

# Casselman Drinking Water System

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Waterworks # 210001219  
System Category – Large Municipal Residential

## Annual Water Report

Prepared For: Municipality of Casselman

Reporting Period of January 1<sup>st</sup> – December 31<sup>st</sup> 2020

Issued: February 5, 2021

Revision: 1

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 residents and the annual report will be available to the public at the Casselman Municipal Office and on their website.

## Compliance Report Card

Compliance Event	# of Events
Ministry of Environment Inspections	2
Ministry of Labour Inspections	0
QEMS External Audit	1
AWQI's/BWA	2
Non-Compliance	3
Community Complaints	4
Spills	0
Watermain Breaks	0

## System Process Description

### Raw Source

Serving the residents of the Village of Casselman, this surface water treatment plant draws water from the Nation River.

### Treatment & Distribution

The facility is capable of supplying water at a rate of 3,182 m<sup>3</sup>/day and consists of the following components:

- Raw water intake
- one (1) low lift concrete wet well
- three (3) vertical turbine low lift pumps
- two (2) ballasted flocculation water treatment units (Actiflow process units) complete with coagulation, injection, maturation and settling tanks
- two (2) mixed media filters
- filter backwash system
- one (1) filtered water holding tank with three (3) vertical speed vertical turbine
- two clear wells that have a capacity of 415 m<sup>3</sup> and 440 m<sup>3</sup> respectively
- three (3) vertical high lift pumps
- two (2) ultraviolet disinfection units
- chemical feed system consisting chemical pumps, storage tanks, piping and associated appurtenances to dose coagulant, polymer, potassium permanganate, sodium hydroxide, and chlorine gas.

This system operates under Drinking Water License Number 173-101 & Drinking Water Works Permit Number 173-201.

*Treatment Chemicals used during the reporting year:*

Chemical Name	Use	Supplier
Potassium Permanganate	Manganese removal	Canada Colours & Chemicals
PAS-08	Coagulant	Kemira
PASS 10	Coagulant	Kemira
PAX-XL6	Coagulant	Kemira
Polymer	Coagulant aid	Northland Chemicals
Chlorine Gas	Disinfection	Brenntag
Sodium Hydroxide	pH adjustment	Brenntag
Ammonium Sulphate	Chloramination	Canada Colours & Chemicals

## Summary of Non-Compliance

### Adverse Water Quality Incidents

Date	AWQI #	Parameter	Value	Limit	Legislation
July 2, 2020	146998	June Filter Performance	90.01%	95%	O. Reg. 170/03
August 6, 2020	147877	July Filter Performance	78.49%	95%	O. Reg. 170/03

### Non-Compliance

Legislation	requirement(s) system failed to meet	duration of the failure (i.e. date(s))	Corrective Action	Status
There were no non-compliance issues reported during the reporting period.				

### Non-Compliance Identified in a Ministry Inspection:

Legislation	requirement(s) system failed to meet	duration of the failure (i.e. date(s))	Corrective Action	Status
MDWL	All UV sensors were not checked and calibrated as required in Schedule E of the MDWL.	N/A	Training was given to staff to review regulatory requirements related to Schedule E of the MDWL.	Complete
O. Reg. 128/04	All operators did not possess the required certification.	August 3 & 4, 2019.	Training was given to staff to review regulatory requirements related to training and certification.	Complete
MDWL	UVT monitoring did not meet the requirements as prescribed under Section Schedule C of the MDWL.	N/A	Training was given to staff to review regulatory requirements related to Schedule C of the MDWL. Additionally, Real Tech was onsite to give operations staff hands on training related to required UVT unit.	Complete

## Flows

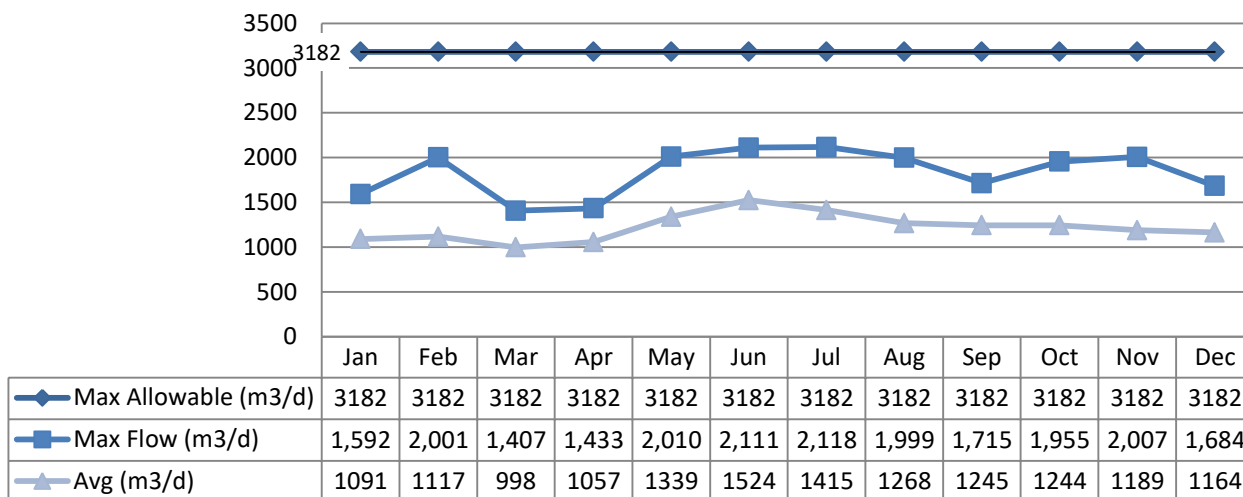
### Raw Water Flows

The Raw Water flows are regulated under the Permit to Take Water (PTTW). 2020 Raw Flow Data was submitted to the Ministry electronically on a monthly basis under permit #6067-9EGM32. (Expires December 31<sup>st</sup>, 2023)

As per its PTTW, the Casselman Drinking Water System is rated for 3182 m<sup>3</sup>/d and operated at 38% of its capacity during the 2020 reporting year.

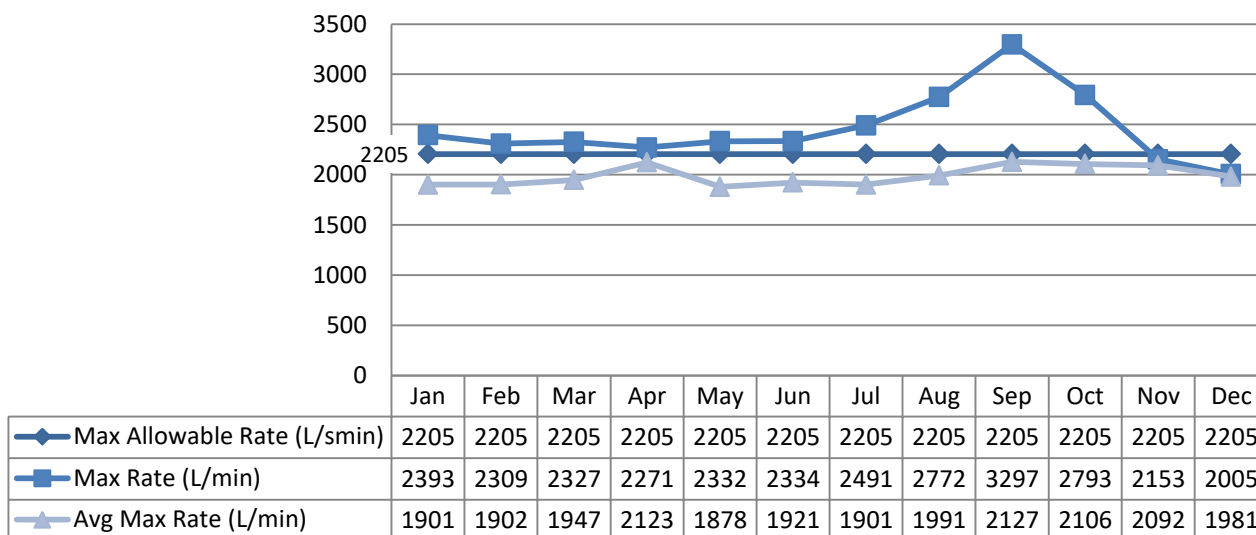
#### Total Monthly Flows (m3/d)

Max Allowable - PTTW



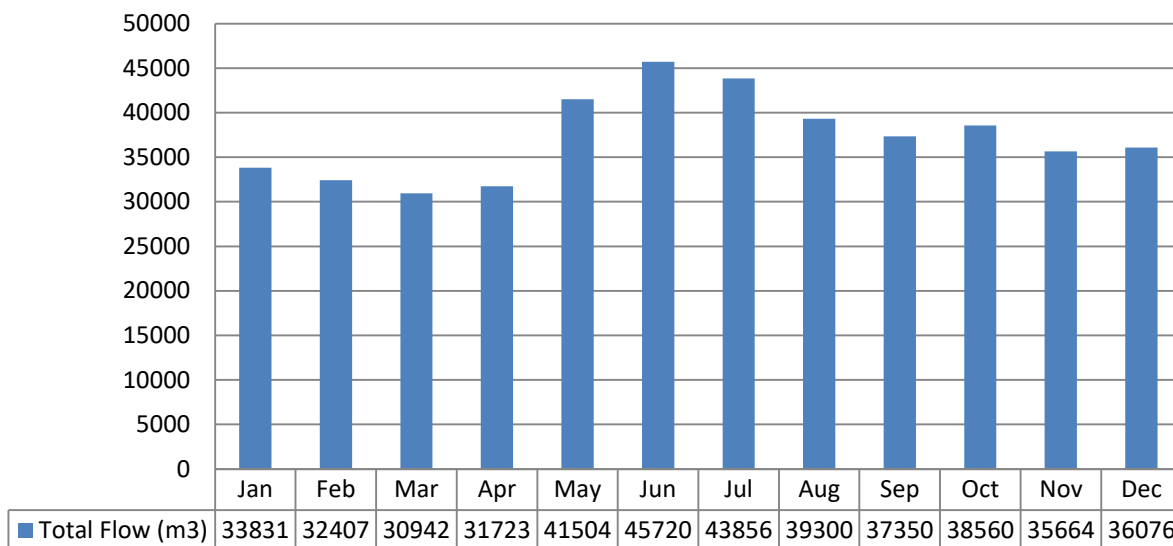
#### Monthly Rated Flows (L/min)

Max allowable rate - PTTW



NOTE: Maximum allowable rate was exceeded during brief periods of plant upset when the filter to waste cycle of the backwash sequence needed to be extended to reach compliant turbidity readings.

Monthly Raw Flow Comparison

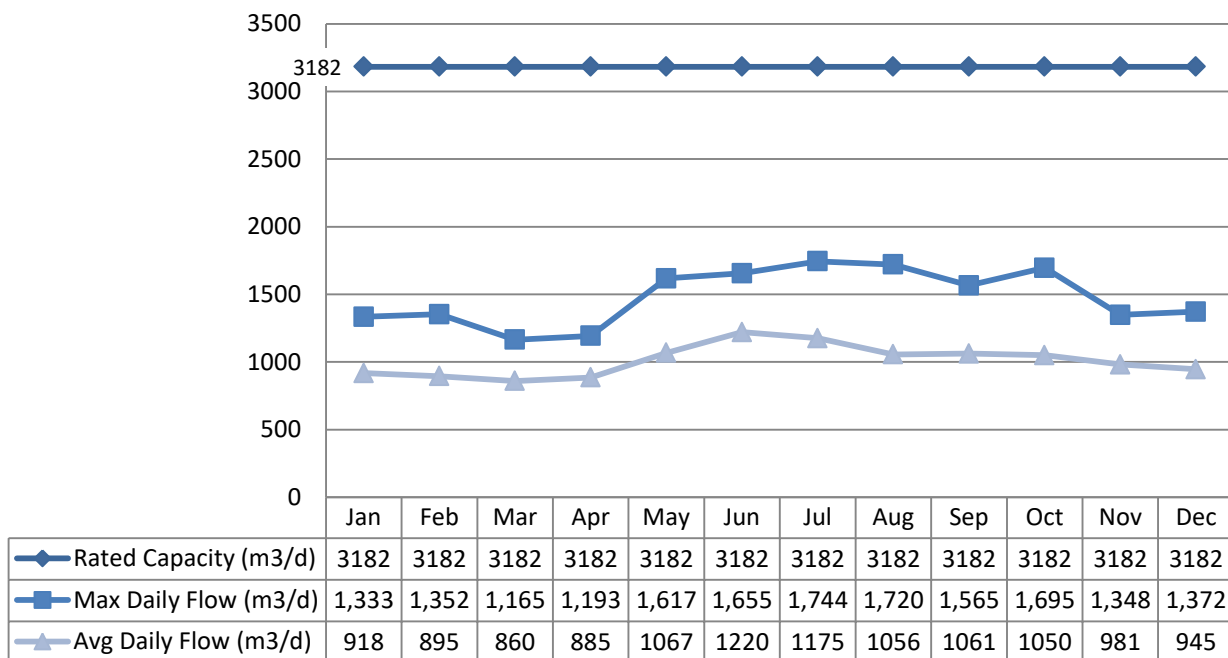


Treated Water Flows

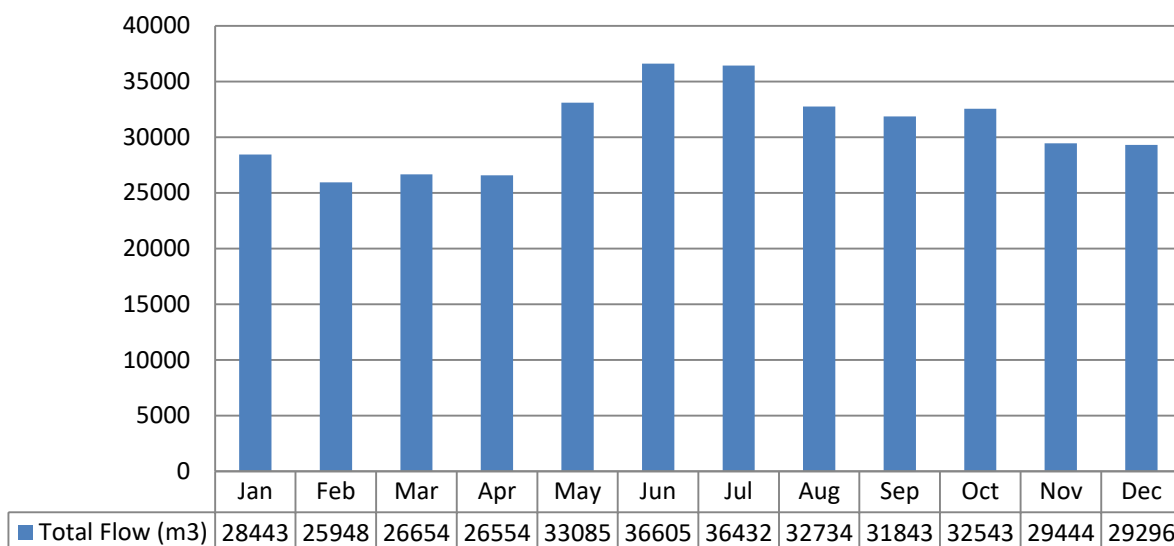
The Treated Water flows are regulated under the Municipal Drinking Water Licence (MDWL). The rated capacity of the facility, as indicated in the MDWL, is 3182 m<sup>3</sup>/d.

Monthly Treated Water Flows (m3/d)

Rated Capacity - MDWL



Monthly Treated Flow Comparison



## Regulatory Sample Results Summary

### Microbiological Testing

	No. of Samples Collected	Range of E.Coli Results		Range of Total Coliform Results		Range of HPC Results	
		Min	Max	Min	Max	Min	Max
Raw Water	52	0	148	0	920		
Treated Water	52	0	0	0	0	<2	268
Distribution Water	156	0	0	0	0	<2	396

### Operational Testing

	No. of Samples Collected	Range of Results	
		Minimum	Maximum
Turbidity, On-Line (NTU) – Filter 1	8760	0.01	0.77
Turbidity, On-Line (NTU) – Filter 2	8760	0.01	0.84
Turbidity, On-Line (NTU) - TW	8760	0.11	3.82
Free Chlorine Residual, On-Line (mg/L) - TW	8760	0.40	3.19
Free Chlorine Residual, In-House (mg/L) - TW	236	1.34	2.92
Free Chlorine Residual, On-Line (mg/L) - DW	4380*	0.37	3.28
Free Chlorine Residual, Field (mg/L) - DW	84*	0.38	2.36
Combined Chlorine Residual, On-Line (mg/L) - DW	4380*	0.32	2.83
Combined Chlorine Residual, Field (mg/L) - DW	72*	1.03	1.94

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

\*Chloramination system was put online July 15<sup>th</sup>, 2020

## Inorganic Parameters

These parameters are tested as a requirement under 170/03. Sodium and Fluoride are required to be tested every 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
- MDL = Below the laboratory detection level

	Sample Date (yyyy/mm/dd)	Sample Result	MAC	No. of Exceedances	
				MAC	1/2 MAC
<b>Treated Water</b>					
Antimony: Sb (ug/L) - TW	2020/04/14	<MDL 0.1	6.0	No	No
Arsenic: As (ug/L) - TW	2020/04/14	0.2	10.0	No	No
Barium: Ba (ug/L) - TW	2020/04/14	45.0	1000.0	No	No
Boron: B (ug/L) - TW	2020/04/14	27.0	5000.0	No	No
Cadmium: Cd (ug/L) - TW	2020/04/14	<MDL 0.02	5.0	No	No
Chromium: Cr (ug/L) - TW	2020/04/14	<MDL 2.0	50.0	No	No
Mercury: Hg (ug/L) - TW	2020/04/14	<MDL 0.02	1.0	No	No
Selenium: Se (ug/L) - TW	2020/04/14	<MDL 1.0	50.0	No	No
Uranium: U (ug/L) - TW	2020/04/14	<MDL 0.05	20.0	No	No
<b>Additional Inorganics</b>					
Fluoride (mg/L) - TW	2020/06/01	<MDL 0.1	1.5	No	No
Nitrite (mg/L) - TW	2020/01/07	<MDL 0.1	1.0	No	No
Nitrite (mg/L) - TW	2020/04/06	<MDL 0.1	1.0	No	No
Nitrite (mg/L) - TW	2020/07/13	<MDL 0.1	1.0	No	No
Nitrite (mg/L) - TW	2020/10/05	<MDL 0.1	1.0	No	No
Nitrate (mg/L) - TW	2020/01/07	2.4	10.0	No	No
Nitrate (mg/L) - TW	2020/04/06	3.2	10.0	No	No
Nitrate (mg/L) - TW	2020/07/13	0.3	10.0	No	No
Nitrate (mg/L) - TW	2020/10/05	0.9	10.0	No	No
*Sodium: Na (mg/L) - TW	2020/04/20	36.5	N/A	N/A	N/A

\*There is no "MAC" for Sodium. The aesthetic objective for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be notified mg/L when the sodium concentration exceeds 20 mg/L so that this information may be communicated to local physicians for their use with patients on sodium restricted diets.

### Schedule 15 Sampling:

The Schedule 15 Sampling is required under O.Reg 170/03. This system is under reduced sampling. No plumbing samples were collected.

Distribution System	Number of Sampling Points	Number of Samples	Range of Results		MAC (mg/L)	Number of Exceedances
			Minimum	Maximum		
Alkalinity (mg/L)	2	4	148	181	N/A	N/A
pH	2	4	7.61	8.29	N/A	N/A
Lead (mg/L)	N/A	N/A	N/A	N/A	0.01	N/A



## 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
<b>Treated Water</b>					
Alachlor (ug/L) - TW	2020/04/14	<MDL 0.3	5.00	No	No
Azinphos-methyl (ug/L) - TW	2020/04/14	<MDL 1.0	20.00	No	No
Benzene (ug/L) - TW	2020/04/14	<MDL 0.5	1.00	No	No
Benzo(a)pyrene (ug/L) - TW	2020/04/14	<MDL 0.005	0.01	No	No
Bromoxynil (ug/L) - TW	2020/04/14	<MDL 0.5	5.00	No	No
Carbaryl (ug/L) - TW	2020/04/14	<MDL 3.0	90.00	No	No
Carbofuran (ug/L) - TW	2020/04/14	<MDL 1.0	90.00	No	No
Carbon Tetrachloride (ug/L) - TW	2020/04/14	<MDL 0.2	2.00	No	No
Chlorpyrifos (ug/L) - TW	2020/04/14	<MDL 0.5	90.00	No	No
Diazinon (ug/L) - TW	2020/04/14	<MDL 1.0	20.00	No	No
Dicamba (ug/L) - TW	2020/04/14	<MDL 10.0	120.00	No	No
1,2-Dichlorobenzene (ug/L) - TW	2020/04/14	<MDL 0.5	200.00	No	No
1,4-Dichlorobenzene (ug/L) - TW	2020/04/14	<MDL 0.5	5.00	No	No
1,2-Dichloroethane (ug/L) - TW	2020/04/14	<MDL 0.5	5.00	No	No
1,1-Dichloroethylene (ug/L) - TW	2020/04/14	<MDL 0.1	14.00	No	No
Dichloromethane (Methylene Chloride) (ug/L) - TW	2020/04/14	<MDL 5.0	50.00	No	No
2,4-Dichlorophenol (ug/L) - TW	2020/04/14	<MDL 0.1	900.00	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW	2020/04/14	<MDL 10.0	100.00	No	No
Diclofop-methyl (ug/L) - TW	2020/04/14	<MDL 0.9	9.00	No	No
Dimethoate (ug/L) - TW	2020/04/14	<MDL 1.0	20.00	No	No
Diquat (ug/L) - TW	2020/04/14	<MDL 5.0	70.00	No	No
Diuron (ug/L) - TW	2020/04/14	<MDL 5.0	150.00	No	No
Glyphosate (ug/L) - TW	2020/04/14	<MDL 25.0	280.00	No	No
Malathion (ug/L) - TW	2020/04/14	<MDL 5.0	190.00	No	No
Metolachlor (ug/L) - TW	2020/04/14	<MDL 3.0	50.00	No	No
Metribuzin (ug/L) - TW	2020/04/14	<MDL 3.0	80.00	No	No
Monochlorobenzene (Chlorobenzene) (ug/L) - TW	2020/04/14	<MDL 0.5	80.00	No	No
Paraquat (ug/L) - TW	2020/04/14	<MDL 1.0	10.00	No	No
PCB (ug/L) - TW	2020/04/14	<MDL 0.05	3.00	No	No
Pentachlorophenol (ug/L) - TW	2020/04/14	<MDL 0.1	60.00	No	No
Phorate (ug/L) - TW	2020/04/14	<MDL 0.3	2.00	No	No
Picloram (ug/L) - TW	2020/04/14	<MDL 20.0	190.00	No	No
Prometryne (ug/L) - TW	2020/04/14	<MDL 0.1	1.00	No	No
Simazine (ug/L) - TW	2020/04/14	<MDL 0.5	10.00	No	No
Terbufos (ug/L) - TW	2020/04/14	<MDL 0.3	1.00	No	No
Tetrachloroethylene (ug/L) - TW	2020/04/14	<MDL 0.5	10.00	No	No
2,3,4,6-Tetrachlorophenol (ug/L) - TW	2020/04/14	<MDL 0.1	100.00	No	No
Triallate (ug/L) - TW	2020/04/14	<MDL 10.0	230.00	No	No

	Sample Date (yyyy/mm/dd)	Sample Result	MAC	Number of Exceedances	
				MAC	1/2 MAC
Trichloroethylene (ug/L) - TW	2020/04/14	<MDL 0.5	5.00	No	No
2,4,6-Trichlorophenol (ug/L) – TW	2020/04/14	<MDL 0.1	5.00	No	No
2-Methyl-4chlorophenoxyacetic Acid (MCPA) ug/L) - TW	2020/04/14	<MDL 10.0	100.00	No	No
Trifluralin (ug/L) – TW	2020/04/14	<MDL 0.5	45.00	No	No
Vinyl Chloride (ug/L) – TW	2020/04/14	<MDL 0.2	1.00	No	No
<b>Distribution Water</b>					
Trihalomethane: Total (ug/L) RAA - DW	2020/10/05	90.0	100*	No	Yes
HAA Total (ug/L) RAA – DW	2020/10/05	77.7	80*	No	Yes

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

MDL = Below the laboratory detection level

\* Four quarter running average

### Additional Legislated Samples

As per the facility's Municipal Drinking Water Licence, monthly samples are required to monitor total suspended solids in the backwash water and supernatant tank.

	Annual Average TSS Concentration (mg/L)	Annual Average TSS Concentration Limit (mg/L)
Backwash water	6.6	25
Supernatant	4.0	25

As per Section 2.0, Table 7 of the Casselman Drinking Water System's DWWP Schedule C, lead sampling at four different locations per week for a period of ten weeks following the startup up of the chloramination system.

Sample Date	Lead Concentration mg/L (MAC: 0.010 mg/L)			
	812 Principale	651 St-Joseph	46 Racine	859 Laval
July 20, 2020	0.00007	0.00017	0.00047	0.00021
July 27, 2020	0.00012	0.00021	0.00020	0.00021
August 4, 2020	0.00026	0.00019	0.00072	0.00072
August 10, 2020	0.00014	0.00012	0.00062	0.00049
August 17, 2020	0.00013	0.00092	0.00103	0.00110
August 24, 2020	0.00006	0.00015	0.00048	0.00028
August 31, 2020	0.00007	0.00016	0.00050	0.00022
September 8, 2020	0.00013	0.00013	0.00039	0.00024
September 14, 2020	0.00008	0.00014	0.00051	0.00058
September 21, 2020	0.00011	0.00022	0.00056	0.00052

As per the facility's Municipal Drinking Water Licence, quarterly samples are required to monitor NDMA at the furthest point in the distribution system.

Parameter	Date	Result (ug/L)	MAC (ug/L)	Exceedance
NDMA	2020/08/24	0.0016	0.009	No
NDMA	2020/10/05	<0.0016	0.009	No

### Additional Samples

Parameter	Date	Result (ug/L)	Limit (ug/L)	Exceedance
Microcystin DM – RW	2020/09/22	<0.15	1.5	No
Microcystin DM – TW	2020/09/22	<0.15	1.5	No
Microcystin DM – RW	2020/09/28	<0.15	1.5	No
Microcystin DM – TW	2020/09/28	<0.15	1.5	No
Microcystin DM – RW	2020/10/05	<0.15	1.5	No
Microcystin DM – TW	2020/10/05	<0.15	1.5	No
Microcystin DM – RW	2020/10/13	<0.15	1.5	No
Microcystin DM – TW	2020/10/13	<0.15	1.5	No

## Maintenance Summary

### Water Treatment Plant Maintenance

Date	Description
04-Feb-20	Low lift pump #3 motor seized. Remove and have rebuilt.
05-Feb-20	Real Tech onsite to perform repairs and give training on UVT unit. Because of the extensive amount of work that was required on the unit, a temporary unit was installed until repairs could be made.
25-Feb-20	Capital Control onsite to work on PLC/SCADA controls for the chloramination system.
05-Mar-20	Acutec onsite to perform inspections on hoist/safety equipment.
09-Apr-20	Repaired backwash valve Gord Technical Services.
22-Apr-20	Start-up Potassium Permanganate system for the season.
13-May-20	Chloratech onsite to perform annual maintenance on gas chlorination system.
14-May-20	Gord Technical Services onsite to repair process air compressor.
27-May-20	Installed new disconnect on process air compressor and added alternating control switch.
02-June-20	Gord Technical Services onsite to inspect low lift well screen to submit a quote for required repairs.
30-Jun-20	Repair backwash valve for Actiflo filters.
15-Jul-20	Start up of chloramination system.
11-Aug-20	Install new recirculation pump on Actiflo #1.
02-Sep-20	Rebuild coagulant pump motor.
16-Sep-20	Replace both Actiflo inlet flow meters with new models.
17-Sep-20	Gord Technical Services onsite with DM Valve to repair filter effluent valve.
06-Sep-20	God Technical Services onsite to install new raw water well intake screen.
03-Nov-20	Capital Control onsite to perform flow meter calibrations.
05-Nov-20	Install new display panel for UV system.

25-Nov-20	Annual maintenance and repairs on UV system.
02-Dec-20	Install new backwash pump flow meter.
03-Dec-20	Chloratech onsite for annual chemical feed pump maintenance.

### Distribution Maintenance

Date	Location Reference	Description
25-Mar-20	787 Principal	Repair water service with Gagné Construction.
25-Mar-20	679 St-Marie	Lower stand post in driveway.
May-20	WDS	Semi-annual flushing of the water distribution system.
13-May-20	Subway	Repair hydrant.
28-May-20	784 Laval	Repair curb stop.
28-May-20	625 St-Isidore	Lower stand post.
06-Jun-20	46 Racine	Replace stand post.
10-Jun-20	663-665 Montcalm	Cut down stand post (new construction.)
23/24-Jun-20	WDS	Repair 6 valves on St-Joseph, Montcalm, and Dollard Streets with Gagné Construction and LSC Sanitation.
10-Jul-20	11 Alice	Repair curb stop.
15-Jul-20	WDS	Flushing of WDS following startup of chloramination system at WTP.
29-Jul-20	745 Brebeuf	Live tap with Blair Construction and H2O Houle.
06-Aug-20	12 Martin	Repair broken water valve.
22-26-Sep-20	DWS	Inspect valves and valve boxes in new subdivision for Robert Excavation. Report back all deficiencies that were identified.
20-Oct-20	676 St-Joseph	Replace stand post.
27-Oct-20	50 Industrielle	Repair valve with Gagné Construction.
27-Oct-20	228 Argile	Repair water service with Robert Excavation.
28-Oct-20	WDS	Start checking and winterizing hydrants.
02-Dec-20	806 Principal	Repair hydrant valve.
02-Dec-20	Frances/Martin	Repair valve box.

# Appendix A

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## WTRS Data and Submission Confirmation

# CASSELMAN DRINKING WATER SYSTEM / Raw Water

## Yearly Summary (Flow) 2020

### Annual Values and Summary

Units: cubic meter per day

Station:

Daily Max: 2118.0 on July 03

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	579.00	841.00	942.00	1074.00	695.00	1281.00	844.00	1363.00	1495.00	1430.00	1552.00	1069.00
2	1373.00	1208.00	1119.00	816.00	1479.00	1419.00	1494.00	1042.00	1100.00	990.00	948.00	1005.00
3	1068.00	1291.00	1076.00	1291.00	1493.00	881.00	2118.00	1042.00	1541.00	1430.00	2007.00	1307.00
4	1143.00	844.00	853.00	662.00	1223.00	1756.00	1811.00	1716.00	1263.00	770.00	1031.00	1011.00
5	958.00	1167.00	1260.00	1314.00	1503.00	1430.00	1034.00	821.00	1101.00	1150.00	1567.00	1456.00
6	1215.00	800.00	725.00	948.00	1244.00	1176.00	1728.00	1198.00	1247.00	1050.00	788.00	933.00
7	1001.00	1241.00	1200.00	1200.00	1583.00	1579.00	1832.00	1999.00	934.00	1200.00	1554.00	1358.00
8	887.00	1100.00	941.00	831.00	955.00	1666.00	1962.00	1335.00	1325.00	850.00	987.00	1321.00
9	1314.00	980.00	1188.00	1188.00	1363.00	1052.00	1468.00	903.00	1415.00	1250.00	1431.00	812.00
10	1064.00	1168.00	713.00	890.00	915.00	1747.00	2066.00	1662.00	905.00	1100.00	974.00	1431.00
11	1080.00	883.00	1242.00	1277.00	1285.00	1130.00	1130.00	1102.00	1253.00	1100.00	1615.00	781.00
12	1176.00	1308.00	833.00	889.00	603.00	1522.00	1419.00	1658.00	1553.00	1250.00	713.00	1491.00
13	1054.00	686.00	919.00	1048.00	1784.00	1204.00	1213.00	1349.00	867.00	872.00	1559.00	868.00
14	960.00	1320.00	1267.00	1125.00	1383.00	1771.00	1629.00	1647.00	1297.00	1526.00	1085.00	1381.00
15	1238.00	1087.00	736.00	1000.00	1100.00	1389.00	1553.00	989.00	1381.00	1050.00	1202.00	997.00
16	724.00	1203.00	1106.00	863.00	1650.00	1686.00	1133.00	1507.00	1108.00	1210.00	848.00	1286.00
17	1325.00	937.00	813.00	1232.00	770.00	1957.00	1238.00	1181.00	1715.00	1734.00	1254.00	782.00
18	835.00	1245.00	1064.00	1148.00	2010.00	1826.00	1425.00	1024.00	1430.00	1209.00	1096.00	1579.00
19	1592.00	952.00	815.00	809.00	999.00	1908.00	1279.00	1534.00	770.00	1922.00	1184.00	810.00
20	782.00	1315.00	1176.00	1301.00	1743.00	1523.00	1122.00	1216.00	1430.00	1320.00	941.00	1684.00
21	1140.00	709.00	783.00	824.00	1511.00	1669.00	1448.00	1011.00	1320.00	1258.00	1160.00	781.00
22	1105.00	1691.00	1407.00	1167.00	1157.00	2111.00	1195.00	1507.00	1404.00	1552.00	1275.00	1354.00
23	1291.00	605.00	599.00	945.00	1622.00	1541.00	1597.00	1003.00	763.00	920.00	789.00	1084.00
24	890.00	1694.00	1254.00	1037.00	1895.00	1088.00	1112.00	1717.00	1479.00	1955.00	1315.00	1261.00
25	1509.00	770.00	804.00	1433.00	1145.00	1595.00	1666.00	956.00	1260.00	690.00	1222.00	1150.00
26	1003.00	995.00	1040.00	573.00	1768.00	1749.00	1020.00	1163.00	1064.00	1502.00	930.00	1524.00
27	1157.00	1130.00	1100.00	1313.00	1106.00	1225.00	1473.00	1026.00	1568.00	1528.00	1099.00	899.00
28	939.00	2001.00	1081.00	1244.00	1230.00	1622.00	1036.00	1476.00	648.00	952.00	1071.00	1317.00
29	1191.00	1236.00	768.00	1040.00	1394.00	1552.00	1438.00	844.00	1600.00	1424.00	1374.00	1202.00
30	1012.00		1182.00	1241.00	1459.00	1665.00	1153.00	1566.00	1114.00	1133.00	1093.00	830.00
31	1226.00		936.00		1437.00		1220.00	743.00		1233.00		1312.00
<b>Min</b>	579.00	605.00	599.00	573.00	603.00	881.00	844.00	743.00	648.00	690.00	713.00	781.00
<b>Mean</b>	1091.32	1117.48	998.13	1057.43	1338.84	1524.00	1414.71	1267.74	1245.00	1243.87	1188.80	1163.74
<b>Max</b>	1592.00	2001.00	1407.00	1433.00	2010.00	2111.00	2118.00	1999.00	1715.00	1955.00	2007.00	1684.00

**Water Taking Data submitted successfully.****Confirmation:**

Thank you for submitting your water taking data online.

Permit Number: 6067-9EGMS2

Permit Holder: THE CORPORATION OF THE VILLAGE OF CASSELMAN.

Received on: Jan 22, 2021 8:55 AM

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.

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VILLAGE1 CASSELMAN1 | 2021/01/22

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