



OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	220009158
Drinking-Water System Name:	Grafton Well Supply
Drinking-Water System Owner:	Corporation of the Township of Alnwick/Haldimand
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1 to December 31, 2013

<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 [] No [X]</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;"> <ul style="list-style-type: none"> - Township of Alnwick/Haldimand Office 10836 County Rd. 2, Grafton Ontario - Township of Alnwick/Haldimand Satellite Office 9059 County Rd. No. 45, Roseneath Ontario - Lakefront Utility Services Inc. Office 207 Division Street, Cobourg Ontario </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served:</p> <div style="border: 1px solid black; width: 100px; height: 20px; margin-bottom: 10px;"></div> <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; width: 100px; height: 20px; display: inline-block;"></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 all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
N/A	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 []



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 Hamlet of Grafton Communal Water System supplies water to approximately 1000 residents.

Water is taken from 2 wells located at the water plant on Edwardson Road. The water is disinfected with sodium hypochlorite and sodium silicate is added to sequester the iron as the water enters the plant. After the appropriate contact time, water is pumped to the distribution system with variable speed pumps, which modulate to maintain the distribution system pressure.

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

-New High Lift Pump #3 - \$12,000.00
 -New SCADA system - \$63,000.00
 -New Chlorine Analyzer - \$5500.00
 -New Sodium Silicate Pump - \$4000.00
 -Outside of general maintenance items associated with the well supply and distribution system.

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	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
07/23/13	Low Pressure	0	Psi	Pressure restored, flush and sampled	07/26/13
09/10/13	Loss of continuous analyzers		Psi, Cl2	Repaired comm line	09/11/13



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 #)
Raw	106	0 – 0	0 – 1	N/A	N/A
Treated	53	0 – 0	0 – 0	53	0 – 480
Distribution	163	0 – 0	0 – 0	106	0 – 12

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	Range of Results (min #)-(max #)
Turbidity	24	0.14 – 0.70 (NTU)
Chlorine	8760	0.26– 1.26
Fluoride (If the DWS provides fluoridation)	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, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
N/A				

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	Jan. 07/13	0.00013	mg/l	No
Arsenic	Jan. 07/13	0.0003	mg/l	No
Barium	Jan. 07/13	0.145	mg/l	No
Boron	Jan. 07/13	0.03	mg/l	No
Cadmium	Jan. 07/13	0.000007	mg/l	No
Chromium	Jan. 07/13	<0.0005	mg/l	No
*Lead	Jan. 07/13	0.00024	mg/l	No
Mercury	Jan. 07/13	0.000007	mg/l	No
Selenium	Jan. 07/13	<0.001	mg/l	No
Sodium	Jan. 11/10	16.9	mg/l	No
Uranium	Jan. 07/13	0.000051	mg/l	No

Fluoride	Jan. 14/10	0.16	mg/l	No
Nitrite	Oct. 7/13	0.003	mg/l	No
Nitrate	Oct. 7/13	0.018	mg/l	No

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems.

Summary of lead testing under Schedule 15.1 during this reporting period

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
Plumbing	N/A		
Distribution	N/A		

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	Jan. 07/13	<0.00002	mg/l	No
Aldicarb	Jan. 07/13	<0.00001	mg/l	No
Aldrin + Dieldrin	Jan. 07/13	<0.00001	mg/l	No
Atrazine + N-dealkylated metabolites	Jan. 07/13	<0.00001	mg/l	No
Azinphos-methyl	Jan. 07/13	<0.00002	mg/l	No
Bendiocarb	Jan. 07/13	<0.00001	mg/l	No
Benzene	Jan. 07/13	<0.00032	mg/l	No
Benzo(a)pyrene	Jan. 07/13	<0.000004	mg/l	No
Bromoxynil	Jan. 07/13	<0.000033	mg/l	No
Carbaryl	Jan. 07/13	<0.00001	mg/l	No
Carbofuran	Jan. 07/13	<0.00001	mg/l	No
Carbon Tetrachloride	Jan. 07/13	<0.00016	mg/l	No
Chlordane (Total)	Jan. 07/13	<0.00001	mg/l	No
Chlorpyrifos	Jan. 07/13	<0.00002	mg/l	No
Cyanazine	Jan. 07/13	<0.00003	mg/l	No
Diazinon	Jan. 07/13	<0.00002	mg/l	No
Dicamba	Jan. 07/13	<0.00020	mg/l	No
1,2-Dichlorobenzene	Jan. 07/13	<0.00041	mg/l	No
1,4-Dichlorobenzene	Jan. 07/13	<0.00036	mg/l	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Jan. 07/13	<0.00001	mg/l	No
1,2-Dichloroethane	Jan. 07/13	<0.00001	mg/l	No
1,1-Dichloroethylene (vinylidene chloride)	Jan. 07/13	<0.00033	mg/l	No
Dichloromethane	Jan. 07/13	<0.00035	mg/l	No

2-4 Dichlorophenol	Jan. 07/13	<0.00015	mg/l	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan. 07/13	<0.00019	mg/l	No
Diclofop-methyl	Jan. 07/13	<0.00040	mg/l	No
Dimethoate	Jan. 07/13	<0.00003	mg/l	No
Dinoseb	Jan. 07/13	<0.000036	mg/l	No
Diquat	Jan. 07/13	<0.001	mg/l	No
Diuron	Jan. 07/13	<0.00003	mg/l	No
Glyphosate	Jan. 07/13	<0.006	mg/l	No
Heptachlor + Heptachlor Epoxide	Jan. 07/13	<0.00001	mg/l	No
Lindane (Total)	Jan. 07/13	<0.00001	mg/l	No
Malathion	Jan. 07/13	<0.00002	mg/l	No
Methoxychlor	Jan. 07/13	<0.00001	mg/l	No
Metolachlor	Jan. 07/13	<0.00001	mg/l	No
Metribuzin	Jan. 07/13	<0.00002	mg/l	No
Monochlorobenzene	Jan. 07/13	<0.00003	mg/l	No
Paraquat	Jan. 07/13	<0.001	mg/l	No
Parathion	Jan. 07/13	<0.00002	mg/l	No
Pentachlorophenol	Jan. 07/13	<0.00015	mg/l	No
Phorate	Jan. 07/13	<0.00001	mg/l	No
Picloram	Jan. 07/13	<0.001	mg/l	No
Polychlorinated Biphenyls(PCB)	Jan. 07/13	<0.00004	mg/l	No
Prometryne	Jan. 07/13	<0.00003	mg/l	No
Simazine	Jan. 07/13	<0.00001	mg/l	No
THM (NOTE: show latest annual average)	2013 Avg.	0.033	mg/l	No
Temephos	Jan. 07/13	<0.00001	mg/l	No
Terbufos	Jan. 07/13	<0.00001	mg/l	No
Tetrachloroethylene	Jan. 07/13	<0.00044	mg/l	No
2,3,4,6-Tetrachlorophenol	Jan. 07/13	<0.00014	mg/l	No
Triallate	Jan. 07/13	<0.00001	mg/l	No
Trichloroethylene	Jan. 07/13	<0.00044	mg/l	No
2,4,6-Trichlorophenol	Jan. 07/13	<0.00014	mg/l	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Jan. 07/13	<0.00022	mg/l	No
Trifluralin	Jan. 07/13	<0.00002	mg/l	No
Vinyl Chloride	Jan. 07/13	<0.00017	mg/l	No

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
N/A			