Appendix 1 <u>City of Brantford Water System</u> 2020 Annual Summary Report

2020 Annual Summary Report – Executive Summary

The City of Brantford is committed to providing our customers with a safe and adequate supply of drinking water that either meets or surpasses applicable regulations and legislation in the Province of Ontario. The information in the Annual Summary Report is intended to inform members of Council and the public about the current state of the Drinking Water System and demonstrate that high quality drinking water is continually supplied to consumers.

In 2020, the City of Brantford incurred \$806,460 for major expenses related to drinking water quality such as upgrades to water quality analyzers, a chemical system, pumps at both the Water Treatment Plant and Pumping Stations and the SCADA servers. A new roof was installed for the Low Lift Building in the Water Treatment Plant. Also the Maintenance Gap Analysis and installation of more sampling stations in the Water Distribution System were completed.

A total of 1651 regulated bacteriological samples were tested in 2020. Four of the 1651 samples had adverse test results. In each of the four cases, resamples were tested with additional samples collected upstream and downstream of the original adverse sample. The bacteriological results of all locations resampled were negative and the drinking water was confirmed safe.

Sodium concentration in the drinking water reflects the level found in the Grand River. Both raw and treated samples were over the Maximum Acceptable Concentration (MAC) of 20 mg/L as outlined in O. Regulation 170/03, but well below the aesthetic objective of 200 mg/L.

The raw water quantity taken from the Grand River did not exceed the limit that was set in the Permit to Take Water nor did the treated water flows exceeded the limit that was set in the Municipal Drinking Water License. In order to monitor any impacts the water taking has had on the Grand River, the raw water taken was constantly compared to the Grand River flows. The highest percentage of flow taken from the river in 2020 was 2.19%, which is considered a low impact on the Grand River.

In addition to bacteriological testing, operational parameters as well as Schedule 23 (Inorganic) and 24 (Organic) parameters were also tested and all parameters were within the regulatory limits. Total Suspended Solids are tested in the waste water released back to the Grand River at the end of the Water Treatment Process from the Residual (sludge) Management Facility. The annual average concentration of Total Suspended Solids was 3.04 mg/L which is well below the compliance limit of 25 mg/L.

In 2020 and beyond, the City of Brantford continues to honor our commitment to provide safe drinking water to our customers.

The Annual Summary Report is prepared by City Staff in order to fulfill the duty to report to the public as outlined in the Safe Drinking Water Act (2002), and Ontario Regulation 170/03.

2020 Annual Summary Report

A. Background

This report has been prepared in accordance with the terms and requirements set out in the Safe Drinking Water Act (2002), as Section 11 – Annual Reports and Schedule 22 – Summary Reports of Ontario Regulation 170/03. It covers the period from January 1st to December 31st, 2020.

The 2020 Annual Summary Report will be available to the public without charge, beginning March 23rd, 2021. A copy of this report can be obtained via the Internet (www.brantford.ca) and at Brantford City Hall by contacting (519) 759-4150 Ext. 5539.

B. Description of Drinking Water System

Drinking Water System Number	#220003564
Owner	The Corporation of the City of Brantford
Classification	Large Municipal Residential
Treatment	Class IV
Distribution	Class III
Supply	Grand River (Holmedale Canal)
DWS Location	324 Grand River Ave.
Municipal Drinking Water License	063-101 Issue # 8, Issued November 13, 2019
(MDWL)	
Drinking Water Works Permit (DWWP)	#063-201 Issue # 5, Issued: November 13, 2019
Permit to Take Water	# 2375-BLHMW5
	Town of Cainsville Distribution System (Drinking Water System #: 260002616, Class I) which is owned and managed by the County of Brant.

The City of Brantford Water System is owned and operated by the Corporation of the City of Brantford. The Drinking Water System is a Large Municipal Residential System consisting of a Class IV Water Treatment Plant (Holmedale Water Treatment Plant) and a Class III Distribution System. (Drinking Water System Number: 220003564, Municipal Drinking Water License (MDWL) 063-101 Issue # 8, Issued November 13, 2019, Drinking Water Works Permit (DWWP) #063-201 Issue # 5, Issued: November 13, 2019).

The Holmedale Water Treatment Plant is located at 324 Grand River Avenue in Brantford, Ontario. The City's raw water supply is drawn from the Grand River, at the Holmedale Canal.

The plant is responsible for the overall management of the production and distribution of Brantford's drinking water. Specifically, this includes the treatment of Grand River water, the maintenance of the distribution and metering systems and meeting and/or exceeding water quality requirements. The water treatment plant is permitted to produce

drinking water up to 100 Megalitres per day (ML/d) (Permit to Take Water #2375-BLHMW5 Issued: May 8, 2017, expires May 31, 2027). The plant contains the following treatment process units: Screening, coagulation, sand-ballasted flocculation (John Meunier's Actiflo©), sedimentation, ozonation, biological filtration, UV disinfection, chlorination, chloramination and fluoridation.

Three reservoirs (in addition to an in-plant reservoir), one booster pumping station and two elevated tanks are used in the distribution system to equalize water demand, to reduce pressure fluctuations and to provide reserves for firefighting, power outages and other emergencies. A Residue Management Facility (RMF) disposes of the waste generated during treatment in an environmentally sound manner. Treatment of waste consists of concentrating the waste by three gravity settler thickeners and dewatering by two belt filter presses. Dewatered waste (sludge) is disposed at the Brantford Landfill.

The City of Brantford Water System sells water to one drinking water system, which is the Town of Cainsville Distribution System (Drinking Water System #: 260002616, Class I) which is owned and managed by the County of Brant.

C. List of Water Treatment Chemicals Used

Chemical Name	Chemical Use
Polyaluminum chloride	Primary Coagulant
Flopam AN 934 PWG	Settling Aid
Microsand	Settling Aid
Liquid oxygen	Primary Chemical for Ozone Generation
Chlorine gas	Primary Disinfectant
Ammonia gas	Used in combination with free chlorine for secondary disinfection
Hydrofluosilicic Acid	Fluoridation
Sulfur dioxide	Dechlorination Gas

D. Major Expenses Related to Drinking Water Quality

Upgrade Description	Cost
Analyzer Upgrades	\$113,000.00
Post CL2/SO2 Upgrades	\$75,000.00
Low Lift Roof	\$85,000.00
SCADA Server Upgrades	\$280,000.00
Maintenance Gap Analysis	\$123,000.00
WTP and Remote Pump Station Pump Upgrades	\$100,000.00
Sample Stations and Installation	\$30,460.00

The City of Brantford incurred \$806,460 for major expenses related to drinking water quality in 2020.

E. Summary of Reporting Adverse Test Results and Other Problems (Schedule 16)

i. Adverse Bacteriological or Combined Chlorine Residual Results and Corrective Actions Results

In 2020, 1651 bacteriological samples were taken with 4 adverse results.

Location	Date	Adverse Water Quality Indicator (AWQI)	Corrective Actions
CraigSt.	May 24 th ,	Total Coliform	The hydrant was resampled and upstream and downstream locations were resampled as outlined in O. Reg. 170/03. All samples were negative for total coliform.
Hydrant	2020	1 cfu/100mL	
Avondale St.	June 17 th ,	Total Coliform	The hydrant was resampled and upstream and downstream locations were resampled as outlined in O. Reg. 170/03. All samples were negative for total coliform.
Hydrant	2020	1 cfu/100mL	
Whiteveen Dr. Sample Station	July 28 th , 2020	Total Coliform 1 cfu/100mL	The hydrant was resampled and upstream and downstream locations were resampled as outlined in O. Reg. 170/03. All samples were negative for total coliform.
Munro Circle	November	Total Coliform	The hydrant was resampled and upstream and downstream locations were resampled as outlined in O. Reg. 170/03. All samples were negative for total coliform.
Hydrant	12 th , 2020	2 cfu/100mL	
The bacteriological was confirmed safe		ions resampled were nega	tive and the drinking water

ii. Adverse Chemical Results & Corrective Actions

Sodium

Samples collected from treated water & distribution system had an annual sodium average of 62.13 mg/L & 63.90 mg/L respectively. According to O.Reg 170/03, despite an aesthetic objective of 200 mg/l, any concentration above 20 mg/l is considered an adverse result. The City of Brantford Water System is required to report the results to the MECP and the BCHU once every 57 months. The sodium results were last reported to both agencies in November 2017. Sodium concentration in our drinking water supply reflects the level found in the Grand River and cannot be removed by conventional water treatment methods.

iii. Non-Compliance Events With Provincial Regulations, Municipal Drinking Water License, Municipal Drinking Water Works Permit, And Other Official Documents

No non-compliance events were reported in 2020.

F. Holmedale Water Treatment Plant Flows

i. Drinking Water Flows

According to the City of Brantford Water System's Municipal Drinking Water License (Schedule C), the maximum daily volume of treated water that flows from the Holmedale Water Treatment Plant into the distribution system must not exceed 100 ML/d.

At the Holmedale Water Treatment Plant, the treated water flow is measured by continuous on-line flow meters and monitored and controlled via a SCADA computer system. The daily average flow for 2020 was 33.27 ML/d,

Figure 1.0 outlines the monthly average daily flow and maximum total daily flow of treated water for the Holmedale Water Treatment Plant in 2020. The monthly average daily flow was calculated by averaging the total daily flows for a given month. The monthly maximum daily flow corresponds to the highest daily average flow for that month.



Figure 1.0 indicates that the monthly average daily flow and maximum total daily flow never exceeded the rated capacity in 2020. The highest monthly average daily flow was 41.71 ML/d, which occurred in July and the highest maximum daily flow was 49.47ML/d, which occurred in August.

ii. Grand River Flow Intake

The City of Brantford Water System's Permit to Take Water (#2375-BLHMW5) for the Water Treatment Plant allows the City of Brantford to withdraw up to 260 ML/d of raw water from the Grand River on a daily basis at a peak flow not to exceed 181,000 L/min. At the Holmedale Water Treatment Plant, the raw water flow is measured by continuous on-line flow meters and monitored and controlled via a SCADA computer system. The daily average raw water flow for 2020 was 37.70 ML/d.

Figure 2.0 outlines the monthly average daily flow, maximum daily flow and % Grand River flow taken for the Holmedale Water Treatment Plant in 2020. The monthly average daily flow was calculated by averaging the total daily flows for a given month. The monthly maximum daily flow corresponds to the highest daily average flow for that month. The City's Permit to Take Water requires monitoring of any impacts the water taking has on the Grand River. To ensure there are no negative effects to the Grand River, the City monitors the % of Grand River Flow Taken. The % Grand River Flow Taken is calculated by dividing the daily average flow by the Grand River flow measured at the Grand River Conservation Authority (GRCA) Brant Park monitoring station.

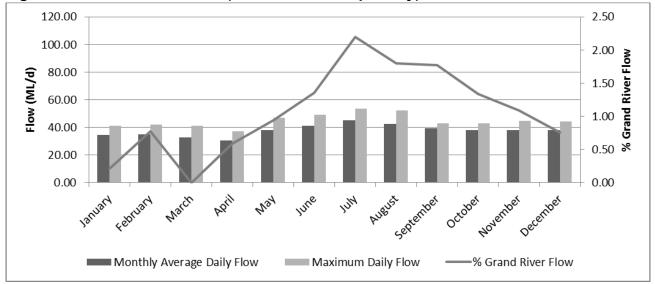


Figure 2.0: Raw Water Flows (millions of liters per day)

Figure 2.0 indicates that the highest monthly average daily flow was 45.03 ML/d which occurred in July and the highest maximum daily flow was 53.75 ML/d which also occurred in July. The maximum daily flow was well below the daily flow limit of 260 ML/d as outlined in the City's Permit to Take Water. The % of Grand River Flow taken from the Grand River peaked at 2.19 % in July. The peak in July can be attributed to a very dry and warm month. There were no reported complaints to the City of Brantford as a result of its water taking activities.

Summary of Test Results Required Under O.Reg 170/03

i. Operational Testing Required Under Schedule 7

Appendix A summarizes the Operational Testing required under Schedule 7. Water quality tests were conducted at the required frequency and all results were within compliance limits in 2020.

ii. <u>Bacteriological Testing Required Under Schedule 10</u>

Appendix B summarizes the Bacteriological Testing required under Schedule 10; Bacteriological tests were conducted at the required frequency. Adverse results are summarized in Section E of this report. All corrective actions were taken as per provincial requirements and guidelines. No further actions were required.

iii. Summary of Inorganic Results Required Under Schedule 23

Appendix C summarizes the Inorganic Results required under Schedule 23; Samples were tested at the required frequency and all results where within compliance limits in 2020.

Two samples collected for nitrate on February 20th, 2020 from the POE (5.25 mg/L) and from the Distribution system (5.71 mg/L) were above half the maximum acceptable concentration (MAC) of 5 mg/L. No corrective actions are required when a water quality parameter is above half the MAC.

Two samples collected for bromate concentration were also over half of the MAC. POE samples from June 10th and July 8th, 2020 were 0.007 mg/L. Similar to nitrates, no corrective actions are required when a water quality parameter is above half the MAC but operational adjustments were made to control bromate concentration. Low flow in the river has been correlated to higher bromide concentration in the water. Bromide reacts with ozone to create bromate. Reducing the ozone dose in low flow conditions manages the concentration of bromate that is produced.

iv. Summary of Organic Results required under Schedule 24

Appendix D summarizes the Organic Results required under Schedule 24; Samples were tested at the required frequency and all results where within compliance limits in 2020.

v. <u>Summary of Additional Testing, Sampling or Reporting Required by an Order or Other Legal Instrument</u>

RMF – Total Suspended Solids (TSS)

Under the City of Brantford Water System's Municipal Drinking Water License, the annual average concentration of TSS discharged from the thickeners in the RMF must be below 25 mg/L. Table 3.0 outlines the Monthly Average TSS for 2020. Each month was well below the 25mg/L compliance limit with an annual average of **3.04 mg/L** for 2020.

Table 3.0: Monthly Average TSS

Month	TSS (mg/l)	Exceedance?
January	2.40	NO
February	3.00	NO
March	3.60	NO
April	3.40	NO
May	3.40	NO
June	4.00	NO
July	3.50	NO
August	2.70	NO
September	2.50	NO
October	2.50	NO
November	2.70	NO
December	2.80	NO
Annual	3.04	
Average		

MECP Annual Inspection

The City of Brantford Water System scored 100% on the MECP Annual Inspection completed in November 2020.



Appendix A City Of Brantford Water System

Operational Parameter Summary 2020

Holmedale Water Treatment Plant										
Location	Parameter	Unit	MAC	O.Reg 170/03 Limit	Minimum	Maximum	Average			
Grand River	Turbidity	NTU			2.18	10.57	5.94			
Filter 1	Turbidity	NTU			0.025	0.067	0.045			
Filter 2	Turbidity	NTU			0.023	0.072	0.048			
Filter 3	Turbidity	NTU			0.024	0.062	0.043			
Filter 4	Turbidity	NTU		<1.00	0.025	0.067	0.044			
Filter 5	Turbidity	NTU		\1.00	0.025	0.047	0.035			
Filter 6	Turbidity	NTU			0.032	0.061	0.048			
Filter 7	Turbidity	NTU			0.027	0.052	0.038			
Filter 8	Turbidity	NTU			0.026	0.058	0.043			
CCC Effluent	Log Removal			>3.00	8.25	26.61	14.80			
Brantford POE	Combined Chlorine	mg/L	3.00		2.59	2.68	2.62			
Brantford POE	Turbidity	NTU			0.035	0.090	0.065			
Brantford POE	Pressure	psi		>20	94.16	97.05	94.80			
Brantford POE	Fluoride	mg/L	1.50		0.63	0.73	0.69			
						_				
		Distrib	ution Syste	m						
Tollgate Reservoir	Total Chlorine	mg/L	_		1.93	2.57	2.35			
Park Rd. Reservoir	Total Chlorine	mg/L	3.00		1.80	2.52	2.24			
Northwest Reservoir	Total Chlorine	mg/L			2.16	2.63	2.45			
Albion St. Booster	Pressure	psi			89.47	90.78	90.27			
Tollgate Reservoir	Pressure	psi			59.60	60.97	60.20			
Park Rd. Reservoir	Pressure	psi			78.86	79.30	79.09			
Northwest Reservoir	Pressure	psi			84.47	86.22	85.35			
Bell Lane	Pressure	psi		>20	47.39	50.78	48.25			
Fifth Ave	Pressure	psi			99.12	103.27	100.36			
Lawren Harris	Pressure	psi			64.45	65.51	65.07			
St. Andrews	Pressure	psi			91.17	93.58	93.05			
Empey St.	Pressure	psi			82.06	83.05	82.62			

Definitions:

POE - Point of Entry to the Distribution System (Treated Water)

CCC - Chlorine Contact Chambers

 $\begin{tabular}{ll} \textbf{Log Removal} - a shorthand term for \log_{10} removal, used in reference to the physical-chemical treatment of water to remove, kill, or inactivate pathogenic organisms. \\ \begin{tabular}{ll} \textbf{Combined Chlorine} - \textbf{The concentration of residual chlorine that is combined with ammonia (NH3), organic nitrogen, or both in water as chloramine, yet is still available to oxidize organic matter and act as a disinfectant. Combined chlorine can be accurately estimated as the difference between the measured total chlorine and measure or known \mathbf{MAC} - Maximum Acceptable Concentration \mathbf{MAC} - Maximum Acceptable Concentration \mathbf{MAC} - \mathbf{MAX}



Appendix B City Of Brantford Water System

Bacteriological Summary 2020

Raw Water (Grand River)

Naw Water (Grand River)											
		Total C	oliform	E.C	Coli	Backg	ground		HPC		
		(colonies	per 100ml)	(colonies	(colonies per 100ml)		(colonies per 100ml)		(colonies per 1m		
	# of Samples	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	# of Samples	Minimum	Maximum	
January	6	7200	80000	40	2000	18500	95000	6	290	240	
February	4	690	2200	4	50	2400	7800	4	90	260	
March	5	600	15000	4	30	3600	130000	5	92	770	
April	4	1500	2200	10	50	1800	5100	5	70	350	
May	4	620	3000	10	60	1700	5800	4	220	430	
June	5	1100	3300	70	150	2200	5400	5	950	3500	
July	5	220	3100	40	120	530	6200	5	870	5500	
August	5	1900	2600	20	110	4600	9400	5	2500	4100	
September	4	610	2400	11	200	2100	9100	4	1380	4500	
October	4	1180	3400	26	70	900	4700	4	230	3000	
November	4	1010	2700	8	160	1200	6500	4	450	1520	
December	5	1400	6200	16	160	1800	31000	5	15	750	

^{* -} General bacteria population expressed as Background

Treated Water (Brantford POE)

	Total Coliform				E.Coli		Background		HPC			
		(colonies	per 100ml)	(colonies	per 100ml)	(colonies	per 100ml)	(cold	nies per 1r	nl)	with	
	# of Samples	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	# of Samples	Minimum	Maximum	Regulation	
January	4	0	0	0	0	0	0	4	0	0	YES	
February	4	0	0	0	0	0	0	4	0	0	YES	
March	5	0	0	0	0	0	0	5	0	7	YES	
April	4	0	0	0	0	0	0	4	0	1	YES	
May	4	0	0	0	0	0	0	4	0	4	YES	
June	6	0	0	0	0	0	0	6	0	39	YES	
July	4	0	0	0	0	0	0	4	0	1	YES	
August	5	0	0	0	0	0	0	5	0	2	YES	
September	4	0	0	0	0	0	0	4	0	3	YES	
October	4	0	0	0	0	0	0	4	0	3	YES	
November	4	0	0	0	0	0	0	4	0	1	YES	
December	5	0	0	0	0	0	0	5	0	1	YES	

Distribution System

		Total C	Coliform	E.C	Coli	Backg	round					
		(colonies per 100ml)		(colonies per 100ml)		,	olonies per 100ml)		% HPC	(colonies	per 1ml)	Complies with the
#	of Sample	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Samples		Minimum	Maximum	Regulation
January	121	0	0	0	0	0	1	63	52%	0	2	YES
February	119	0	0	0	0	0	0	63	53%	0	49	YES
March	135	0	0	0	0	0	1	65	48%	0	4	YES
April	111	0	0	0	0	0	0	52	47%	0	1	YES
May	137	0	1	0	0	0	53	52	38%	0	3	YES
June	171	0	1	0	0	0	55	67	39%	0	8	YES
July	135	0	1	0	0	0	37	58	43%	0	5	YES
August	149	0	0	0	0	0	2	72	48%	0	157	YES
September	150	0	0	0	0	0	3	55	37%	0	4	YES
October	143	0	0	0	0	0	190	56	40%	0	3	YES
November	148	0	2	0	0	0	8	68	46%	0	78	YES
December	132	0	0	0	0	0	8	68	52%	0	12	YES

Regulatory Limits: Total Coliform - <1 colony /100ml E.coli - <1 colony /100ml

^{**} HPC - Heterotrophic Plate Count - General bacteria population expressed as colony counts on a heterotrophic plate count

^{* -} General bacteria population expressed as Background

^{**} HPC - Heterotrophic Plate Count - General bacteria population expressed as colony counts on a heterotrophic plate count



Appendix C City Of Brantford Water System

Inorganic Parameter Summary 2020

Parameter	Recent Sample	Unit of Measure	MAC	MDL	Treated Water	Within Regulatory Limit
Bromate		mg/L	0.01	0.003	0.003	YES
Bromide		mg/L		0.001	0.023	YES
Nitrite (as Nitrogen)		mg/L	1	0.003	0.003	YES
Nitrate (as Nitrogen)		mg/L	10	0.006	2.73	YES
Antimony		ug/L	6	0.020	0.17	YES
Arsenic		ug/L	25	0.2	0.5	YES
Barium		ug/L	1000	0.02	33.8	YES
Boron		ug/L	5000	0.2	39.0	YES
Cadmium		ug/L	5	0.003	0.005	YES
Chromium		ug/L	50	0.03	0.15	YES
Mercury		ug/L	1	0.01	0.01	YES
Sodium		mg/L	20	0.01	57.6	NO*
Selenium		ug/L	10	0.040	0.13	YES
Uranium		ug/L	20	0.002	0.166	YES

Definitions:

MDL - Method Detection Limit

MAC - Maximum Acceptable Concentration

^{* -} refer to Section E. iii. Adverse Chemical Results & Corrective Actions of the Annual Summary Report



Appendix D City Of Brantford Water System

Organic Parameter Summary 2020

				2020		
Parameter	Recent Sample	Unit of Measure	MAC	MDL	Treated Water	Within Regulatory Limit
Benzene	11-Aug-20	ug/L	1	0.32	0.32	YES
Carbon tetrachloride	11-Aug-20	ug/L	2	0.32	<mdl< td=""><td>YES</td></mdl<>	YES
1,2-Dichlorobenzene	11-Aug-20	ug/L	200	0.41	<mdl< td=""><td>YES</td></mdl<>	YES
1,4-Dichlorobenzene	11-Aug-20	ug/L	5	0.36	0.36	YES
		_	14			
1,1-Dichloroethylene	11-Aug-20	ug/L		0.33	0.33	YES
1,2-Dichloroethane	11-Aug-20	ug/L	5	0.35	0.35	YES
Dichloromethane	11-Aug-20	ug/L	50	0.35	0.35	YES
Monochlorobenzene	11-Aug-20	ug/L	80	0.3	0.30	YES
Tetrachloroethylene	11-Aug-20	ug/L	30	0.35	0.35	YES
Trichloroethylene	11-Aug-20	ug/L	5	0.44	0.44	YES
Vinyl Chloride	11-Aug-20	ug/L	1	0.17	0.17	YES
Polychlorinated Biphenyls (PCBs) - Total	11-Aug-20	ug/L	3	0.04	<mdl< td=""><td>YES</td></mdl<>	YES
Benzo(a)pyrene	11-Aug-20	ug/L	0.01	0.004	<mdl< td=""><td>YES</td></mdl<>	YES
Alachlor	11-Aug-20	ug/L	5	0.02	<mdl< td=""><td>YES</td></mdl<>	YES
Atrazine + N-dealkylated metabolites	11-Aug-20	ug/L	5	0.01	<mdl< td=""><td>YES</td></mdl<>	YES
Atrazine	11-Aug-20	ug/L		0.01	0.07	
Desethyl atrazine	11-Aug-20	ug/L		0.01	0.04	
Azinphos-methyl	11-Aug-20	ug/L	20	0.05	0.02	YES
Carbaryl	11-Aug-20	ug/L	90	0.05	<mdl< td=""><td>YES</td></mdl<>	YES
Carbofuran	11-Aug-20	ug/L ug/L	90	0.03		YES
		_			<mdl< td=""><td></td></mdl<>	
Chlorpyrifos	11-Aug-20	ug/L	90	0.02	<mdl< td=""><td>YES</td></mdl<>	YES
Diazinon	11-Aug-20	ug/L	20	0.02	<mdl< td=""><td>YES</td></mdl<>	YES
Dimethoate	11-Aug-20	ug/L	20	0.06	<mdl< td=""><td>YES</td></mdl<>	YES
Diuron	11-Aug-20	ug/L		0.03	<mdl< td=""><td>YES</td></mdl<>	YES
Malathion	11-Aug-20	ug/L	150	0.02	<mdl< td=""><td>YES</td></mdl<>	YES
Metolachlor	11-Aug-20	ug/L	190	0.01	0.02	YES
Metribuzin	11-Aug-20	ug/L	50	0.02	<mdl< td=""><td>YES</td></mdl<>	YES
Phorate	11-Aug-20	ug/L	80	0.01	<mdl< td=""><td>YES</td></mdl<>	YES
Prometryne	11-Aug-20	ug/L	2	0.03	<mdl< td=""><td>YES</td></mdl<>	YES
Simazine	11-Aug-20	ug/L	1	0.01	<mdl< td=""><td>YES</td></mdl<>	YES
Terbufos	11-Aug-20	ug/L	10	0.01	<mdl< td=""><td>YES</td></mdl<>	YES
Triallate	11-Aug-20	ug/L	1	0.01	<mdl< td=""><td>YES</td></mdl<>	YES
Trifluralin	11-Aug-20	ug/L	230	0.02	<mdl< td=""><td>YES</td></mdl<>	YES
2,4-dichlorophenoxyacetic acid (2,4-D)	11-Aug-20	ug/L	5	0.19	<mdl< td=""><td>YES</td></mdl<>	YES
Bromoxynil	11-Aug-20	ug/L	5	0.33	<mdl< td=""><td>YES</td></mdl<>	YES
Dicamba	11-Aug-20	ug/L	120	0.2	<mdl< td=""><td>YES</td></mdl<>	YES
Diclofop-methyl	11-Aug-20	ug/L	9	0.4	<mdl< td=""><td>YES</td></mdl<>	YES
MCPA	11-Aug-20	ug/L		0.00012	<mdl< td=""><td>\<u>\</u></td></mdl<>	\ <u>\</u>
Picloram	11-Aug-20	ug/L	190	1	<mdl< td=""><td>YES</td></mdl<>	YES
2,4-dichlorophenol	11-Aug-20	ug/L	900	0.15	<mdl< td=""><td>YES</td></mdl<>	YES
2,4,6-trichlorophenol 2,3,4,6-tetrachlorophenol	11-Aug-20	ug/L	5 100	0.25 0.2	<mdl <mdl< td=""><td>YES YES</td></mdl<></mdl 	YES YES
2,3,4,6-tetrachiorophenol Pentachlorophenol	11-Aug-20 11-Aug-20	ug/L	60		<mdl< td=""><td>YES</td></mdl<>	YES
Haloacetic Acids	11-Aug-20 11-Aug-20	ug/L ug/L	80	0.15 5.3	18.3	YES
THMs (total)	11-Aug-20 11-Aug-20	ug/L ug/L	100	0.37	31	YES
NDMA N-Nitrosodimethylamine	11-Aug-20 11-Aug-20	ug/L ug/L	9	0.0008	0.0015	YES
MIB	11-Aug-20	ng/L		3	<mdl< td=""><td></td></mdl<>	
Geosmin	11-Aug-20	ng/L		3	<mdl< td=""><td></td></mdl<>	
Diquat	11-Aug-20	ug/L	70	1	<mdl< td=""><td>YES</td></mdl<>	YES
Paraquat	11-Aug-20	ug/L	10	1	<mdl< td=""><td>YES</td></mdl<>	YES
Glyphosate	11-Aug-20	ug/L	290	1	<mdl< td=""><td>YES</td></mdl<>	YES

Definitions:

<MDL - Method Detection Limit

MAC - Maximum Acceptable Concentration