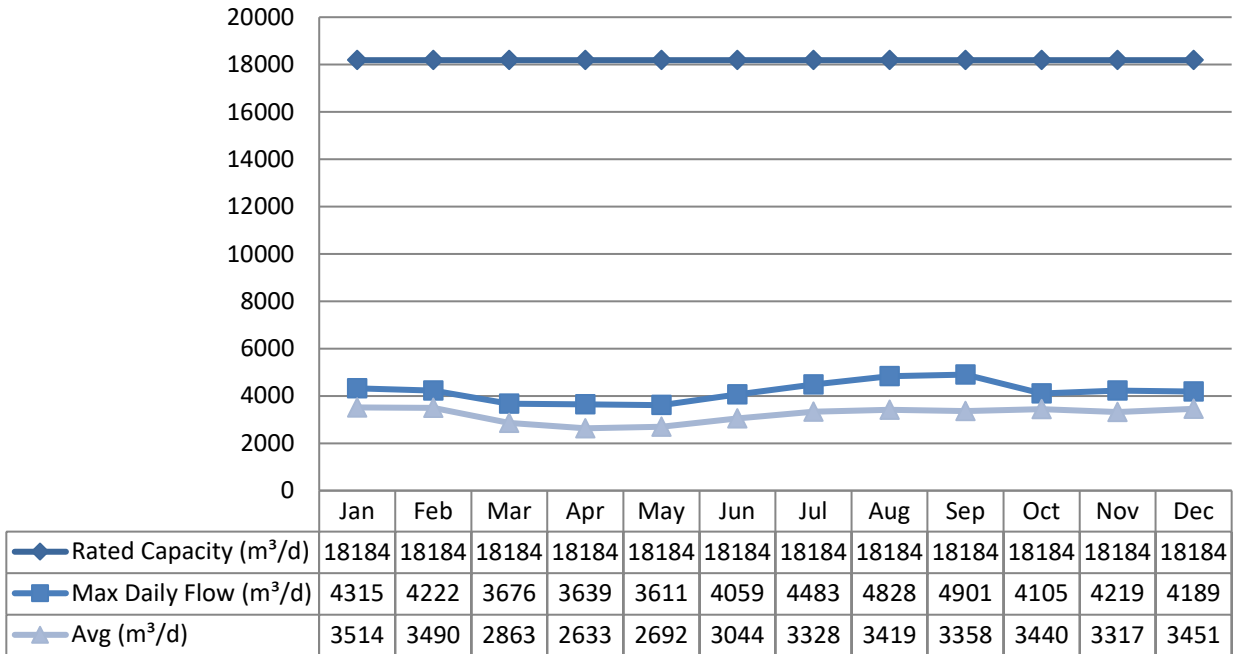


Treated Water Flows

The Treated Water flows are regulated under the Municipal Drinking Water Licence.

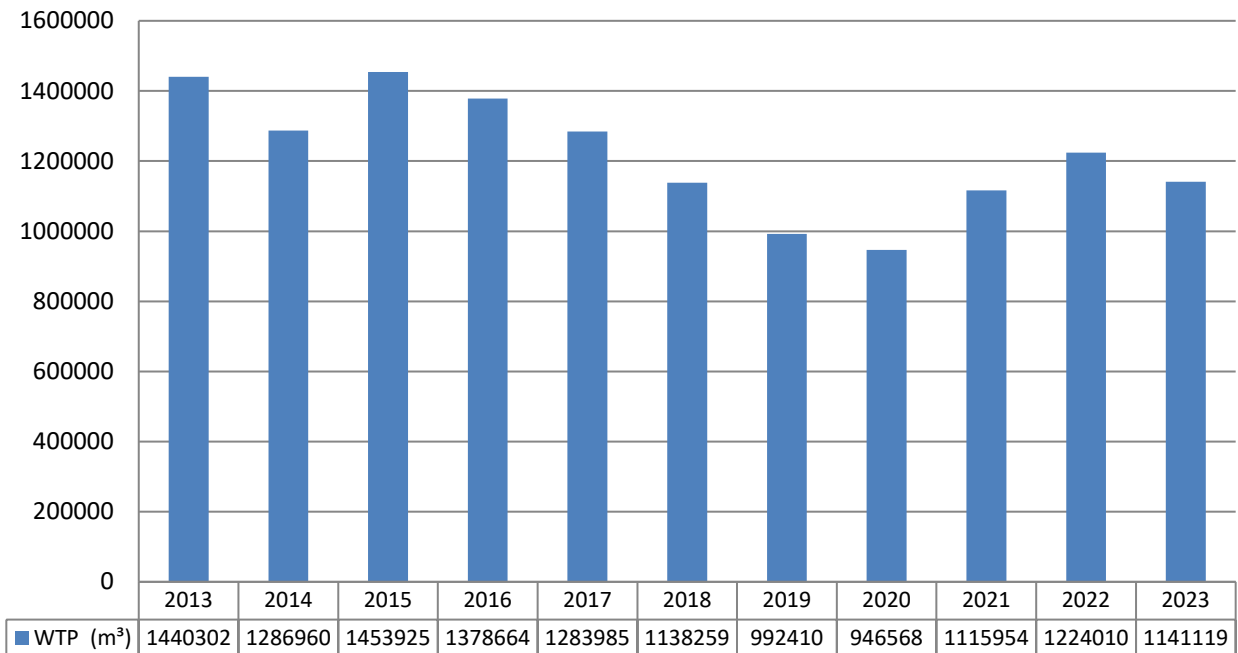
Monthly Rated Flows

Rated Capacity - MDWL



Annual Total Flow Comparison

Total Annual m³



Regulatory Sample Results Summary

Microbiological Testing

	No. of Samples Collected	Range of E.coli Results		Range of Total Coliform Results		# of HPC Samples Collected	Range of HPC Results	
		Min	Max	Min	Max		Min	Max
Raw Water	52	2	189	30	23000			
Treated Water	52	0	0	0	0	52	2	4
Distribution Water	208	0	0	0	8	104	2	76

Operational Testing

	No. of Samples Collected	Range of Results	
		Minimum	Maximum
Turbidity, In-House (NTU) - RW	99	0.17	88.7
Turbidity, In-House (NTU) - TW	99	0.12	3.1
Turbidity, On-Line (NTU) - Filt1	8760	0.0	5.0
Turbidity, On-Line (NTU) - Filt2	8760	0.0	1.78
Turbidity, On-Line (NTU) - Filt3	8760	0.0	5.0
Free Chlorine Residual, On-Line (mg/L) - TW	8760	0.46	3.48
Free Chlorine Residual, In-House (mg/L) - TW	346	1.39	2.80
Free Chlorine Residual, TW Field (mg/L) Lab Upload - TW	55	1.51	2.60
Free Chlorine Residual, On-Line (mg/L) - DW	8760	0.58	2.32
Free Chlorine Residual, DW Field (mg/L) Lab Upload - DW	212	0.21	2.07
Fluoride Residual, On-Line (mg/L) - TW	8760	0.51	1.00
Fluoride Residual, In-House (mg/L) - TW	101	0.05	0.93
Fluoride Residual, Lab Upload (mg/L) -TW	12	0.3	0.9

NOTE: spikes recorded by on-line instrumentation were a result of air bubbles and various maintenance/calibration activities. All spikes are reviewed for compliance with O.Reg 170/03

Laboratory Testing

Parameter	# of grab samples taken	Range of Results (min # - max #)
Raw Water		
Alkalinity	12	44 - 128 mg/l
Colour	12	15 - 26 TCU
Dissolved Organic Carbon (DOC)	12	0.3 – 16.2 mg/L
Fluoride	12	0.1 – 0.2mg/L
Iron	12	0.074 - 0.687 mg/L
Manganese	12	0.010 - 0.035
pH	12	6.41 - 8.01
Treated Water		
Alkalinity	12	41 - 99 mg/L
Aluminum	12	30 - 90 ug/L

Parameter	# of grab samples taken	Range of Results (min # - max #)
Colour	12	0 – 3 TCU
Conductivity	12	162 - 363
Dissolved Organic Carbon (DOC)	12	0.2 – 9.4 mg/L
Fluoride	12	0.3 – 0.9 mg/L
Iron	12	0.005 - 0.008 mg/L
Manganese	12	0.002 - 0.01237
pH	12	6.53 – 7.74
Hardness (as CaCO ₃)	12	59 - 144

Inorganic Parameters

These parameters are tested as a requirement under 170/03. Sodium and Fluoride are required to be tested every five (5) years. Nitrate and Nitrite are tested quarterly and the metals are tested annually as required under 170/03. In the event any of the parameters exceed half of the maximum allowable concentration the parameter is required to be sampled quarterly.

- MAC = Maximum Allowable Concentration as per O. Reg 169/03
- BDL = Below the laboratory detection level

	Sample Date (yyyy/mm/dd)	Sample Result	MAC	No. of Exceedances	
				MAC	1/2 MAC
Treated Water					
Antimony: Sb (ug/L) - TW	2023/01/17	<MDL 0.1	6.0	No	No
Arsenic: As (ug/L) - TW	2023/01/17	0.1	10.0	No	No
Barium: Ba (ug/L) - TW	2023/01/17	26.0	1000.0	No	No
Boron: B (ug/L) - TW	2023/01/17	5.0	5000.0	No	No
Cadmium: Cd (ug/L) - TW	2023/01/17	<MDL 0.01	5.0	No	No
Chromium: Cr (ug/L) - TW	2023/01/17	<MDL 2.0	50.0	No	No
Mercury: Hg (ug/L) - TW	2023/01/17	<MDL 0.02	1.0	No	No
Selenium: Se (ug/L) - TW	2023/01/17	<MDL 1.0	50.0	No	No
Uranium: U (ug/L) - TW	2023/01/17	<MDL 0.09	20.0	No	No
Additional Inorganics					
Fluoride (mg/L) - TW	2023/12/12	0.4	1.5	No	No
Nitrite (mg/L) - TW	2022/02/28	<MDL 0.05	1.0	No	No
Nitrite (mg/L) - TW	2022/05/16	<MDL 0.05	1.0	No	No
Nitrite (mg/L) - TW			1.0	No	No
Nitrite (mg/L) - TW	2022/11/21	<MDL 0.05	1.0	No	No
Nitrate (mg/L) - TW	2022/02/28	<MDL 0.25	10.0	No	No
Nitrate (mg/L) - TW	2022/05/17	<MDL 0.05	10.0	No	No
Nitrate (mg/L) - TW			10.0	No	No
Nitrate (mg/L) - TW	2022/11/21	<MDL 0.05	10.0	No	No
Sodium: Na (mg/L) - TW	2021/01/12	8.6	20	No	Yes

Schedule 15 Distribution Sampling:

This sampling and reporting is completed by the Town of Renfrew. Results are as follows:

Date Sampled	Sampling Location	Sample Type	Lead Results (mg/L)		Alkalinity Result (mg/L)	pH Result
			1st Litre	2nd Litre if plumbing		
15/12/23	FH-2-21 Mason Ave	Distribution	0.00005		44	7.54
15/12/23	FH-2-30 Aberdeen St	Distribution	0.00027		44	7.58
15/12/23	FH-2-25 Stewart St	Distribution	0.00006		44	7.57

Organic Parameters

These parameters are tested annually as a requirement under O. Reg 170/03. In the event any of the parameters exceed half of the maximum allowable concentration the parameter is required to be sampled quarterly.

	Sample Date (yyyy/mm/dd)	Sample Result	MAC	Number of Exceedances	
				MAC	1/2 MAC
Treated Water					
Alachlor (ug/L) - TW	2023/01/17	<MDL 0.3	5.00	No	No
Azinphos-methyl (ug/L) - TW	2023/01/17	<MDL 1.0	20.00	No	No
Benzene (ug/L) - TW	2023/01/17	<MDL 0.5	1.00	No	No
Benzo(a)pyrene (ug/L) - TW	2023/01/17	<MDL 0.006	0.01	No	No
Bromoxynil (ug/L) - TW	2023/01/17	<MDL 0.5	5.00	No	No
Carbaryl (ug/L) - TW	2023/01/17	<MDL 3.0	90.00	No	No
Carbofuran (ug/L) - TW	2023/01/17	<MDL 1.0	90.00	No	No
Carbon Tetrachloride (ug/L) - TW	2023/01/17	<MDL 0.2	2.00	No	No
Chlorpyrifos (ug/L) - TW	2023/01/17	<MDL 0.5	90.00	No	No
Diazinon (ug/L) - TW	2023/01/17	<MDL 1.0	20.00	No	No
Dicamba (ug/L) - TW	2023/01/17	<MDL 1.0	120.00	No	No
1,2-Dichlorobenzene (ug/L) - TW	2023/01/17	<MDL 0.5	200.00	No	No
1,4-Dichlorobenzene (ug/L) - TW	2023/01/17	<MDL 0.5	5.00	No	No
1,2-Dichloroethane (ug/L) - TW	2023/01/17	<MDL 0.5	5.00	No	No
1,1-Dichloroethylene (ug/L) - TW	2023/01/17	<MDL 0.5	14.0	No	No
Dichloromethane (Methylene Chloride) (ug/L) - TW	2023/01/17	<MDL 5.0	50.00	No	No
2,4-Dichlorophenol (ug/L) - TW	2023/01/17	<MDL 0.2	900.00	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW	2023/01/17	<MDL 1.0	100.00	No	No
Diclofop-methyl (ug/L) - TW	2023/01/17	<MDL 0.9	9.00	No	No
Dimethoate (ug/L) - TW	2023/01/17	<MDL 1.0	20.00	No	No
Diquat (ug/L) - TW	2023/01/17	<MDL 5.0	70.00	No	No
Diuron (ug/L) - TW	2023/01/17	<MDL 5.0	150.00	No	No
Glyphosate (ug/L) - TW	2023/01/17	<MDL 25.0	280.00	No	No
Malathion (ug/L) - TW	2023/01/17	<MDL 5.0	190.00	No	No
Metolachlor (ug/L) - TW	2023/01/17	<MDL 3.0	50.00	No	No

	Sample Date (yyyy/mm/dd)	Sample Result	MAC	Number of Exceedances	
				MAC	1/2 MAC
Metribuzin (ug/L) - TW	2023/01/17	<MDL 3.0	80.00	No	No
Monochlorobenzene (Chlorobenzene) (ug/L) - TW	2023/01/17	<MDL 0.5	80.0	No	No
Paraquat (ug/L) - TW	2023/01/17	<MDL 1.0	10.00	No	No
PCB (ug/L) - TW	2023/01/17	<MDL 0.05	3.00	No	No
Pentachlorophenol (ug/L) - TW	2023/01/17	<MDL 0.2	60.00	No	No
Phorate (ug/L) - TW	2023/01/17	<MDL 0.3	2.00	No	No
Picloram (ug/L) - TW	2023/01/17	<MDL 5.0	190.00	No	No
Prometryne (ug/L) - TW	2023/01/17	<MDL 0.1	1.00	No	No
Simazine (ug/L) - TW	2023/01/17	<MDL 0.5	10.00	No	No
Terbufos (ug/L) - TW	2023/01/17	<MDL 0.5	1.00	No	No
Tetrachloroethylene (ug/L) - TW	2023/01/17	<MDL 0.5	10.00	No	No
2,3,4,6-Tetrachlorophenol (ug/L) - TW	2023/01/17	<MDL 0.2	100.00	No	No
Triallate (ug/L) - TW	2023/01/17	<MDL 10.0	230.00	No	No
Trichloroethylene (ug/L) - TW	2023/01/17	<MDL 0.5	5.00	No	No
2,4,6-Trichlorophenol (ug/L) - TW	2023/01/17	<MDL 0.2	5.00	No	No
2-Methyl-4chlorophenoxyacetic Acid (MCPA)(ug/L) - TW	2023/01/17	<MDL 10.0	100	No	No
Trifluralin (ug/L) - TW	2023/01/17	<MDL 0.5	45.00	No	No
Vinyl Chloride (ug/L) - TW	2023/01/17	<MDL 0.2	1.00	No	No
Distribution Water					
Trihalomethane: Total (ug/L) Annual Running Average - DW	2023	89.5	100.00	No	No
Haloacetic Acid: HAA (ug/L) Annual Running Average-DW	2023	68.0	80.0	No	No

MAC = Maximum Allowable Concentration as per O.Reg 169/03

BDL = Below the laboratory detection level

Additional Legislated Samples

Legal Document	Date of Issuance	Parameter	Date Sampled	Result	Unit of measure	Limit
Municipal License 183-101 Issue #3	2015-12-16	Actiflo Suspended Solids	Annual Avg.	9.0	mg/L	25.0 mg/L
Municipal License 183-101 Issue #3	2015-12-16	Backwash Effluent Suspended Solids	Annual Avg.	14.0	mg/L	25.0 mg/L

Major Maintenance Summary



WO #	Description
3483829	Capital Annual Level Sensors Calibration
3483982	Capital Low lift #3 Replacement

WO #	Description
3524502	Capital Lunchroom Air Conditioning Unit Repair
3525776	Capital Franklin Empire Annual Flow Meter Calibration
3574565	Capital Coagulant Pump Replacement
3575879	Capital Yearly Boiler Service
3620750	Capital Float Relay Replacement By Capital Controls
3201336	Capital Boiler Repair and Parts
3201956	Capital Raw Water pH Probe Replacement
3201958	Capital Treated Water Turbidimeters Upgrade
3201965	Capital Raw Water Turbidimeters Upgrade
3201966	Capital Actiflo 1 Turbidimeters Upgrade
3201967	Capital Actiflo 2 Turbidimeters Upgrade
3201971	Capital Fluoride Dosage Pumps Rebuild Kits
3201974	Capital Polymer Dosage Pumps Rebuild Kits
3203014	Capital Chlorinator Service Repair/Replace
3203220	Capital Cl2 Gas Detector Repair
3203593	Capital Filter 3 Actuator Installation
3203602	Capital loss of control on low lift building SCADA
3204890	Capital Cl2 Gas Detector Replacement
3205607	Capital polymer panel PRV Replacements/rebuild kits
3243374	Capital Filter 1 Effluent Actuator Rebuild
3243378	Capital Filter 1 Effluent Actuator Replacement
3246907	Capital Backwash Sludge Pump Spare
3247046	Capital Filter 1 Effluent Actuator Assesment Capital Controls
3247047	Capital Gearbox Repair
3289442	Capital Coagulant pump 2 VFD Fault
3291334	Capital Coagulant Pump 2 VFD Replacement
3338737	Capital Filter 1 Actuator Programing/installation and SCADA Bug Fixes Capital Controls
3624499	Capital Hepa Vacuum Inspection/ Filter and Bag Replacement
3662069	Capital SAI Global Annual External Audit
3662815	Capital Post Filter Chlorine Jet Pump Replacement

WO #	Description
3665521	Capital Stable Cal Calibration Kit For Handheld Turbidimeter And pH Buffer
3703586	Capital Filter 3 Actuator Installation
3703615	Capital Boiler #2 troubleshoot
3387554	Capital Swan Turbidity Integration
3431259	Capital Backflow Preventer Replacements
3480005	Capital Backwash Pump Fail
3482549	Capital Solenoid Valve & Coil
3483570	Capital Relay Base Fail For Actiflo 1 High Level Float Capital Control Replace
3483990	Capital Filter 3 Flow Meter HMI Replacement
3525155	Capital Handheld pH Probe Replacement
3525156	Capital Lab Equipment Pipet Replacement
3525172	Capital Lab Equipment Glassware Replacement
3571408	Capital Low Lift / Backwash Tanks Cleanout
3571723	Capital Sump Pump Purchase
3573966	Capital Coagulant Tote Removal
3573968	Capital Activated Carbon Skids Removal

Appendix A

WTRS Data and Submission Confirmation



Ministry of the Environment,
Conservation and Parks

| [WT DATA](#) | [USER PROFILE](#) | [CONTACT US](#) | [HELP](#) | [HOME](#) | [LOGOUT](#) |

Location: [WTRS](#) / [WT DATA](#) / [Input WT Record](#) WTRS-WT-008

Water Taking Data submitted successfully.

Confirmation:


Thank you for submitting your water taking data online.

Permit Number: 8088-9AXJ6C
Permit Holder: THE CORPORATION OF THE TOWN OF RENFREW.
Received on: Feb 28, 2024 1:37 PM

This confirmation indicates that your data has been received by the Ministry, but should not be construed as acceptance of this data if it differs from that specified on the Permit Number, assigned to the Permit Holder stated above.

[Print Confirmation](#) [Return to Main Page](#)

LAUREN LACOMBE | 2024/02/28
version: v4.5.0.21 (build#: 22)
Last modified: 2018/09/18

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RENFREW DRINKING WATER SYSTEM / Raw Water

Yearly Summary (Flow) 2023

Annual Values and Summary												Units:	cubic meter per day	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	4385.03	3878.58	3302.89	2012.10	2332.12	3738.17	3834.06	4978.98	4457.14	4050.23	4275.43	3738.70		
2	4426.82	4014.91	3236.45	4552.69	3318.41	4967.66	2811.33	4810.35	3437.57	3842.83	4231.77	3581.83		
3	4099.93	4107.71	3020.04	3178.96	2933.66	3854.73	3804.50	3522.48	3487.63	4848.85	2914.39	3881.54		
4	3901.75	4911.62	3291.99	3626.85	3240.38	3564.17	5344.52	5029.35	3904.79	3711.59	3858.84	3936.88		
5	4450.27	3769.90	3019.59	2858.08	2657.12	3550.35	4372.76	3530.76	5748.48	4275.03	4206.18	4168.19		
6	4458.03	4077.89	3259.73	3365.12	2564.87	4569.80	4974.96	3491.65	4242.50	3876.26	4136.69	2532.90		
7	3816.84	4885.04	3566.18	3574.30	3456.02	3185.41	4384.80	3964.75	4001.69	4629.22	3258.08	4533.27		
8	4324.93	4284.97	2942.45	2537.22	3309.16	3171.72	3722.19	4620.74	3650.18	3058.70	3319.00	3279.41		
9	4799.08	4231.26	3376.49	3427.50	3019.59	3690.37	4470.67	5409.92	3219.98	4952.16	3779.08	3746.53		
10	3689.79	4156.23	2832.22	3978.07	3258.12	2944.55	4699.29	2995.91	4403.21	3259.55	3884.79	4465.14		
11	3940.11	4305.43	3608.77	2567.70	3105.40	3693.21	5097.47	3757.14	3959.38	4683.66	3759.27	3495.22		
12	3612.49	4370.43	3000.66	3495.63	3272.00	3837.81	3726.13	3788.66	4319.88	4503.93	3751.43	4369.16		
13	3574.87	4050.08	3093.68	3558.68	3211.69	3852.53	4579.39	3753.54	4234.94	3970.68	4330.64	3384.27		
14	3928.98	4289.35	4092.88	3322.11	2107.40	3305.61	3737.97	4587.74	4377.02	4138.86	3665.92	4458.36		
15	3708.50	4127.12	2832.75	3304.23	3862.40	3604.44	3438.12	4207.06	4877.41	4219.80	3537.04	3459.30		
16	3691.67	4152.38	2846.00	2587.14	2961.63	4205.13	3930.62	4236.30	4284.49	4412.63	4037.15	4358.88		
17	3845.85	3767.83	3316.85	3170.10	3656.33	3068.91	5088.79	4924.66	3740.85	4702.81	3296.58	4333.50		
18	3938.57	3682.58	3158.56	2595.24	3293.40	3894.67	4380.58	3341.13	3690.16	4327.33	4072.22	3757.94		
19	3807.18	4130.66	3396.58	3021.89	2359.67	4162.16	4556.52	3355.92	4925.70	3896.16	3956.46	4470.25		
20	4731.40	4079.39	3319.59	3131.81	2536.15	4428.06	4601.57	3829.22	4402.81	3502.04	3732.34	3440.54		
21	3974.17	3583.79	3185.14	2216.93	3744.07	3793.72	3553.85	4332.92	5152.20	3427.14	4696.82	4013.04		
22	3509.63	2965.72	3339.44	2887.96	2763.64	4608.37	2556.30	5332.25	2954.71	4260.76	2905.12	4238.52		
23	3658.21	3300.03	3254.61	3619.85	3588.30	3943.98	4054.65	4888.45	2790.07	3803.06	3915.63	3649.16		
24	3881.55	3563.68	3076.45	1974.92	2671.79	2622.71	4576.29	4457.09	3906.10	3996.62	3878.15	4804.84		
25	3933.26	3118.76	3750.06	2906.85	3378.23	3684.63	4213.85	3637.88	3404.43	4217.66	2919.88	2722.65		
26	3897.05	3927.65	2456.10	2837.99	3571.78	4347.55	4044.33	3874.95	4322.29	3556.14	3592.30	4589.51		
27	4422.66	3487.78	3101.99	3249.98	2714.61	3102.42	4686.51	4282.26	4628.77	4462.00	4636.65	3572.06		
28	4548.31	2915.31	3936.45	2757.54	3894.32	3519.38	4767.51	5310.63	4134.90	3955.19	3749.43	3354.02		
29	3583.18		3264.46	3151.40	4273.35	3513.05	3298.90	3511.94	3782.26	3216.88	3366.97	4930.07		
30	3630.50		3845.64	3098.83	4341.23	2957.79	4017.78	3582.40	3141.47	4065.06	3854.93	3371.68		
31	4632.33		3911.83		3961.38		4172.92	3963.12		3997.39		4247.30		
Min	3509.63	2915.31	2456.10	1974.92	2107.40	2622.71	2556.30	2995.91	2790.07	3058.70	2905.12	2532.90		
Mean	4025.90	3933.43	3278.60	3085.59	3205.10	3712.77	4177.39	4171.30	4052.77	4058.72	3783.97	3899.51		
Max	4799.08	4911.62	4092.88	4552.69	4341.23	4967.66	5344.52	5409.92	5748.48	4952.16	4696.82	4930.07		

Legend: '---' Missing Data '+' No Day