



THE CORPORATION OF THE TOWNSHIP OF HAMILTON

CAMBORNE AND CREIGHTON HEIGHTS

DRINKING WATER SYSTEMS

ANNUAL SUMMARY REPORT 2020

Prepared By:

Water Operations Team

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1. WATER SYSTEMS INFORMATION

All items listed below and referenced throughout this document are available at any time by contacting the Water Operations Manager at (905) 342-2810 ext. 147 or emailing aschoenleber@hamiltontownship.ca

Camborne

- Drinking Water System # 220008113
- Municipal Drinking Water License # 139-103
- Drinking Water Works Permit # 139-203
- Permit to Take Water # 2140-AP5P6D

Creighton Heights

- Drinking water System # 220008104
- Municipal Drinking Water License # 139-102
- Drinking Water Works Permit # 139-202
- Permit to Take Water # 7265-8W9HLX

2. PURPOSE

The *Safe Drinking Water Act, 2002* sets out the framework for the treatment and distribution of safe drinking water in Ontario. *Regulation 170/03* sets requirements for public waterworks regarding treatment equipment, operational checks, maintenance, sampling and corrective actions. In addition to this, the regulation also has requirements for specific reports that must be prepared by the owner of a drinking water system annually.

This report satisfies all conditions set out in *Ontario Regulation 170/03* Section 11 – Annual Reports and Schedule 22 – Summary Reports.

This report is completed annually by the Water Operations Team, representing the Township of Hamilton as the owner and operating authority of the Camborne Drinking Water System and the Creighton Heights Drinking Water System.

2.1 Scope

The Annual Summary Report contains information about the two Drinking Water Systems, for which the Township of Hamilton is the owner and operating authority, for the period of January 1, 2020 to December 31, 2020. *Ontario Regulation 170/03* requires this information be made available to the following stakeholders:

- Drinking Water System Owner (Mayor and Council)
- Operating Authority Top Management (CAO)
- The Public

2.2 Availability

Hard copies of the Annual Summary Report are available for viewing at the Township of Hamilton office located at 8285 Majestic Hills Drive, Cobourg, ON. Alternatively, the report can be accessed online at hamiltontownship.ca by navigating to the Water Services page located in the Resident Services tab.

3. DRINKING WATER SYSTEMS OVERVIEW

Camborne

The Camborne Drinking Water System provides potable water to approximately 70 homes, one elementary school and one church. There are no commercial or industrial service connections on this system.

The Camborne Water Treatment Plant (WTP) takes water from two drilled artesian wells. The water is dosed with sodium hypochlorite (liquid chlorine) before being directed through two manganese greensand filters used for removal of oxidized iron. Filtered water is discharged into underground

clearwells which consists of two cells and baffle curtains to ensure proper chlorine contact time to achieve primary disinfection. A High Lift pumping system, consisting of three pumps and a series of large pressure tanks, is used to provide flow and adequate pressure to the end users in the distribution system. Continuous online monitoring is used to measure chlorine residual, pressure and flow at all times to maintain regulatory compliance. These instruments are tied in with our Supervisory Control and Data Acquisition System (SCADA) and are equipped with alarms to notify an Operator of any deviation from a control setpoint. Process wastewater is de-chlorinated using sodium thiosulfate and allowed to settle before clear supernatant liquid is pumped to the storm water system. Solids from process wastewater tanks are removed periodically.

The distribution system consists of approximately 2.5 km of watermains throughout the settlement area. The Camborne Drinking Water System is not designed to provide fire protection.

Creighton Heights

The Creighton Heights Drinking Water System provides potable water to approximately 475 residential customers, approximately 10 commercial/industrial properties and one elementary school.

The Creighton Heights WTP takes water from three conventional drilled wells located just outside the plant. The water is dosed with potassium permanganate before being directed through two manganese greensand filters, all which is used for removal of oxidized iron and manganese. Filtered water is sent through a parallel system of Ultraviolet equipment to achieve primary disinfection. Sodium hypochlorite is dosed for secondary disinfection prior to the water being discharged into underground clearwells which consists of cells with baffle curtains to ensure proper residence time. A High Lift pumping system, consisting of three pumps for regular system pressure and two pumps designed for fire protection, provide flow and pressure to the end users of the distribution system. Continuous online monitoring is used to measure chlorine residual, pressure and flow at all times, to maintain regulatory compliance. These instruments communicate with our SCADA and are equipped with alarms to notify an Operator of any deviation from a control setpoint. Process wastewater is de-chlorinated using sodium thiosulfate and allowed to settle before clear supernatant liquid is pumped to the storm water system. Solids from process wastewater tanks are removed periodically.

The distribution system consists of approximately 14 km of watermains ranging in diameter from 50 mm to 300 mm. The Creighton Heights Drinking Water System is designed for fire protection with 72 hydrants.

4. COMPLIANCE

4.1 License and Permit

The Camborne and Creighton Heights Drinking Water Systems were operated in accordance with all terms and conditions of their Municipal Drinking Water License, Drinking Water Works Permit, Permit to Take Water and all relevant Provincial legislation in 2020. Any items of non-compliance are identified in the annual Ministry of Environment Conservation and Parks (MECP) Inspection Reports referenced in section 4.2.

The Permit to Take Water governs the amount of groundwater allowed to be taken per day at specified flow rates per minute. There were no instances of exceeding the permitted amount of water taking on any day during 2020. The Camborne and Creighton Heights Drinking Water Systems flow summaries are detailed below.

Camborne

Raw Water

The two wells at Camborne are classified as artesian and thus overflow constantly to a storm water system which ultimately discharges to an adjacent creek. Flow meters measure the overflow to ensure regulatory compliance. The artesian flow is relatively constant from both wells and is well below the permitted amount. The water taken for treatment and distribution (Plant Flow) is also metered to ensure compliance with permitted amounts.

Table 1. Camborne Permit to Take Water # 2140-AP5P6D, Maximum Flows and Totals

Location	Maximum Flow (L/min)	Maximum Total per Day (m ³)
Well 1A Plant Flow	200	288
Well 2A Plant Flow	286	412
Well 1A Artesian Overflow	340	489.6
Well 2A Artesian Overflow	360	518.4

Note: 1m³ = 1000 L

Table 2. Camborne Actual Plant Water Taken 2020

Month	Total Water Taken (m ³)	Average Daily (m ³)	Maximum Day (m ³)
January	1549.83	49.99	77.43
February	1401.00	48.31	71.20
March	1444.40	46.59	70.90
April	1372.35	45.74	81.22
May	1732.3	55.88	102.20
June	2082.20	69.40	109.70
July	2010.17	64.80	121.50

August	1474.19	47.55	75.37
September	1546.35	51.54	87.63
October	1368.82	44.15	63.08
November	981.92	32.70	96.54
December	1272.44	44.27	64.84

Average daily water taking remains relatively consistent throughout the year with slightly elevated averages during summer months. Overall daily average for the year is approximately 43 m³/day, which represents roughly 15% of the permitted water taking from Well 1A and roughly 10% of the permitted water taking from Well 2A.

Treated Water

In accordance with the Camborne Drinking Water License, the rated capacity and permitted amount of water that can be discharged to the distribution system is 412 m³/day. Table 3 below illustrates the flow data for 2020. The daily average for the year is approximately 49.9 m³/day, representing roughly 12% of the rated capacity and permitted discharge. The Wells that supply water to the treatment plant failed on Nov 11th, 2020. Until the Wells could be temporarily repaired, hauled potable water was delivered to the Camborne Water Treatment Plant from Nov 13th, 2020 to and including Nov 23rd, 2020. The total amount hauled potable water to the Camborne Plant was 456.4m³ and the average daily use of water during this time was 41.5m³/day

Table 3. Camborne Treated Flow Data 2020

Month	Total Water Discharged (m ³)	Average Daily (m ³)	Maximum Day (m ³)
January	1500.10	48.39	60.20
February	1372.30	47.32	53.70
March	1378.40	44.46	52.60
April	1342.18	44.74	76.38
May	1670.20	53.88	94.60
June	2037.70	67.92	102.50
July	1886.53	60.86	104.05
August	1421.24	45.85	57.31
September	1545.83	49.87	75.32
October	1330.44	42.92	48.00
November	1418.70	45.76	84.18
December	1313.01	42.36	51.74

Creighton Heights

Raw Water

There are three conventional groundwater wells at our Creighton Heights Water Treatment Plant. Wells 6 and 7 are primary wells and only one can operate at a time. Well 1 is a back-up well designed to run in conjunction with either primary well during periods of high demand. Flow meters measure the amount of water being taken from the wells to ensure regulatory compliance.

Table 4. Creighton Heights Permit to Take Water # 7265-8W9HLX, Maximum Flows and Totals

Location	Maximum Flow (L/min)	Maximum Total per Day (m ³)
Well 1	225	489.6
Well 6	680	979.2
Well 7	680	979.2

Table 5. Creighton Heights Actual Plant Water Taken 2020

Month	Total Water Taken (m ³)	Average Daily (m ³)	Maximum Day (m ³)
January	10154.72	327.57	454.7
February	9502.01	327.65	642.55
March	10237.11	330.29	417.89
April	9903.79	330.13	406.57
May	12426.36	400.85	627.24
June	13323.39	444.13	602.80
July	12285.23	396.29	488.93
August	10785.50	347.91	479.03
September	10529.31	350.97	467.74
October	11146.30	359.55	522.79
November	9372.52	312.41	415.40
December	9722.35	313.62	413.20

Average daily water taking remains relatively consistent throughout the year with slightly elevated averages during summer months and hydrant flushing program in the fall. Overall daily average for the year is approximately 354 m³/day, representing roughly 36% of the permitted water taking from Well 6 or 7. These numbers indicate that we are within our regulated limits

Treated Water

In accordance with the Creighton Heights Drinking Water License, the rated capacity and permitted amount of water that can be discharged to the distribution system is 979.2 m³/day. Table 6 below illustrates the flow data for 2020. The daily average for the year is approximately 332 m³/day, which represents roughly 34% of the rated capacity and permitted discharge.

Table 6. Creighton Heights Treated Flow Data 2020

Month	Total Water Discharged (m ³)	Average Daily (m ³)	Maximum Day (m ³)
January	9454.58	305.98	345.40
February	8929.64	307.91	372.90
March	9306.36	300.20	336.35
April	9120.52	304.01	391.48
May	11398.65	367.69	558.43
June	12725.57	424.18	589.57
July	11621.79	374.89	470.96
August	10201.01	329.06	427.69
September	10064.96	335.49	399.80
October	10111.01	326.16	471.73
November	9061.36	302.04	343.24
December	9234.35	297.88	331.35

It should be noted that the Creighton Heights Drinking Water System appears to be below rated and/or permitted capacities as illustrated in the tables above. The design of the Water Treatment Plant and continued water processing challenges demonstrate that we are currently running very close to the processing capabilities. If new development in the Creighton Heights Settlement Area is going to be considered, further review of WTP processing capabilities will have to be considered.

4.2 MECP Annual Inspections

Camborne and Creighton Heights

The MECP annual inspections for 2020 have been delayed due to COVID. Once it has taken place and the report is received, the results will be available on the Township website.

4.3 Adverse Water Quality Incidents and Corrective Actions

There was one instance of adverse water quality in the Camborne Drinking Water System during 2020. The Creighton Heights Drinking Water System had one adverse water quality incident. Both are described below:

- On July 6, 2020, a flange on the High Lift Header at the Camborne WTP corroded and failed resulting in loss of pressure. A Boil Water Order was issued for the duration of the repair. Due

to fact that the flange is located in the Clearwell, it necessitated emptying the cell and entering the confined space in order to replace the corroded flange. Full disinfection of the affected cell of the Clearwell was performed following the repair. All parts and tools were disinfected. Free Chlorine residual was increased and bacti samples were taken. Pressure was restored to the Distribution system. Bacti results were acceptable.

- September 30, 2020 – while switching from Chloramination Disinfection to Free Chlorination Disinfection for Creighton Heights Distribution watermain cleaning, the chloramination level increased to 3.056mg/L which is above the allowable limit of 3.00mg/L. Dosing was adjusted and the level dropped below 3.00mg/L.

5. CAPITAL AND OPERATING INFRASTRUCTURE UPGRADES

Camborne

On Nov 11, 2020, Well 1A could no longer deliver water to process. A specialized well rehabilitation firm was contracted to restore supply from Well 1A. They discovered holes in the riser pipe caused by electrochemical corrosion which caused the failure. The riser pipe and the well pump/motor were replaced as the original pump/motor was showing severe signs of wear and deterioration due to sand entering into the well casing. Further work is needed on Well 1A as the casing has multiple holes in it due to high pressure from artesian flow.

6. SAMPLING AND ANALYSIS

During 2020 the Water Department complied with all regulated sampling requirements of *Ontario Regulation 170/03*. All samples were analyzed by an accredited, third-party laboratory located in Lakefield, Ontario. There were no instances of adverse water quality reported as a result of a parameter exceeding a maximum acceptable concentration in 2020.

Camborne

Table 7. Camborne Microbiological Testing (Schedule 11 of O.Reg 170/03)

	Number of Samples	E.Coli (cfu/100mL) (min #)-(max #)	Total Coliform (cfu/100mL) (min #)-(max #)	Number of HPC Samples	HPC Results (cfu/1mL) (min #)-(max #)
Raw	26	0 – 0	0 – 0	N/A	N/A
Distribution	52	0 – 0	0 – 0	52	0 – 3

Note: cfu refers to colony forming units

Table 8. Camborne Operational Testing (Schedule 7 of O.Reg 170/03)

	Number of Grab Samples	Range of Results (Min – Max)
Chlorine Residual (primary disinfection)	8760 (continuous monitoring)	0.64 mg/L – 1.54 mg/L

Table 9. Camborne Additional Sampling Requirements

Date of MDWL	Parameter	Number of Samples	Maximum Annual Average Concentration	Actual Average Concentration
Aug. 18, 2016	Total Suspended Solids	4 (Quarterly)	25 mg/L	8 mg/L

Table 10. Camborne Lead Testing (MDWL 139-103 Schedule D)

Location Type	Date	Sample Location	pH	Alkalinity	Lead
Distribution	Mar. 18, 2020	Schoolhouse	7.5	190 mg/L	N/A
Distribution	Sept. 8, 2020	Schoolhouse	6.8	198 mg/L	N/A

In addition to the samples listed in tables 7-10, there are many other parameters that are tested on a less frequent basis. For these parameters, the most recent analysis is listed in Table 11 below. A parameter below the method detection limit (indicated by <MDL) cannot be detected by the method used in the laboratory. This means the concentration of the parameter is less than the lowest measurement possible.

Table 11. Camborne Organic and Inorganic Sampling (Schedules 13,23, and 24 of O.Reg 170/03)

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	Jun 7, 2016	0.02<MDL	ug/l	no
Arsenic	Jun 7, 2016	0.7	ug/l	no
Barium	Jun 7, 2016	117	ug/l	no
Boron	Jun 7, 2016	12	ug/l	no
Cadmium	Jun 7, 2016	0.005	ug/l	no
Chromium	Jun 7, 2016	0.34	ug/l	no
Mercury	Jun 7, 2016	0.01<MDL	ug/l	no
Selenium	Jun 7, 2016	1<MDL	ug/l	no
Sodium	June 5, 2016	8.01	mg/l	no
Uranium	Jun 7, 2016	0.276	ug/l	no
Fluoride	June 5, 2016	0.15	mg/l	no
Nitrite	Mar. 5, 2020 June 11, 2020	0.003<MDL 0.003<MDL	mg/l	no

	Sept. 3, 2020 Dec. 16, 2020	0.003<MDL 0.003<MDL		
Nitrate	Mar. 5, 2020 June 11, 2020 Sept. 3, 2020 Dec. 16, 2020	0.006<MDL 0.006<MDL 0.006<MDL 0.006<MDL	mg/l	no
Alachlor	Jun 7, 2016	0.02<MDL	ug/l	no
Atrazine	Jun 7, 2016	0.01<MDL	ug/l	no
Atrazine + N-dealkylated metabolites	Jun 7, 2016	0.01<MDL	ug/l	no
Desethyl atrazine	Jun 7, 2016	0.01<MDL	ug/l	no
Azinphos-methyl	Jun 7, 2016	0.05<MDL	ug/l	no
Benzene	Jun 7, 2016	0.32<MDL	ug/l	no
Benzo(a)pyrene	Jun 7, 2016	0.004<MDL	ug/l	no
Bromoxynil	Jun 7, 2016	0.33<MDL	ug/l	no
Carbaryl	Jun 7, 2016	0.05<MDL	ug/l	no
Carbofuran	Jun 7, 2016	0.01<MDL	ug/l	no
Carbon Tetrachloride	Jun 7, 2016	0.16<MDL	ug/l	no
Chlorpyrifos	Jun 7, 2016	0.02<MDL	ug/l	no
Diazinon	Jun 7, 2016	0.02<MDL	ug/l	no
Dicamba	Jun 7, 2016	0.20<MDL	ug/l	no
1,2-Dichlorobenzene	Jun 7, 2016	0.41<MDL	ug/l	no
1,4-Dichlorobenzene	Jun 7, 2016	0.36<MDL	ug/l	no
1,2-Dichloroethane	Jun 7, 2016	0.35<MDL	ug/l	no
1,1-Dichloroethylene (vinylidene chloride)	Jun 7, 2016	0.33<MDL	ug/l	no
Dichloromethane	Jun 7, 2016	0.35<MDL	ug/l	no
2-4 Dichlorophenol	Jun 7, 2016	0.15<MDL	ug/l	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jun 7, 2016	0.19<MDL	ug/l	no
Diclofop-methyl	Jun 7, 2016	0.40<MDL	ug/l	no
Dimethoate	Jun 7, 2016	0.03<MDL	ug/l	no
Diquat	Jun 7, 2016	1<MDL	ug/l	no
Diuron	Jun 7, 2016	0.03<MDL	ug/l	no
Glyphosate	Jun 7, 2016	1<MDL	ug/l	no
Haloacetic Acid (HAA)	Mar. 5, 2020 June 11, 2020 Sept. 3, 2020 Dec. 16, 2020	5.3<MDL (Running Annual Average)	ug/l	no
Malathion	Jun 7, 2016	0.02<MDL	ug/l	no
Metolachlor	Jun 7, 2016	0.01<MDL	ug/l	no
Metribuzin	Jun 7, 2016	0.02<MDL	ug/l	no
Monochlorobenzene	Jun 7, 2016	0.3<MDL	ug/l	no
MCPA	Jun 7, 2016	0.00012<MDL	ug/l	no
Paraquat	Jun 7, 2016	1<MDL	ug/l	no
Pentachlorophenol	Jun 7, 2016	0.15<MDL	ug/l	no
Phorate	Jun 7, 2016	0.01<MDL	ug/l	no
Picloram	Jun 7, 2016	1<MDL	ug/l	no
Polychlorinated Biphenyls(PCB)	Jun 7, 2016	0.04<MDL	ug/l	no

Prometryne	Jun 7, 2016	0.03<MDL	ug/l	no
Simazine	Jun 7, 2016	0.01<MDL	ug/l	no
Trihalomethane (THM)	Mar. 5, 2020 June 11, 2020 Sept. 3, 2020 Dec. 16, 2020	5.44 (Running Annual Average)	ug/l	no
Terbufos	Jun 7, 2016	0.01<MDL	ug/l	no
Tetrachloroethylene	Jun 7, 2016	0.35<MDL	ug/l	no
2,3,4,6-Tetrachlorophenol	Jun 7, 2016	0.20<MDL	ug/l	no
Triallate	Jun 7, 2016	0.01<MDL	ug/l	no
Trichloroethylene	Jun 7, 2016	0.44<MDL	ug/l	no
2,4,6-Trichlorophenol	Jun 7, 2016	0.25<MDL	ug/l	no
Trifluralin	Jun 7, 2016	0.02<MDL	ug/l	no
Vinyl Chloride	Jun 7, 2016	0.17<MDL	ug/l	no

Creighton Heights

Table 12. Creighton Heights Microbiological Testing (Schedule 11 of O.Reg 170/03)

	Number of Samples	E.Coli (cfu/100mL) (min #)-(max #)	Total Coliform (cfu/100mL) (min #)-(max #)	Number of HPC Samples	HPC Results (cfu/1mL) (min #)-(max #)
Raw	156	0 – 0	0 – 0	N/A	N/A
Treated	52	0 – 0	0 – 0	52	0 – 122
Distribution	115	0 – 0	0 – 0	52	0 – 41

Note: cfu refers to colony forming units

Table 13. Creighton Heights Operational Testing (Schedule 7 of O.Reg 170/03)

	Number of Grab Samples	Range of Results (Min – Max)
Chlorine Residual (secondary disinfection)	365	0.83 mg/L – 2.78 mg/L (Chloramination) 1.33 mg/L – 2.4 mg/L (Chlorination)

Note: System free chlorinated from Oct. 3, 2020 to Oct. 28, 2020 for distribution maintenance

Table 14. Creighton Heights Additional Sampling Requirements

Date of MDWL	Parameter	Number of Samples	Maximum Annual Average Concentration	Actual Average Concentration
Aug. 18, 2016	Total Suspended Solids	4 (Quarterly)	25 mg/L	26.25mg/L

Table 15. Creighton Heights Lead Testing (MDWL 139-102 Schedule D)

Location Type	Date	Sample Location	pH	Alkalinity	Lead
Distribution	Mar. 18, 2020	Burwash	7.31	202 mg/L	N/A
		Hwy 45	7.25	202 mg/L	N/A
Distribution	Sept. 8, 2020	Burwash	7.28	210 mg/L	N/A
		Hwy 45	7.43	208 mg/L	N/A

In addition to the samples listed in tables 12-15, there are many other parameters that are tested on a less frequent basis. For these parameters, the most recent analysis is listed in Table 16 below. A parameter below the method detection limit (indicated by <MDL) cannot be detected by the method used in the laboratory. This means the concentration of the parameter is less than the lowest measurement possible.

Table 16. Creighton Heights Organic and Inorganic Sampling (Schedules 13, 23, 24 of O.Reg 170/03)

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	May 29, 2018	0.02<MDL	ug/l	no
Arsenic	May 29, 2018	0.2<MDL	ug/l	no
Barium	May 29, 2018	28.6	ug/l	no
Boron	May 29, 2018	54.0	ug/l	no
Cadmium	May 29, 2018	0.003<MDL	ug/l	no
Chromium	May 29, 2018	0.12	ug/l	no
Mercury	May 29, 2018	0.01<MDL	ug/l	no
Selenium	"	0.04< MDL	ug/l	no
Sodium	June 5, 2017	27.2	mg/l	no
Uranium	May 29, 2018	0.002<MDL	ug/l	no
Fluoride	June 5, 2017	0.34	mg/l	no
Nitrite	Mar. 5, 2020	0.023	mg/l	no
	June 10, 2020	0.017		
	Sept. 3, 2020	0.028		
	Dec. 16, 2020	0.021		
Nitrate	Mar. 5, 2020	0.020	mg/l	no
	June 10, 2020	0.012		
	Sept. 3, 2020	0.014		
	Dec. 16, 2020	0.016		
Alachlor	May 29, 2018	0.02<MDL	ug/l	no
Aldicarb	May 29, 2018	0.02<MDL	ug/l	no
Aldrin + Dieldrin	May 29, 2018	0.01<MDL	ug/l	no
Aldrin	May 29, 2018	0.01<MDL	ug/l	no
Dieldrin	May 29, 2018	0.01<MDL	ug/l	no

Atrazine + N-dealkylated metabolites	May 29, 2018	0.01<MDL	ug/l	no
Atrazine	May 29, 2018	0.01<MDL	ug/l	no
Azinphos-methyl	May 29, 2018	0.05<MDL	ug/l	no
Benzene	May 29, 2018	0.32<MDL	ug/l	no
Benzo(a)pyrene	May 29, 2018	0.004<MDL	ug/l	no
Bromoxynil	May 29, 2018	0.33<MDL	ug/l	no
Carbaryl	May 29, 2018	0.05<MDL	ug/l	no
Carbofuran	May 29, 2018	0.01<MDL	ug/l	no
Carbon Tetrachloride	May 29, 2018	0.16<MDL	ug/l	no
Chlordane (Total)	May 29, 2018	0.01<MDL	ug/l	no
Chlorpyrifos	May 29, 2018	0.02<MDL	ug/l	no
Cyanazine	May 29, 2018	0.03<MDL	ug/l	no
Desethyl atrazine	May 29, 2018	0.01<MDL	ug/l	no
Diazinon	May 29, 2018	0.02<MDL	ug/l	no
Dicamba	May 29, 2018	0.20<MDL	ug/l	no
1,2-Dichlorobenzene	May 29, 2018	0.41<MDL	ug/l	no
1,4-Dichlorobenzene	May 29, 2018	0.36>MDL	ug/l	no
1,2-Dichloroethane	May 29, 2018	0.35<MDL	ug/l	no
1,1-Dichloroethylene (vinylidene chloride)	May 29, 2018	0.33<MDL	ug/l	no
Dichloromethane	May 29, 2018	0.35<MDL	ug/l	no
2-4 Dichlorophenol	May 29, 2018	0.15<MDL	ug/l	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	May 29, 2018	0.19<MDL	ug/l	no
Diclofop-methyl	May 29, 2018	0.40<MDL	ug/l	no
Dimethoate	May 29, 2018	0.03<MDL	ug/l	no
Diquat	May 29, 2018	1<MDL	ug/l	no
Diuron	May 29, 2018	0.03<MDL	ug/l	no
Glyphosate	May 29, 2018	1<MDL	ug/l	no
Haloacetic Acid HAA	Mar. 5, 2020 June 10, 2020 Sept. 3, 2020 Dec. 16, 2020	5.75 (Running Annual Average)	ug/l	no
Malathion	May 29, 2018	0.02<MDL	ug/l	no
Metolachlor	May 29, 2018	0.01<MDL	ug/l	no
Metribuzin	May 29, 2018	0.02<MDL	ug/l	no
Paraquat	May 29, 2018	1<MDL	ug/l	no
Pentachlorophenol	May 29, 2018	0.15<MDL	ug/l	no
Phorate	May 29, 2018	0.01<MDL	ug/l	no
Picloram	May 29, 2018	1<MDL	ug/l	no
Polychlorinated Biphenyls(PCB)	May 29, 2018	0.04<MDL	ug/l	no
Prometryne	May 29, 2018	0.03<MDL	ug/l	no
Simazine	May 29, 2018	0.01<MDL	ug/l	no
Trihalomethane (THM)	Mar. 5, 2020 June 10, 2020 Sept. 3, 2020 Dec. 16, 2020	1.2 (Running Annual Average)	ug/l	no

Terbufos	May 29, 2018	0.01<MDL	ug/l	no
Tetrachloroethylene	May 29, 2018	0.35<MDL	ug/l	no
2,3,4,6-Tetrachlorophenol	May 29, 2018	0.20<MDL	ug/l	no
Triallate	May 29, 2018	0.01<MDL	ug/l	no
Trichloroethylene	May 29, 2018	0.44<MDL	ug/l	no
2,4,6-Trichlorophenol	May 29, 2018	0.25<MDL	ug/l	no
Trifluralin	May 29, 2018	0.02<MDL	ug/l	no
Vinyl Chloride	May 29, 2018	0.17<MDL	ug/l	no