

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

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|--|----------------------------------|
| Drinking-Water System Number: | 220003831 |
| Drinking-Water System Name: | Alton Well Supply |
| Drinking-Water System Owner: | Regional Municipality 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 []</p> |
|---|--|

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? N/A
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

Population served in Alton is 1113

Alton Wells No.1 and 2

A communal well water supply system consisting of two (2) well supplies and one (1) treatment system with associated appurtenances. Each Well located within a concrete chamber at Lot 22, Concession III at 51 Station Street Southside, in the Town of Caledon as follows:

- Each well 350 mm diameter and 28 m deep ground water production well equipped with a submersible well water pump with a rated capacity of 7.6 L/s at a Total Dynamic Head (TDH) of 54 m.
- Each well equipped complete with flow meter, pump control and check valves, raw and treated water sample taps, a pressure relief as well as a manual by pass and all other fittings.
- One (1) online continuous chlorine analyzer located on the treated water discharge line with alarm and lockout capability.
- connecting piping 100 mm diameter from each well pump header to increasing to a 152 mm water main in the pump house.

Sodium hypochlorite system consisting of:

- two (2) metering pumps, each capable of handling up to 3.78 L/h of sodium hypochlorite solution against a pressure of 1034 kPa. Shelved standby metering pump of same capacity available onsite.
- Sodium hypochlorite supplied from 204 litre drum
- All instrumentation and equipment is compatible with the Region's SCADA system.

Well No. 2 is to be used as an alternate to Well No.1 and may also be used concurrently in emergencies only.

Alton Well No. 3 and 4

A communal well water supply system consisting of 2 well supplies and 1 treatment system and associated appurtenances. Both wells located in a building at 1640 Queen Street, Lot 32, Concession III in the Town of Caledon as follows:

Well No.3

- 250 mm diameter and 27 m deep ground water production well with a submersible well water pump rated at 11.7 L/s at a TDH of 91.5 m.

Well No.4

- 250 mm diameter and 25 m deep ground water production well with a submersible well water pump rate at 11.7 L/h at a TDH of 91.5 m.

- each well equipped with flow meter, air release valve, pump control and check vale, raw and treated water sample taps, a pressure relief as well as a manual by pass and all other fittings.

- one (1) online continuous chlorine analyzer located on the treated water discharge line with alarm and lockout capability.

- 100 mm diameter discharge line connected to each well pump headers in the pump house increasing to a 200 mm discharge water main.

Sodium hypochlorite

- 2 metering pumps, each capable of handling up to 3.78 L/h of sodium hypochlorite solution against a pressure of 1034 kPa. Shelved standby metering pump of same capacity available onsite.

- Sodium hypochlorite supplied from 204 L drums

- Standby power supply provided by a 100 kW diesel generator, complete with automatic transfer switch and one (1) 1000 L capacity fuel storage tank.

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

Well No. 4 is to be used as an alternate to Well No.3 and may also be used concurrently in emergencies only.

List all water treatment chemicals used over this reporting period

Sodium Silicates and Sodium Hypochlorite

Were any significant expenses incurred to?

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

Describe
Alton Waterworks

| Significant Installations | Approximate Expenditure |
|----------------------------------|--------------------------------|
| Water Service Installations | \$6,470 |
| | |

| Significant Repairs | Approximate Expenditure |
|---|--------------------------------|
| Alton Well 4 Rehabilitation | \$15,000 |
| 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 Alton Well 2 Pump | \$7,000 |
| 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 – Well 3 | 44.1 | mg/L | Letter provided by health authority | 22/01/03 |
| 22/01/03 | Sodium – Well 1 | 150.1 | mg/L | Letter provided by health authority | 22/01/03 |
| 22/01/03 | Sodium – Well 4 | 28.3 | mg/L | Letter provided by health authority | 22/01/03 |
| 02/09/03 | Total Coliform | 2 | CFU/100 mL | Re-sampled upsteam, downstream and reported location | 11/09/03 |

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 (#-#) |
|------------------------|-------------------|--|---------------------------------------|-----------------------------|-----------------------|----------------------------|
| Alton 1 Raw | 52 | 0 | 0 | -- | 36 | 0 |
| Alton 1 Treated | 51 | 0 | 0 | -- | 9 | 0 |
| Alton 2 Raw | 45 | 0 | 0 | -- | 27 | 0 |
| Alton 2 Treated | 44 | 0 | 0 | -- | 9 | 0 |
| Alton 3 Raw | 34 | 0 | 0 | -- | 22 | 0 |
| Alton 3 Treated | 32 | 0 | 0 | -- | 6 | 0 |
| Alton 4 Raw | 38 | 0 | 0 | -- | 27 | 0 |
| Alton 4 Treated | 37 | 0 | 0 | -- | 11 | 0 |
| Distribution | 192 | 0 | 0-1 | 0 | 192 | 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 (#-#) Alton Well's 1-2 | Range of Results (#-#) Alton Well's 3-4 |
|--|------------------------|--|--|
| Turbidity | 8760 | 0.03 – 0.24 | 0.02 – 0.15 |
| Chlorine | 8760 | 0.86 -1.64 | 1.16 - 1.64 |
| 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 (dd/mm/yy) | Result Value Alton # 1 | Result Value Alton # 2 | Result Value Alton # 3 | Result Value Alton # 4 | Unit of Measure | Exceedance |
|-----------|----------------------------------|------------------------|------------------------|------------------------|------------------------|----------------------|------------|
| Antimony | 23/07/03 20/11/03 | <0.001 | <0.001 | <0.001 | <0.0005 | | |
| Arsenic | 22/01/03 23/04/03 20/11/03 | <0.427 | <0.427 | <0.427 | <0.002 | ug/L ug/L ug/L | |
| Barium | 22/01/03 23/04/03 20/03/03 | 0.034 | 0.128 | 0.134 | 0.130 | | |
| Boron | 22/01/03 23/04/03 20/11/03 | 0.035 | 0.035 | 0.030 | 0.036 | | |
| Cadmium | 23/04/03 20/11/03 | <0.0001 | | | <0.0001 | | |
| Chromium | 22/01/03 23/04/03 20/11/03 | <0.009 | <0.009 | <0.009 | <0.005 | | |
| Lead | 22/01/03 23/04/03 20/11/03 | 0.860 | 3.54 | 0.518 | 0.860 | ug/L ug/L ug/L | |
| Mercury | 22/01/03 23/04/03 | 0.51 | <0.08 | 0.10 | 0.24 | ug/L ug/L ug/L | |
| Selenium | 22/01/03 23/04/03 20/11/03 | 0.574 | <0.404 | <0.404 | <0.002 | ug/L ug/L ug/L | |
| Uranium | 22/01/03 23/04/03 20/11/03 | 0.0002 | 0.0005 | 0.0005 | 0.0005 | | |
| Fluoride | 23/04/03 20/11/03 | 0.026 | <0.021 | 0.030 | 0.059 | | |
| Nitrite | 23/07/03 20/11/03 | <0.017 | <0.017 | <0.017 | <0.017 | | |
| Nitrate | 23/07/03 20/11/03 | 8.44 | 7.61 | 0.481 | 1.08 | | |

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

* ND = Not detected

| Parameter | Sample Date (dd/mm/yy) | Result Value Alton # 1 | Result Value Alton # 2 | Result Value Alton # 3 | Result Value Alton # 4 | Unit of Measure | Exceedance |
|---|----------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|----------------------|------------|
| Alachlor | 23/04/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Aldicarb | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Aldrin + Dieldrin | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Atrazine + N-dealkylated metabolites | 20/11/03 | | | | ND | ug/L | |
| Atrazine | 23/07/03 | ND | ND | ND | | ug/L | |
| Azinphos-methyl | 23/04/03 20/11/03 | <0.31 | ND | ND | ND | ug/L ug/L | |
| Bendiocarb | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Benzene | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Benzo(a)pyrene | 23/07/03 21/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Bromoxynil | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Carbaryl | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Carbofuran | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Carbon Tetrachloride | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Chlordane (Total) | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Chlorpyrifos | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Cyanazine | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Diazinon | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Dicamba | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| 1,2-Dichlorobenzene | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| 1,4-Dichlorobenzene | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Dichlorodiphenyltrichloroethane (DDT) + metabolites | 23/04/03 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L ug/L | |

| | | | | | | | |
|---|----------------------|-------|-------|-------|-------|--------------|--|
| 1,2-Dichloroethane | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| 1,1-Dichloroethylene (vinylidene chloride) | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Dichloromethane | 23/07/03 20/11/03 | <0.23 | <0.23 | ND | 0.51 | ug/L ug/L | |
| 2-4 Dichlorophenol | 23/07/03 20/11/03 | ND | ND | ND | | ug/L ug/L | |
| 2,4-Dichlorophenoxy acetic acid (2,4-D) | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Diclofop-methyl | 23/07/03 20/11/03 | <0.08 | ND | ND | ND | ug/L ug/L | |
| Dimethoate | 23/07/03 20/11/03 | ND | <0.46 | <0.46 | <0.46 | ug/L ug/L | |
| Dinoseb | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Diquat | 23/07/03 20/11/03 | ND | ND | ND | ND | ppb | |
| Diuron | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Glyphosate | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Heptachlor + Heptachlor Epoxide | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Linadane (Total) | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Malathion | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Methoxychlor | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Metolachlor | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Metribuzin | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Monochlorobenzene | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Paraquat | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Parathion | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Pentachlorophenol | 23/07/03 20/11/03 | <0.49 | ND | ND | | ug/L ug/L | |
| Phorate | 23/07/03 20/11/03 | ND | ND | ND | <0.64 | ug/L ug/L | |
| Picloram | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Polychlorinated Biphenyls(PCB) | 23/07/03 20/11/03 | ND | ND | ND | <0.08 | ug/L ug/L | |
| Promethyne | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Simazine | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| THM (NOTE: show latest quarterly average) | 23/07/03 20/11/03 | 12.4 | 11.6 | 9.25 | 9.07 | ug/L ug/L | |

| | | | | | | | |
|---|----------------------|-------|-------|-------|----|--------------|--|
| Temephos | 23/07/03 20/11/03 | <0.32 | ND | ND | ND | ug/L ug/L | |
| Terbufos | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Tetrachloroethylene | 23/07/03 20/11/03 | <0.22 | <0.22 | ND | ND | ug/L ug/L | |
| 2,3,4,6-Tetrachlorophenol | 23/07/03 20/11/03 | ND | ND | ND | | ug/L ug/L | |
| Triallate | 23/07/03 20/11/03 | ND | ND | <0.59 | ND | ug/L ug/L | |
| Trichloroethylene | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| 2,4,6-Trichlorophenol | 23/07/03 20/11/03 | ND | ND | ND | | ug/L ug/L | |
| 2,4,5-Trichlorophenoxy acetic acid (2,4,5-T) | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Trifluralin | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L ug/L | |
| Vinyl Chloride | 23/07/03 20/11/03 | ND | ND | ND | ND | ug/L 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)