

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

Drinking-Water System Number:	220004947
Drinking-Water System Name:	Caledon East Well Supply
Drinking-Water System Owner:	Region of Peel
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2006 to December 31, 2006

<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 Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px;"> 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: <div style="border: 1px solid black; padding: 2px; display: inline-block;">N/A</div> </p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No [] </p> <p>Number of Interested Authorities you report to: <div style="border: 1px solid black; padding: 2px; display: inline-block;">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 [] </p>
---	---

Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

List Drinking-Water Systems, which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
None	N/A

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.

- Public access/notice via the web**
- Public access/notice via Government Office**
- 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 East is 5471. The groundwater drawn from three (3) municipal wells is disinfected with chlorine and delivered to consumers through the water distribution system. Surplus water is stored in a 4.5 million-litre (990 thousand-gallon) reservoir connected to the water distribution system. Sodium silicate is also added to the water to help prevent the naturally occurring iron in water from precipitating out of solution.

Caledon East Well Pump House No.2

A communal well water supply consisting of one (1) well supply, treatment system and associated appurtenances.

Well No.2 is a 254 mm diameter 30 m deep casing with a 6.0 m long well screen length drilled ground water production well, equipped with a submersible well water pump rated at 18.2 L/s. The well is equipped with a flow meter with recording capabilities, online continuous chlorine analyzer with alarm and lockout capability and one online continuous turbidity analyzer with alarm and lockout capability.

The disinfection system consists of a chemical feed pump pumping sodium hypochlorite from 204 L drums.

The iron sequestration system consists of a chemical feed pump pumping sodium silicate from 204 L drums

A 50 kW stand-by diesel generator set complete with automatic transfer switch system provides stand-by power to the facility in the event of power failure is located in the pump house.

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

Caledon East Well Pump House No.3

A communal well water supply consisting of one (1) well supply, treatment system and associated appurtenances.

Well No. 3 is a 300 mm diameter 48 m deep casing with a 7.6 m long well screen length drilled ground water production well equipped with a submersible well water pump rated at 30.3 L/s. The well is equipped with a flow meter with recording capabilities, online continuous chlorine analyzer with alarm and lockout capability and one online continuous turbidity analyzer with alarm and lockout capability.

The disinfection system consists of a chemical feed pump pumping sodium hypochlorite from 204 L drums. All instrumentation and equipment are compatible with the Region's SCADA system.

Caledon East Pump House No. 4

A communal well water supply system consisting of one well supply and treatment system and associated appurtenances

Well No.4 is a 254 mm diameter 57 m deep casing with a 7.6 m long well screen length drilled ground water production well, equipped with a submersible well water pump rated at 45 L/s.

The well is equipped with a flow meter with recording capabilities, online continuous chlorine analyzer with alarm and lockout capability and one online continuous turbidity analyzer with alarm and lockout capability.

The disinfection system consists of a chemical feed pump pumping sodium hypochlorite from 204 L drums.

The iron sequestration system consists of a chemical feed pump pumping sodium silicate from 204 L drums.

A 125 kW stand-by diesel generator set complete with automatic transfer switch system provides stand-by power to the facility in the event of a power failure is located in the pump house as well as a booster pumping system to supply a small sub-division.

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

List all water treatment chemicals used over this reporting period

Sodium Hypochlorite
Sodium Silicate

Were any significant expenses incurred to?

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

Please provide a brief description and a breakdown of monetary expenses incurred

Significant Installations	Approximate Expenditure
Valve Installation and Replacement	est \$ 666.00

Significant Repairs	Approximate Expenditure
Fire Hydrant Repairs	est \$ 4,500.00
Water Service Repairs	\$ 9,396.00
Water Service Box Repair/Replacement	est \$ 2,000.00
Caledon East Wells and Reservoir maintenance and inspections, including all repairs	\$ 29,396.76

Significant Replacements	Approximate Expenditure
Water Service Replacements	\$ 6,243.00

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

Drinking-Water Systems Regulation O. Reg. 170/03

Incident Date (dd/mm/yy)	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date (dd/mm/yy)
01/05/06	Well # 3 transmission line break/loss of water pressure Chlorine Residual readings low	<0.05	mg/L	*Chlorine and turbidity checks/grab samples confirm analyzers at fault *Flushing of mains *Bacteriological sampling *Water main break repair	15/05/06
04/12/06	Low system pressure (Well # 4-Booster Station) due to a main break	NA	NA	Street was flushed and samples taken. Test results from all samples taken confirmed no bacterial contamination and adequate chlorine residuals within the system.	07/12/06

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

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period

	Number of Samples	Range of E.Coli Or Fecal Results (min#)-(max#)	Range of Total Coliform Results (min#)-(max#)	Number of HPC Samples	Range of HPC Results (min#)-(max#)
Caledon East Well # 2 Raw	48	0	0	48	0-10
Caledon East Well # 2 Treated	48	0	0	48	0-1
Caledon East Well # 3 Raw	50	0	0	50	0-10
Caledon East Well # 3 Treated	52	0	0	52	0-1
Caledon East Well # 4 Raw	52	0	0	52	0-9
Caledon East Well # 4 Treated	52	0	0	52	0-1
Distribution	204	0	0	204	0-5

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03, during the period covered by this Annual Report.

	Number of Grab Samples	Caledon East Distribution System	Caledon East Well 2 Range of Results (min#)-(max#)	Caledon East Well 3 Range of Results (min#)-(max#)	Caledon East Well 4 Range of Results (min#)-(max#)
Turbidity	8760	Treated Water 0.09 -0.46	0.06-0.44	0.0-0.41	0.06-0.51
Chlorine	8760	0.60-1.56	0.46-2.00	0.06-1.99	0.15-2.00
Fluoride (If the DWS provides fluoridation)	NA	NA	NA	NA	NA

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, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result Well 2	Result Well 3	Result Well 4	Result Reservoir	Unit of Measure
(CofA) 15/11/05	R2A	03-Jan-06	80	4	-	12	cfu/100mL
		10-Jan-06	32	36	-	38	cfu/100mL
		17-Jan-06	8	26	-	23	cfu/100mL
		24-Jan-06	10	14	-	20	cfu/100mL
		31-Jan-06	5	26	-	52	cfu/100mL
		07-Feb-06	2	9	0	6	cfu/100mL
		14-Feb-06	3	2	1	4	cfu/100mL
		21-Feb-06	16	3	1	102	cfu/100mL
		28-Feb-06	1	4	0	23	cfu/100mL
		07-Mar-06	16	1	2	7	cfu/100mL
		14-Mar-06	50	1	1	10	cfu/100mL
		21-Mar-06	54	7	0	12	cfu/100mL
		28-Mar-06	35	7	1	30	cfu/100mL
		04-Apr-06	38	11	1	20	cfu/100mL
		11-Apr-06	28	17	0	22	cfu/100mL
		19-Apr-06	50	14	7	500	cfu/100mL
		25-Apr-06	32	22	1	70	cfu/100mL
		02-May-06	58	out of service	3	3	cfu/100mL
		09-May-06	130	out of service	1	9	cfu/100mL
		16-May-06	95	8	0	65	cfu/100mL
		24-May-06	190	35	2	140	cfu/100mL
		30-May-06	130	70	1	30	cfu/100mL
		06-Jun-06	80	26	1	0	cfu/100mL
		13-Jun-06	20	18	0	56	cfu/100mL
		20-Jun-06	98	6	1	350	cfu/100mL
		27-Jun-06	100	40	3	62	cfu/100mL
		05-Jul-06	170	120	1	80	cfu/100mL
		11-Jul-06	10	18	2	88	cfu/100mL
		18-Jul-06	33	190	2	70	cfu/100mL
		25-Jul-06	99	150	0	200	cfu/100mL
		01-Aug-06	190	13	0	60	cfu/100mL
		09-Aug-06	90	4	3	140	cfu/100mL
		15-Aug-06	64	12	1	120	cfu/100mL
		21-Aug-06	16	20	0	30	cfu/100mL
		28-Aug-06	40	60	2	2	cfu/100mL
		05-Sep-06	50	23	0	84	cfu/100mL
		11-Sep-06	70	25	2	140	cfu/100mL
		18-Sep-06	85	50	1	27	cfu/100mL
		25-Sep-06	40	4	3	4	cfu/100mL
		02-Oct-06	12	10	1	45	cfu/100mL

Drinking-Water Systems Regulation O. Reg. 170/03

		10-Oct-06	15	18	1	35	cfu/100mL
		16-Oct-06	10	18	0	0	cfu/100mL
		23-Oct-06	20	1	4	298	cfu/100mL
		30-Oct-06	20	2	0	90	cfu/100mL
		06-Nov-06	82	0	0	95	cfu/100mL
		13-Nov-06	10	7	16	110	cfu/100mL
		20-Nov-06	27	10	7	60	cfu/100mL
		27-Nov-06	6	5	5	>150	cfu/100mL
		04-Dec-06	out of service	1	2	>150	cfu/100mL
		11-Dec-06	out of service	60	1	>150	cfu/100mL
		18-Dec-06	out of service	75	2	130	cfu/100mL
		26-Dec-06	out of service	100	3	80	cfu/100mL
Date of legal instrument issued	Parameter	Date Sampled	Result Well 2 Raw	Result Well 3 Raw	Result Well 4 Raw	Result Reservoir	Unit of Measure
(CofA) 15/11/05	AOC	2-Jan-06	71	95	96	108	ugAOC/L
		6-Feb-06	89	109	100	101	ugAOC/L
		6-Mar-06	173	142	182	178	ugAOC/L
		3-Apr-06	161	115	135	137	ugAOC/L
		1-May-06	120	N/A	140	111	ugAOC/L
		5-Jun-06	148	127	148	168	ugAOC/L
		5-Jul-06	194	173	132	165	ugAOC/L
		9-Aug-06	105	122	98	124	ugAOC/L
		5-Sep-06	134	103	103	126	ugAOC/L
		2-Oct-06	134	115	108	107	ugAOC/L
		6-Nov-06	149	138	128	154	ugAOC/L
		4-Dec-06	123	127	127	143	ugAOC/L

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

Parameter	Sample Date (dd/mm/yy)	Result Value Well # 2	Result Value Well # 3	Result Value Well # 4	Unit of Measure	Exceedance
Antimony	06/04/06	<0.486	<0.486	<0.486	ug/L	No
Arsenic	06/04/06	<0.673	<0.673	1.15	ug/L	No
Barium	06/04/06	0.122	0.113	0.147	mg/L	No
Boron	06/04/06	0.042	0.051	0.014	mg/L	No
Cadmium	06/04/06	ND	ND	ND	mg/L	No
Chromium	06/04/06	<0.003	<0.003	<0.003	mg/L	No
Lead	06/04/06	0.316	0.289	0.348	ug/L	No
Mercury	06/04/06	ND	ND	ND	mg/L	No
Selenium	06/04/06	<0.957	<0.957	<0.957	ug/L	No
Sodium	13/07/06	42.5	106	8.63	mg/L	Yes

Drinking-Water Systems Regulation O. Reg. 170/03

Uranium	06/04/06	0.0006	0.0005	ND	mg/L	No
Fluoride	17/10/06	0.096	<0.065	<0.065	mg/L	No
Nitrite	17/10/06	<0.017	<0.017	<0.017	mg/L as N	No
	18/12/06				mg/L as N	No
Nitrate	17/10/06	1.96	6.71	<0.038	mg/L as N	No
	18/12/06		6.13		mg/L as N	No

ND indicates Not detectable, < indicates below Method Detection Limit. (MDL).

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

Parameter	Sample Date (dd/mm/yy)	Result Value Caledon East Well # 2	Result Value Caledon East Well # 3	Result Value Caledon East Well # 4	Unit of Measure	Exceedance
Alachlor	06/04/06	ND	ND	ND	ug/L	No
Aldicarb	06/04/06	ND	ND	ND	ug/L	No
Aldrin + Dieldrin	06/04/06	ND	ND	ND	ug/L	No
Atrazine + N-dealkylated metabolites	06/04/06	ND	ND	ND	ug/L	No
Azinphos-methyl	06/04/06	ND	ND	ND	ug/L	No
Bendiocarb	06/04/06	ND	ND	ND	ug/L	No
Benzene	06/04/06	ND	ND	ND	ug/L	No
Benzo(a)pyrene	06/04/06	ND	ND	ND	ug/L	No
Bromoxynil	06/04/06	ND	ND	ND	ug/L	No
Carbaryl	06/04/06	ND	ND	ND	ug/L	No
Carbofuran	06/04/06	ND	ND	ND	ug/L	No
Carbon Tetrachloride	06/04/06	ND	ND	ND	ug/L	No
Chlordane (Total)	06/04/06	ND	ND	ND	ug/L	No
Chlorpyrifos	06/04/06	ND	ND	ND	ug/L	No
Cyanazine	06/04/06	ND	ND	ND	ug/L	No
Diazinon	06/04/06	ND	ND	ND	ug/L	No
Dicamba	06/04/06	ND	ND	ND	ug/L	No
1,2-Dichlorobenzene	06/04/06	ND	ND	ND	ug/L	No
1,4-Dichlorobenzene	06/04/06	ND	ND	ND	ug/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	06/04/06	ND	ND	ND	ug/L	No
1,2-Dichloroethane	06/04/06	ND	ND	ND	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	06/04/06	ND	ND	ND	ug/L	No
Dichloromethane	06/04/06	ND	ND	ND	ug/L	No
2,4 Dichlorophenol	06/04/06	ND	ND	ND	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	06/04/06	ND	ND	ND	ug/L	No
Diclofop-methyl	06/04/06	ND	ND	ND	ug/L	No
Dimethoate	06/04/06	ND	ND	ND	ug/L	No
Dinoseb	06/04/06	ND	ND	ND	ug/L	No
Diquat	06/04/06	ND	ND	ND	ppb	No

Diuron	06/04/06	ND	ND	ND	ug/L	No
Glyphosate	06/04/06	ND	ND	ND	ug/L	No
Heptachlor + Heptachlor Epoxide	06/04/06	ND	ND	ND	ug/L	No
Linadane (Total)	06/04/06	ND	ND	ND	ug/L	No
Malathion	06/04/06	ND	ND	ND	ug/L	No
Methoxychlor	06/04/06	ND	ND	ND	ug/L	No
Metolachlor	06/04/06	ND	ND	ND	ug/L	No
Metribuzin	06/04/06	ND	ND	ND	ug/L	No
Monochlorobenzene	06/04/06	ND	ND	ND	ug/L	No
Paraquat	06/04/06	ND	ND	ND	ppb	No
Parathion	06/04/06	ND	ND	ND	ug/L	No
Pentachlorophenol	06/04/06	ND	ND	ND	ug/L	No
Phorate	06/04/06	ND	ND	ND	ug/L	No
Picloram	06/04/06	ND	ND	ND	ug/L	No
Polychlorinated Biphenyls(PCB)	06/04/06	ND	ND	ND	ug/L	No
Prometryne	06/04/06	ND	ND	ND	ug/L	No
Simazine	06/04/06	ND	ND	ND	ug/L	No
THM (NOTE: show latest annual average)	Jan 1-Dec 31 2006	20.8 (annual running average in the distribution system)			ug/L	No
Temephos	06/04/06	ND	ND	ND	ug/L	No
Terbufos	06/04/06	ND	ND	ND	ug/L	No
Tetrachloroethylene	06/04/06	ND	ND	ND	ug/L	No
2,3,4,6-Tetrachlorophenol	06/04/06	ND	ND	ND	ug/L	No
Triallate	06/04/06	ND	ND	ND	ug/L	No
Trichloroethylene	06/04/06	ND	ND	ND	ug/L	No
2,4,6-Trichlorophenol	06/04/06	ND	ND	ND	ug/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	06/04/06	ND	ND	ND	ug/L	No
Trifluralin	06/04/06	ND	ND	ND	ug/L	No
Vinyl Chloride	06/04/06	ND	ND	ND	ug/L	No

ND indicates Not detectable, < indicates below Method Detection Limit. (MDL).

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
None	N/A	N/A	N/A

(Only if DWS category is large municipal residential, small municipal residential, large municipal non-residential, non municipal year round residential, large non municipal non residential)