



***THE CORPORATION OF THE TOWNSHIP OF HAMILTON***

**CAMBORNE AND CREIGHTON HEIGHTS**

**DRINKING WATER SYSTEMS**

**2025 ANNUAL & SUMMARY REPORT**

**January 1 to December 31, 2025**

Prepared By:

Township of Hamilton Water Operations Division

## **CONTENTS**

<b>1. WATER SYSTEMS INFORMATION</b>	<b>3</b>
<b>2. PURPOSE</b>	<b>3</b>
<b>2.1 Scope</b>	<b>3</b>
<b>2.2 Availability</b>	<b>3</b>
<b>3. DRINKING WATER SYSTEMS DESCRIPTIONS</b>	<b>4</b>
<b>4. COMPLIANCE</b>	<b>5</b>
<b>4.1 License and Permit</b>	<b>5</b>
<b>4.2 MECP Annual Inspections</b>	<b>10</b>
<b>4.3 Adverse Water Quality Incidents and Corrective Actions</b>	<b>11</b>
<b>5. CAPITAL AND OPERATING INFRASTRUCTURE UPGRADES</b>	<b>12</b>
<b>6. SAMPLING AND ANALYSIS</b>	<b>13</b>

## 1. WATER SYSTEMS INFORMATION

### 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 # 2320-CGPMQ5

## 2. PURPOSE

The *Safe Drinking Water Act, 2002* sets out the framework for the treatment and distribution of safe drinking water in Ontario. Under the Act, *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 annually by the Operating Authority of a drinking water system.

This report for 2025, 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 Manager. The Township of Hamilton is the owner and Operating Authority of the Camborne Drinking Water System and the Creighton Heights Drinking Water System.

### 2.1 Scope (Section 11 Annual Report Requirement)

This Annual & Summary Report contains information about the two Drinking Water Systems for the period of January 1 to December 31, 2025. *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 (Section 11 Annual Report Requirement)

A hard copy of this Annual & Summary Report is 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 [www.hamiltontownship.ca](http://www.hamiltontownship.ca). On the website, navigate to the Resident Services tab, then to Water Services and then to Annual Reports. Any queries regarding this document may be directed to the Manager of Water Operations at (905) 342-2810, extension 147.

### **3. DRINKING WATER SYSTEMS DESCRIPTIONS (Section 11 Annual Report Requirement)**

#### **Camborne**

The Camborne Drinking Water System, considered a Small Residential system, provides potable water to approximately 71 water connections consisting of homes, the Camborne Public School, the Old Camborne Schoolhouse Community Hall and a 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 that are considered Non-GUDI (Groundwater that is not Under the Direct Influence of Surface Water). For the primary disinfection requirement, the raw water is dosed with NSF Certified sodium hypochlorite (liquid form of chlorine) before being directed through greensand filters which remove oxidized iron. Filtered water is discharged into underground clearwells which consist of two cells with baffle curtains which ensure proper chlorine contact time in the achievement of 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 instruments measure chlorine residual, pressure and flow to ensure regulatory compliance. These instruments are monitored by the Supervisory Control and Data Acquisition (SCADA) system. SCADA alarms notify the on-call Water Operator of any deviation from a control setpoint. The on-call Water Operator will then respond to those alarms. Process wastewater is de-chlorinated using sodium thiosulfate and is allowed to settle before clear supernatant is pumped to the storm water system. Solids from process wastewater tanks are removed on a regular basis.

The distribution system consists of approximately 3 km of watermains throughout the settlement area ranging in size from 50mm to 150mm. The Camborne Drinking Water System is not designed to provide fire protection.

#### **Creighton Heights**

The Creighton Heights Drinking Water System, a Large Residential system, provides potable water to approximately 527 water connections consisting of residential customers, approximately 15 light commercial/industrial properties, the Baltimore Recreation Centre Arena, the Baltimore Fire Hall, the Baltimore Public School and the local golf course club house.

The Creighton Heights Water Treatment Plant takes water from three drilled wells that are considered non-GUDI. The raw water is treated with NSF Certified potassium permanganate before being directed through greensand filters. Greensand filtration, optimized by dosing with the potassium permanganate, is used for removal of iron and manganese. Filtered water is then treated with NSF Certified sodium hypochlorite (liquid form of chlorine) and conveyed through Ultraviolet (UV) Reactors. UV disinfection achieves Primary Disinfection. The addition of sodium hypochlorite achieves Secondary Disinfection prior to the water passing through the methane stripper which removes naturally occurring methane. Water then passes into underground clearwells which consist of cells with baffle curtains to ensure proper residence/contact 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. A booster station located within the highlift suction well, conveys drinking water to distribution system supplying the Deerfield Estates Subdivision. Continuous online monitoring instruments measure chloramine/chlorine residual, pressure and flow to meet regulatory compliance. These instruments are monitored by the Supervisory Control and Data Acquisition (SCADA) system. SCADA alarms notify the duty Water Operator of any deviation from a control setpoint. The duty Water Operator will then respond to those alarms. Process wastewater is de-chlorinated using sodium thiosulfate and is allowed to settle before clear supernatant liquid is pumped to the storm water system. Solids from process wastewater tanks are removed on a regular basis.

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 79 hydrants and two (2) underground cisterns servicing the Deerfield Estates system.

#### **4. COMPLIANCE**

##### **4.1 License and Permit (Schedule 22 Summary Report Requirement)**

The Camborne and Creighton Heights Drinking Water Systems were operated in accordance with all terms and conditions of their Municipal Drinking Water Licenses (MDWL), Drinking Water Works Permits (DWWP), Permits to Take Water (PTTW) and all relevant Provincial legislation for the year 2025. The MDWL's and DWWP's for both Camborne and Creighton Heights Drinking Water Systems were renewed in Aug of 2021.

The PTTW 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 2025. Any peaks are attributed to well pump start up and the peaks quickly drop to normal. Creighton Heights PTTW was renewed in July of 2022 and requires renewal in July of 2032. The Camborne PTTW requires renewal in June 2027.

Raw Water Source Description and Flow summaries for Camborne and Creighton Heights are detailed below:

## Camborne

### 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. The artesian flow is relatively constant from both wells and is consistently below the permitted amount. Separate flow meters for both drinking water production and artesian flow, measure flow to ensure regulatory compliance. Only one well at a time can run for drinking water production.

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

Well	Maximum Flow (L/min)	Maximum Total per Day (m <sup>3</sup> )
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: 1m<sup>3</sup> = 1000 L

**Table 2. Camborne Raw Water Taken for Drinking Water Production in 2025**

Month	Total Raw Water Taken (m <sup>3</sup> )	Average Daily Raw Taken (m <sup>3</sup> )	Maximum Day of Raw Taken (m <sup>3</sup> )
<b>Well 1A</b>			
January	1154.49	37.2	56.72
February	1015.43	36.3	66.80
March	1307.66	42.2	75.20
April	1274.73	42.5	71.70
May	1417.55	45.7	110.89
June	1600.81	53.4	107.46
July	1133.95	37.8	71.10
August	1188.94	39.6	86.00
September	1190.46	39.7	62.98
October	1251.01	40.4	77.56
November	1106.38	36.9	61.54
December	1273.94	42.5	66.10
	Total 14915.35	Avg 41.18	

Month	Total Raw Water Taken (m <sup>3</sup> )	Average Daily Raw Taken (m <sup>3</sup> )	Maximum Day of Raw Taken (m <sup>3</sup> )
<b>Well 2A</b>			
January	62.64	2.0	41.14
February	195.83	7.0	46.99
March	102.54	3.3	35.63
April	62.31	2.1	19.26
May	157.31	5.1	38.45
June	158.29	5.3	61.17
July	406.57	13.6	44.60
August	182.27	6.1	34.70
September	140.82	4.7	25.78
October	56.16	1.8	21.55
November	207.42	6.9	78.50
December	90.94	3.0	14.90
	Total 1823.10	Avg 5.08	

Non-production days for each well are included in the monthly average.

Average daily water taking remains relatively consistent throughout the year with slightly elevated averages during summer months. Overall daily average for Well 1A for the year is approximately 41.18m<sup>3</sup>/day, which represents roughly 14.3 % of the permitted water taking from Well 1A. Overall daily average for Well 2A for the year is approximately 5.08 m<sup>3</sup>/day which represents roughly 1.23 % of the permitted water taking from Well 2A.

### **Camborne Treated Water**

In accordance with the Camborne Municipal Drinking Water License, the “maximum daily volume of treated water that flows from the treatment subsystem into the distribution system shall not exceed the rated capacity of 415 m<sup>3</sup>/day”. Table 3 below illustrates the Treated flow data for 2025. The daily average for the year is approximately 44.60 m<sup>3</sup>/day, representing roughly 10.7 % of the rated capacity.

**Table 3. Camborne Treated Flow Data 2025**

Month	Total Treated Water Discharged (m <sup>3</sup> )	Average Daily Treated Water Discharged (m <sup>3</sup> )	Maximum Day Treated Water Discharged (m <sup>3</sup> )
January	1166.91	67.64	48.35
February	1169.16	40.32	51.32
March	1352.63	43.63	62.56
April	1274.48	42.48	55.70
May	1530.76	59.38	73.18
June	1723.08	57.44	89.55
July	1582.54	51.05	69.54
August	1370.53	44.21	67.86

September	1274.05	42.47	53.41
October	1276.89	41.19	55.58
November	1248.11	41.60	58.46
December	1358.07	43.81	53.85
	Total 16327.21	Avg 44.60	

The difference between Raw Water taken for production and Treated Drinking Water conveyed to the Distribution System, is due to in-house operational processes such as filter backwashing.

## Creighton Heights

### Creighton Heights Raw Water

The Creighton Heights Water Treatment Plant (WTP) takes water from three drilled wells. Wells TW 6 and TW 7 are the primary production wells and only one of these wells can operate at a time. Well TW 1 is a back-up well, designed to run in conjunction with either primary well. The water taken for treatment and distribution is metered to ensure compliance with permitted amounts.

**Table 4. Creighton Heights Permit to Take Water # 2320-CGPMQ5, Maximum Flows and Totals**

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

**Table 5. Creighton Heights Raw Water Taken 2025**

Month	Total Raw Water Taken (m <sup>3</sup> )	Average Daily Raw Taken (m <sup>3</sup> )	Maximum Day (m <sup>3</sup> )
<b>Raw TW 1</b>			
January	1273.37	41.10	114.90
February	1371.75	48.99	116.80
March	1135.52	36.63	94.55
April	1866.25	62.21	120.16
May	2171.70	70.05	138.76
June	3936.27	131.21	237.06
July	4499.48	145.14	191.71
August	4491.72	144.89	211.01
September	841.73	28.06	158.74
October	1527.55	49.28	1078.30
November	1287.55	42.92	124.27

December	1251.05	40.36	172.36
	Total 25653.94	Avg 70.07	

Month	Total Raw Water Taken (m <sup>3</sup> )	Average Daily Raw Taken (m <sup>3</sup> )	Maximum Day (m <sup>3</sup> )
<b>Raw TW 6</b>			
January	3823.73	123.35	317.07
February	3137.23	112.04	222.40
March	3732.29	120.04	307.61
April	4239.79	141.33	290.18
May	5402.77	174.28	304.87
June	7899.61	263.32	462.16
July	7477.50	241.21	337.50
August	5497.15	177.33	380.11
September	10544.96	351.50	487.20
October	3032.99	97.84	362.40
November	3484.21	116.14	311.06
December	3953.00	127.52	353.59
	Total 62225.23	Avg 170.49	

Month	Total Raw Water Taken (m <sup>3</sup> )	Average Daily Raw Taken (m <sup>3</sup> )	Maximum Day (m <sup>3</sup> )
<b>Raw TW 7</b>			
January	3346.25	107.94	237.12
February	3002.61	107.24	288.60
March	3707.38	119.59	282.48
April	2321.34	77.38	264.03
May	1551.47	50.05	264.99
June	239.09	7.97	179.41
July	2005.85	64.70	415.92
August	4817.86	155.41	364.85
September	393.09	13.10	338.97
October	6019.91	194.19	351.70
November	5015.11	167.17	319.83
December	5114.18	164.97	425.49
	Total 37534.14	Avg 102.48	

Non-production days for each well are included in the monthly average.

Average daily water taking remains relatively consistent throughout the year with slightly elevated averages during summer months and during the hydrant flushing program in the fall. Overall daily average for Well TW 1 is approximately 70.07 m<sup>3</sup>/day, representing roughly 7.1 %

of the permitted water taking from Well TW 1. Overall daily average for Well TW 6 for the year is approximately 170.49 m<sup>3</sup>/day, which represents roughly 17.4 % of the permitted water taking from Well TW 6. Overall daily average for Well TW 7 for the year is approximately 102.48 m<sup>3</sup>/day which represents roughly 10.4 % of the permitted water taking from Well TW 7. These numbers indicate that we are within our regulated limits.

**Creighton Heights Treated Water**

In accordance with the Creighton Heights Municipal Drinking Water License, the “maximum daily volume of treated water that flows from the treatment subsystem into the distribution system shall not exceed the rated capacity of 979.2 m<sup>3</sup>/day”. Table 6 below illustrates the flow data for 2025. The daily average for the year is approximately 332 m<sup>3</sup>/day, which represents roughly 33.9 % of the rated capacity and permitted discharge.

**Table 6. Creighton Heights Treated Flow Data 2025**

<b>Month</b>	<b>Total Treated Water Discharged (m<sup>3</sup>)</b>	<b>Average Daily Treated Water Discharged (m<sup>3</sup>)</b>	<b>Maximum Day Treated Water Discharged (m<sup>3</sup>)</b>
January	8148.87	262.87	326.98
February	7590.75	261.75	302.75
March	8402.01	271.03	323.74
April	8099.42	269.98	313.71
May	8884.63	286.60	363.55
June	11606.12	386.87	649.24
July	13105.02	422.74	503.18
August	14448.53	466.08	608.70
September	11487.43	382.91	652.28
October	10305.23	332.43	446.17
November	9465.83	315.53	359.51
December	10083.78	325.28	487.61
	Total 121627.60	Avg 332.01	

The difference between Raw Water taken for production and Treated Drinking Water conveyed to the Distribution System, is due to in-house operational processes such as filter backwashing and maintenance activities.

**4.2 Ministry of Environment, Conservation and Parks (MECP) Annual Inspections (Schedule 22 Summary Report Requirement)**

The 2025 MECP Annual Inspection for the Camborne Drinking Water System occurred on October 27, 2025 and received 100% scoring.

The 2025 MECP Annual Inspection for the Creighton Heights Drinking Water System occurred on October 27, 2025 and received 100% scoring.

MECP Inspection reports/scoring are available on the Township website and at the Township office front desk for public view.

**4.3 Adverse Water Quality Incidents and Corrective Actions (Section 11 Annual Report Requirement)**

There was 1 reportable AWQI in the Creighton Heights Drinking Water System in 2025:

The Creighton Heights online CL17 analyzer reading spiked for a short duration on December 23, 2025 above 3.00 mg/L limit for chloramine residual. The analyzer spiked to 3.04 mg/L. Staff completed notifications to the MECP and KPRD Health Unit inclusive of submitting the notice of resolution.

**5. CAPITAL AND OPERATING INFRASTRUCTURE UPGRADES (Section 11 Annual Report Requirement)**

**Camborne**

- No significant cost incurred in 2025

**Creighton Heights**

- The Creighton Heights Control Panel replacement project is ongoing: \$41,848.48
- Distribution system repairs and leak detection: \$38,498.25
- Chlorination System Upgrades at Creighton Heights Plant: \$9,854.99

**Both Systems**

- Water meters replaced with Radio Frequency meters based on condition, state of operation and age: \$17,310.39

**6. SAMPLING AND ANALYSIS (Section 11 Annual Report Requirement)**

As per O. Reg 170/03, water quality samples were collected throughout the Camborne and Creighton Heights Drinking Water Systems. The results are provided below.

**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 #)
<b>Raw</b>	27	0 – 0	0 – 0	Not Applicable	Not Applicable

<b>Distribution</b>	52	0 – 0	0 – 0	52	0 – 2
---------------------	----	-------	-------	----	-------

Note: cfu refers to colony forming units

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

	<b>Number of Grab Samples</b>	<b>Range of Results of Free Chlorine (Min – Max)</b>
<b>Chlorine Residual (primary disinfection)</b>	8760 (continuous monitoring)	0.83 mg/L – 1.42 mg/L
<b>Chlorine Residual (secondary disinfection)</b>	104 (grab)	0.69 mg/l – 1.26 mg/L

**Table 9. Camborne Additional Sampling Requirements**

	<b>Parameter</b>	<b>Number of Samples</b>	<b>Maximum Allowable Annual Average Concentration</b>	<b>Actual Average Concentration over last 4 quarterly tests</b>
Annual Average	Total Suspended Solids of Supernatant	4 (Quarterly)	25 mg/L	3.00 9 mg/L

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

<b>Location Type</b>	<b>Date</b>	<b>Sample Location</b>	<b>pH</b>	<b>Alkalinity</b>	<b>Lead</b>
Distribution	11Feb2025	Old Schoolhouse	7.28	199 mg/L	0.14 ug/l
Distribution	25Jun2025	Old Schoolhouse	7.64	202 mg/L	0.27 ug/l

There are many other parameters that are tested on a less frequent basis. For these parameters, the most recent analysis is listed below in Table 11. <MDL refers to 'less than Method Detection Limit' which means the measured concentration of the parameter in our water is less than the lowest detectable measurement possible by the certified laboratory.

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

<b>Parameter</b>	<b>Sample Date</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Exceedance</b>
Antimony	26May2021	0.9<MDL	ug/l	no
Arsenic	26May2021	1.0	ug/l	no
Barium	26May2021	125	ug/l	no
Boron	26May2021	20	ug/l	no

Cadmium	26May2021	0.003 <MDL	ug/l	no
Chromium	26May2021	0.29	ug/l	no
Mercury	26May2021	0.01<MDL	ug/l	no
Selenium	26May2021	0.04<MDL	ug/l	no
Sodium	June 1, 2022	9.29	mg/l	no
Uranium	26May2021	0.381	ug/l	no
Fluoride	June 1, 2022	0.14	mg/l	no
Nitrite	05Mar2025 23Jun2025 15Sept2025 04Dec2025	0.003<MDL 0.003<MDL 0.003<MDL 0.003<MDL	mg/L	no
Nitrate	05Mar2025 23Jun2025 15Sept202 04Dec2025	0.006<MDL 0.006<MDL 0.006<MDL 0.018	mg/l	no
Alachlor	26May2021	0.02<MDL	ug/l	no
Atrazine	26May2021	0.01<MDL	ug/l	no
Atrazine + N-dealkylated metabolites	26May2021	0.01<MDL	ug/l	no
Desethyl atrazine	26May2021	0.01<MDL	ug/l	no
Azinphos-methyl	26May2021	0.05<MDL	ug/l	no
Benzene	26May2021	0.32<MDL	ug/l	no
Benzo(a)pyrene	26May2021	0.004<MDL	ug/l	no
Bromoxynil	26May2021	0.33<MDL	ug/l	no
Carbaryl	26May2021	0.05<MDL	ug/l	no
Carbofuran	26May2021	0.01<MDL	ug/l	no
Carbon Tetrachloride	26May2021	0.17<MDL	ug/l	no
Chlorpyrifos	26May2021	0.02<MDL	ug/l	no
Diazinon	26May2021	0.02<MDL	ug/l	no
Dicamba	26May2021	0.20<MDL	ug/l	no
1,2-Dichlorobenzene	26May2021	0.41<MDL	ug/l	no
1,4-Dichlorobenzene	26May2021	0.36<MDL	ug/l	no
1,2-Dichloroethane	26May2021	0.35<MDL	ug/l	no
1,1-Dichloroethylene (vinylidene chloride)	26May2021	0.33<MDL	ug/l	no
Dichloromethane	26May2021	0.35<MDL	ug/l	no
2-4 Dichlorophenol	26May2021	0.15<MDL	ug/l	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	26May2021	0.19<MDL	ug/l	no
Diclofop-methyl	26May2021	0.40<MDL	ug/l	no
Dimethoate	26May2021	0.06<MDL	ug/l	no
Diquat	26May2021	1<MDL	ug/l	no
Diuron	26May2021	0.03<MDL	ug/l	no
Glyphosate	26May2021	1<MDL	ug/l	no
Haloacetic Acid (HAA)	05Mar2025 23Jun2025 15Sept2025 04Dec2025	<5.3 MDL <5.3 MDL <5.3 MDL <5.3 MDL	ug/L ug/L ug/L ug/L	no no no no
Malathion	26May2021	0.02<MDL	ug/l	no
Metolachlor	26May2021	0.01<MDL	ug/l	no

Metribuzin	26May2021	0.02<MDL	ug/l	no
Monochlorobenzene	26May2021	0.3<MDL	ug/l	no
MCPA	26May2021	0.00012<MDL	mg/l	no
Paraquat	26May2021	1<MDL	ug/l	no
Pentachlorophenol	26May2021	0.15<MDL	ug/l	no
Phorate	26May2021	0.01<MDL	ug/l	no
Picloram	26May2021	1<MDL	ug/l	no
Polychlorinated Biphenyls(PCB)	26May2021	0.04<MDL	ug/l	no
Prometryne	26May2021	0.03<MDL	ug/l	no
Simazine	26May2021	0.01<MDL	ug/l	no
Trihalomethane (THM)	05Mar2025	5.4	ug/L	no
	23Jun2025	6.4	ug/L	no
	15Sept2025	6.1	ug/L	no
	04Dec2025	8.0	ug/L	no
Terbufos	26May2021	0.01<MDL	ug/l	no
Tetrachloroethylene	26May2021	0.35<MDL	ug/l	no
2,3,4,6-Tetrachlorophenol	26May2021	0.20<MDL	ug/l	no
Triallate	26May2021	0.01<MDL	ug/l	no
Trichloroethylene	26May2021	0.44<MDL	ug/l	no
2,4,6-Trichlorophenol	26May2021	0.25<MDL	ug/l	no
Trifluralin	26May2021	0.02<MDL	ug/l	no
Vinyl Chloride	26May2021	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 #)
<b>Raw</b>	144	0 - 0	0- NDOGT	Not Applicable	Not Applicable
<b>Treated</b>	52	0 - 0	0 - 0	52	0 - 84
<b>Distribution</b>	113	0 - 0	0 - 0	52	0 - 1040

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)
<b>Chlorine Residual (secondary disinfection)</b>	364	0.44 mg/L - 3.00 mg/L (Chloramination) 0.03 mg/L - 1.96 mg/L (Free Chlorination)

Note: System was Free Chlorinated from Sept 4-29 2025 for Distribution System maintenance and Denitrification.

**Table 14. Creighton Heights Additional Sampling Requirements**

	Parameter	Number of Samples	Maximum Allowable Annual Average Concentration	Actual Average Concentration over last 4 quarterly tests
Annual Average	Total Suspended Solids of Supernatant	4 (Quarterly)	25 mg/L	8.0 mg/L

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

Location Type	Date	Sample Location	pH	Alkalinity	Lead
Distribution	11Feb2025	S.S. Burwash	7.17	205 mg/L	0.06 ug/l
		Hwy 45	7.35	205 mg/L	0.08 ug/l
Distribution	25June2025	S.S. Burwash	7.32	206 mg/l	0.06 ug/l
		Hwy 45	7.56	204 mg/L	0.05 ug/l

There are many other parameters that are tested on a less frequent basis. For these parameters, the most recent analysis is listed below in Table 16. <MDL refers to 'less than Method Detection Limit' which means the measured concentration of the parameter in our water is less than the lowest possible detectable measurement by the licensed laboratory. The 5-year Sodium test was collected and tested for Creighton Heights and was found to be 32.4 mg/L which is over the Maximum Acceptable Concentration of 20 mg/L. This was reported to the Health Unit, and a notice was distributed to the water users.

**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	10Jun2024	0.6<MDL	ug/l	no
Arsenic	10Jun2024	0.2 <MDL	ug/l	no
Barium	10Jun2024	24.5	ug/l	no
Boron	10Jun2024	48.0	ug/l	no
Cadmium	10Jun2024	0.003<MDL	ug/l	no
Chromium	10Jun2024	0.16	ug/l	no
Mercury	10Jun2024	0.01<MDL	ug/l	no
Selenium	10Jun2024	0.04< MDL	ug/l	no

Sodium	13June2022	32.4	mg/l	Yes
Uranium	10Jun2024	0.002	ug/l	no
Fluoride	1June2022	0.32	mg/l	no
Nitrite	05Mar2025	0.044	mg/l	no
	23Jun2025	0.028		
	15Sept2025	0.032		
	04Dec2025	0.031		
Nitrate	05Mar2025	0.051	mg/l	no
	23Jun2025	0.047		
	15Sept2025	0.043		
	04Dec2025	0.061		
Alachlor	10Jun2024	0.02<MDL	ug/l	no
Atrazine + N-dealkylated metabolites	10Jun2024	0.01<MDL	ug/l	no
Atrazine	10Jun2024	0.01<MDL	ug/l	no
Azinphos-methyl	10Jun2024	0.05<MDL	ug/l	no
Benzene	10Jun2024	0.32<MDL	ug/l	no
Benzo(a)pyrene	10Jun2024	0.004<MDL	ug/l	no
Bromoxynil	10Jun2024	0.33<MDL	ug/l	no
Carbaryl	10Jun2024	0.05<MDL	ug/l	no
Carbofuran	10Jun2024	0.01<MDL	ug/l	no
Carbon Tetrachloride	10Jun2024	0.17<MDL	ug/l	no
Chlorpyrifos	10Jun2024	0.02<MDL	ug/l	no
Desethyl atrazine	10Jun2024	0.01<MDL	ug/l	no
Diazinon	10Jun2024	0.02<MDL	ug/l	no
Dicamba	10Jun2024	0.20<MDL	ug/l	no
1,2-Dichlorobenzene	10Jun2024	0.41<MDL	ug/l	no
1,4-Dichlorobenzene	10Jun2024	0.36>MDL	ug/l	no
1,2-Dichloroethane	10Jun2024	0.35<MDL	ug/l	no
1,1-Dichloroethylene (vinylidene chloride)	10Jun2024	0.33<MDL	ug/l	no
Dichloromethane	10Jun2024	0.35<MDL	ug/l	no
2-4 Dichlorophenol	10Jun2024	0.15<MDL	ug/l	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	10Jun2024	0.19<MDL	ug/l	no
Diclofop-methyl	10Jun2024	0.40<MDL	ug/l	no
Dimethoate	10Jun2024	0.06<MDL	ug/l	no
Diquat	10Jun2024	1<MDL	ug/l	no
Diuron	10Jun2024	0.03<MDL	ug/l	no
Glyphosate	10Jun2024	1<MDL	ug/l	no
Haloacetic Acid HAA	05Mar2025	5.35 (Running Annual Average)	ug/l	no
	23Jun2025			
	15Sept2025			
	04Dec2025			
Malathion	10Jun2024	0.02<MDL	ug/l	no
MCPA, 2-methyl-4-chlorophenoxyacetic acid	10Jun2024	0.00012<MDL	mg/L	no
Metolachlor	10Jun2024	0.01<MDL	ug/l	no
Metribuzin	10Jun2024	0.02<MDL	ug/l	no
Monchlorobenzene	10Jun2024	0.3<MDL	ug/L	no
NDMA, N-nitrosodimethylamine	05Mar2025	0.0025	ug/L	no

As per new MDWL (12Aug2021) we are required to test for NDMA quarterly	23Jun2025 15Sept2025 04Dec2025	(Running Annual Average)		
Paraquat	10Jun2024	1<MDL	ug/l	no
Pentachlorophenol	10Jun2024	0.15<MDL	ug/l	no
Phorate	10Jun2024	0.01<MDL	ug/l	no
Picloram	10Jun2024	1<MDL	ug/l	no
Polychlorinated Biphenyls (PCB)	10Jun2024	0.04<MDL	ug/l	no
Prometryne	10Jun2024	0.03<MDL	ug/l	no
Simazine	10Jun2024	0.01<MDL	ug/l	no
Trihalomethane (Total) (THM)	05Mar2025 23Jun2025 15Sept2025 04Dec2025	1.425 (Running Annual Average)	ug/l	no
Terbufos	10Jun2024	0.01<MDL	ug/l	no
Tetrachloroethylene (perchloroethylene)	10Jun2024	0.35<MDL	ug/l	no
2,3,4,6-Tetrachlorophenol	10Jun2024	0.20<MDL	ug/l	no
Triallate	10Jun2024	0.01<MDL	ug/l	no
Trichloroethylene	10Jun2024	0.44<MDL	ug/l	no
2,4,6-Trichlorophenol	10Jun2024	0.25<MDL	ug/l	no
Trifluralin	10Jun2024	0.02<MDL	ug/l	no
Vinyl Chloride	10Jun2024	0.17<MDL	ug/l	no

This concludes the Annual and Summary Report for the Camborne and Creighton Heights Drinking Water Systems for 2025.