

**Part III Form 2
Section 11. ANNUAL REPORT.**

Drinking-Water System Number:	220004000
Drinking-Water System Name:	Caledon Village
Drinking-Water System Owner:	Region of Peel
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2003 to December 2003

<p><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [] No [x]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [x] No []</p> <p>Location where Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px;"> Region of Peel 10 Peel Centre Drive, 4th floor Brampton, Ontario L6T 4B9 </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served:</p> <div style="border: 1px solid black; padding: 2px; width: fit-content;">None</div> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? N/A Yes [] No []</p> <p>Number of Interested Authorities you report to: <div style="border: 1px solid black; padding: 2px; width: fit-content;">N/A</div></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No [] N/A</p>
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List Drinking-Water Systems, which receive all of their drinking water from your system:

None

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?

Yes [] No [x]

Indicate how you notified system users that your annual report is available, and is free of charge.

- [x] Public access/notice via the web
- [x] Public access/notice via Government Office
- [x] Public access/notice via a newspaper

Public access/notice via Public Request

Public access/notice via a Public Library

Public access/notice via other method _____

Describe your Drinking-Water System

The population served in Caledon Village is 2551

Well Pump House A (Well No.3 and 3A)

A communal well water supply system consisting of two (2) well supplies and a treatment system and associated appurtenances, located in Lot 13, Concession 1 in the Town of Caledon on the west side of Highway 10 approximately 1200 m south of Highway 24 (Charleston Sideroad) in the Town of Caledon (Caledon Village), (NAD 83: UTM Zone 17: 581751.00 m E, 4855626.00 m N) as follows:

Well No. 3

254 mm in diameter, 32 m deep with a well screen length of 6.1 m. Well equipped to supply 23.1 L/s at a Total Dynamic Head (TDH) of 50 m.

Well No. 3A

153 mm in diameter, 35 m deep with a well screen length of 3.7 m. capable of supplying 6.4 L/s at a TDH of 51.5 m.

equipped complete with flow meter, air release valve, pump control and check valves, raw and treated water sample taps, pressure relief valve and manual by pass, and all other fittings

connection piping at the well heads 150 mm diameter increasing to 250 mm diameter outside the station to connect to the 250 mm watermain.

Online continuous chlorine residual analyzer with alarm and lockout capability.

Wells 3 and 3A equipped with a vented, watertight, galvanized steel enclosure over the wellhead and located in a concrete block well pump house.

One (1) sodium hypochlorite system consisting of:

One (1) metering pump, capable of handling up to 3.78 L/h of sodium hypochlorite solution against a pressure of 1034 kPa. Shelved stand-by is available on-site

Sodium hypochlorite supplied from 204 L drums

All instrumentation and equipment compatible with the Region's SCADA system.

(Well No. 3A is not in operation and is to be abandoned.)

Well Pump House B (Well No.4)

A communal well water supply system consisting of a well supply and treatment system and associated appurtenances, located on the north side of Beech Grove Sideroad approximately 250 m west of the 2nd Line West in the Town of Caledon (Caledon Village), (NAD 83: UTM Zone 17: 576674.00 m E, 4856588.00 m N) as follows:

Well No.4

610 mm diameter, 77m deep well with a well screen of length 13.7m. equipped with a submersible well water pump rated at 38 L/s at a TDH of 116 m, complete with flow meter, air release valve, pump control and check valve, raw and treated water sample taps, a pressure relief valve as well as a manual by pass and all other fittings, including an inline static chlorine mixer, and online continuous chlorine residual analyzer with alarm and lockout capability. Complete with a vented, watertight, galvanized steel enclosure over the wellhead and located in a concrete block well pump house.

150 mm diameter connection piping from the well head to the 300 mm feedermain outside the station and along the 20th Sideroad from the Well No.4 Pumphouse to approximately 800 meters northeast of the Credit River.

One (1) sodium hypochlorite system consisting of:

One (1) metering pump, capable of handling up to 3.78 L/h of sodium hypochlorite solution against a pressure of 1034 kPa. Shelved stand-by available on-site.

Sodium hypochlorite supplied from 204 L drums.

One (1) sodium silicate system consisting of:

One (1) metering pump capable of handling up to 3.78 L/hr of sodium silicate against a pressure of 1034 kPa.

Sodium silicate supplied from 204 L drums.

All instrumentation and equipment compatible with the Region's SCADA system.

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List all water treatment chemicals used over this reporting period

Sodium hypochlorite Sodium silicates

Were any significant expenses incurred to?

- Install required equipment
- Repair required equipment
- Replace required equipment

Describe
Caledon Village Waterworks

Significant Installations	Approximate Expenditure
Caledon Village Reservoir Expansion	\$760,000
Water Service Installations	\$6,470

Significant Repairs	Approximate Expenditure
Watermain Breaks	\$6,500
Fire Hydrant Repairs	\$7,800
Water Distribution System Valve Repairs	\$6,900
Water Service Repairs	\$13,157

Significant Replacements	Approximate Expenditure
Replaced Caledon Village Well 4 Pump	\$9,000
Fire Hydrant Replacements	\$4,100
Water Service Replacements	\$800

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre?

Incident Date (dd/mm/yy)	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date (dd/mm/yy)
22/01/03	Sodium	33.1	mg/L	Health authority notified	22/01/03
24/02/03	Total Coliform Background <i>E.coli</i>	3 >200 3	CFU/100 mL CFU/100 mL CFU/100 mL	Re-sampled upstream, downstream and reported location	28/02/03
16/06/03	Total Coliform	1	CFU/100mL	Re-sampled	20/06/03
11/08/03	Background	>200	CFU/100mL	Re-sampled	19/08/03
11/08/03	Background	>200	CFU/100mL	Re-sampled	19/08/03

Note: Incident date represents the sampling date, corrective action date represents the date the incident was resolved.

Microbiological testing done under section 8 (2) during this reporting period

	Number of Samples	Range of E.Coli or Fecal Results (#-#)	Range of Total Coliform Results (#-#)	Range of Background Results	Number of HPC Samples	Range of HPC Results (#-#)
Caledon Village Raw #3	52	0	0	--	31	0
Caledon Village Treated #3	52	0	0	--	11	0
Caledon Village Raw #4	52	0	0	--	32	0
Caledon Village Treated #4	52	0	0	--	11	0
Distribution	438	0 - 3	0 - 3	0 - 200	0	0

Operational testing done under Schedule 7, 8 or 9 during the period covered by this Annual Report.

	Number of Grab Samples	Range of Results (#-#) Caledon Village Well's 3 & 3A	Range of Results (#-#) Caledon Village Well 4
Turbidity	8760	0.01 - 0.32	0.03 – 0.24
Chlorine	8760	1.06 – 1.64	0.73 – 1.31
Fluoride (If the DWS provides fluoridation)	N/A	N/A	N/A

NOTE: For continuous monitors use 8760 as the number of samples.

*NOTE: Record the unit of measure if it is **not** milligrams per litre.*

Summary of additional testing and sampling carried out in accordance with the requirement of an approval or order.

Date of order or C of A	Parameter	Date Sampled	Result	Unit of Measure

Summary of Inorganic parameters tested during this reporting period or most recent

Parameter	Sample Date (mm/dd/yy)	Result Value Caledon Village #3	Result Value Caledon Village #4	Unit of Measure	Exceedance
Antimony	07/30/03	0	0	ug/L	
Arsenic	04/23/03	4.01	0.74	ug/L	
Barium	04/23/03	34	83	ug/L	
Boron	04/23/03 11/20/03	9	62	ug/L ug/L	
Cadmium	04/23/03 11/20/03	0	0	ug/L ug/L	
Chromium	04/23/03 11/20/03	0	0	ug/L	
Lead	04/23/03	0	0	ug/L	
Mercury	04/23/03	0.22	0.16	ug/L	
Selenium	04/23/03	0	0	ug/L	
Uranium	04/23/03	0.2	0.2	ug/L	
Fluoride	11/20/03	49	99	ug/L	
Nitrite	11/20/03	0	0	ug/L	
Nitrate	11/20/03	0	151	ug/L	

Summary of Organic parameters sampled during this reporting period or most recent

Parameter	Sample Date (dd/mm/yy)	Result Value Caledon Village #3	Result Value Caledon Village #4	Unit of Measure	Exceedance
Alachlor	23/07/03	0	0	ug/L	
Aldicarb	23/07/03	0	0	ug/L	
Aldrin + Dieldrin	23/07/03	0	0	ug/L	
Atrazine + N-dealkylated metabolites					
Atrazine	23/07/03	0	0	ug/L	
Azinphos-methyl	23/07/03	0	0	ug/L	
Bendiocarb	23/07/03	0	0	ug/L	
Benzene	23/07/03	0	0	ug/L	
Benzo(a)pyrene	23/07/03	0	0	ug/L	
Bromoxynil	23/07/03	0	0	ug/L	
Carbaryl	23/07/03	0	0	ug/L	
Carbofuran	23/07/03	0	0	ug/L	
Carbon Tetrachloride	23/07/03	0	0	ug/L	
Chlordane (Total)	23/07/03	0	0	ug/L	
Chlorpyrifos	23/07/03	0	0	ug/L	
Cyanazine	23/07/03	0	0	ug/L	
Diazinon	23/07/03	0	0	ug/L	
Dicamba	23/07/03	0	0	ug/L	
1,2-Dichlorobenzene	23/07/03	0	0	ug/L	
1,4-Dichlorobenzene	23/07/03	0	0	ug/L	
Dichlorodiphenyltrichloroethane (DDT) + metabolites	23/07/03	0	0	ug/L	
1,2-Dichloroethane	23/07/03	0	0	ug/L	
1,1-Dichloroethylene (vinylidene chloride)	23/07/03	0	0	ug/L	
Dichloromethane	23/07/03	0	0	ug/L	
2,4 Dichlorophenol	23/07/03	0	0	ug/L	
2,4-Dichlorophenoxy acetic acid (2,4-D)	23/07/03	0	0	ug/L	
Diclofop-methyl	23/07/03	0	0	ug/L	
Dimethoate	23/07/03	0	0	ug/L	

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Dinoseb	23/07/03	0	0	ug/L	
Diquat	23/07/03	0	0	ug/L	
Diuron	23/07/03	0	0	ug/L	
Glyphosate	23/07/03	0	0	ug/L	
Heptachlor + Heptachlor Epoxide	23/07/03	0	0	ug/L	
Linadane (Total)	23/07/03	0	0	ug/L	
Malathion	23/07/03	0	0	ug/L	
Methoxychlor	23/07/03	0	0	ug/L	
Metolachlor	23/07/03	0	0	ug/L	
Metribuzin	23/07/03	0	0	ug/L	
Monochlorobenzene	23/07/03	0	0	ug/L	
Paraquat	23/07/03	0	0	ug/L	
Parathion	23/07/03	0	0	ug/L	
Pentachlorophenol	23/07/03	0	0	ug/L	
Phorate	23/07/03	0	0	ug/L	
Picloram	23/07/03	0	0	ug/L	
Polychlorinated Biphenyls(PCB)	23/07/03	0	0	ug/L	
Promethyne	23/07/03	0	0	ug/L	
Simazine	23/07/03	0	0	ug/L	
THM (NOTE: show latest quarterly average)	23/07/03	7.18	8.23	ug/L	
Temephos	23/07/03	0	0	ug/L	
Terbufos	23/07/03	0	0	ug/L	
Tetrachloroethylene	23/07/03	0	0	ug/L	
2,3,4,6-Tetrachlorophenol	23/07/03	0	0	ug/L	
Triallate	23/07/03	0	0	ug/L	
Trichloroethylene	23/07/03	0	0	ug/L	
2,4,6-Trichlorophenol	23/07/03	0	0	ug/L	
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	23/07/03	0	0	ug/L	
Trifluralin	23/07/03	0	0	ug/L	
Vinyl Chloride	23/07/03	0	0	ug/L	

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Parameter	Result Value	Unit of Measure	Date of Sample

(Only if category is large municipal residential, small municipal residential, large municipal non residential, small municipal non residential, large non municipal non residential)