



**SECTION 11 ANNUAL REPORT**

<b>Drinking-Water System Number:</b>	<b>220006393</b>
<b>Drinking-Water System Name:</b>	Keene Heights Subdivision Drinking Water System
<b>Drinking-Water System Owner:</b>	The Township of Otonabee-South Monaghan
<b>Drinking-Water System Category:</b>	Small Municipal Residential
<b>Period being reported:</b>	January 1, 2010 to December 31, 2010

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></p> <p><b>Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [X]</b></p> <p><b>Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No [ ]</b></p> <p><b>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</b></p> <table border="1" style="width: 100%;"> <tr> <td>Public access/notice via the web. Public access/notice via Government Office</td> </tr> </table>	Public access/notice via the web. Public access/notice via Government Office	<p><b><u>Complete for all other Categories.</u></b></p> <p><b>Number of Designated Facilities served:</b></p> <p style="text-align: center;">NONE</p> <p><b>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ ]</b></p> <p><b>Number of Interested Authorities you report to:</b></p> <p style="text-align: center;">NONE</p> <p><b>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ ] No [ ]</b></p>
Public access/notice via the web. Public access/notice via Government Office		

**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
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 [ ]**



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

A groundwater well supply source complete with sodium hypochlorite disinfection and sodium silicate sequestering for iron control serving thirty-seven homes in the Keene Heights Subdivision. This facility contains continuous, alarmed, on-line monitoring for treated water free chlorine residual and treated water turbidity.

List all water treatment chemicals used over this reporting period

Sodium Hypochlorite – 12%  
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

- ◆ Replacement Preventative Maintenance Kits for Chemical Analyzers & Pumps – Approx. \$1600;
- ◆ Replacement of Online Chlorine Analyzer – Approx. \$3500;
- ◆ Mobilization and Demobilization – Drilling of 2 Wells – Approx. \$15,000; and
- ◆ Pump Testing – Approx. \$2,200.

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
NONE					

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, Well 4	12	0 - 0	0 - 0	Not Required	
Distribution	52	0 - 0	0 - 0	52	0 - 4

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, Raw Well 4 (NTU)	12	0.11 – 0.64
Turbidity, Treated (NTU)	8760	0.009 – 0.671
Chlorine, Treated	8760	0.73 – 1.98
Chlorine, Treated	136	0.93 – 1.61
Chlorine, Distribution	127	0.67 – 1.37
Fluoride (If the DWS provides fluoridation)	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, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
NONE				

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

Parameter	Sample Date	Sample Result	Exceedance
Antimony: Sb (ug/L) - TW	2009/03/10	< 0.020	No
Arsenic: As (ug/L) - TW	2009/03/10	0.30	No
Barium: Ba (ug/L) - TW	2009/03/10	244.00	No
Boron: B (ug/L) - TW	2009/03/10	20.50	No

Cadmium: Cd (ug/L) - TW	2009/03/10	< 0.0030	No
Chromium: Cr (ug/L) - TW	2009/03/10	0.80	No
Lead: Pb (ug/L) - DW	2007/03/19	0.17	No
Mercury: Hg (ug/L) - TW	2009/03/10	< 0.020	No
Selenium: Se (ug/L) - TW	2009/03/10	< 1.00	No
Sodium: Na (mg/L) - TW	2008/10/14	24.10	Yes
Uranium: U (ug/L) - TW	2009/03/10	0.23	No
Fluoride Residual: Mean (mg/L) - TW	2008/09/02	0.17	No
Nitrite (mg/L) - TW	2010/01/04	< 0.0050	No
Nitrite (mg/L) - TW	2010/04/06	< 0.0050	No
Nitrite (mg/L) - TW	2010/07/12	< 0.0050	No
Nitrite (mg/L) - TW	2010/10/04	< 0.0050	No
Nitrate (mg/L) - TW	2010/01/04	< 0.013	No
Nitrate (mg/L) - TW	2010/04/06	< 0.013	No
Nitrate (mg/L) - TW	2010/07/12	< 0.013	No
Nitrate (mg/L) - TW	2010/10/04	< 0.013	No

**Summary of lead testing under Schedule 15.1 during this reporting period**

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
<b>Plumbing</b>	<b>NONE*</b>		
<b>Distribution</b>	<b>NONE*</b>		

**\*This system is exempt from plumbing sampling for lead. This system must collect distribution pH and alkalinity samples under the reduced sampling table during each sampling period in every 12 month period and distribution lead samples under the reduced sampling table during each sampling period in every third 12-month period. The 2010 reporting period was not the third 12-month period so no lead samples were collected as per regulatory requirements.**

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

Parameter	Sample Date	Result Value	Exceedance
Alachlor (ug/L) - TW	2009/03/10	< 0.11	No
Aldicarb (ug/L) - TW	2009/03/10	< 0.30	No
Aldrin + Dieldrin (ug/L) - TW	2009/03/10	< 0.067	No
Atrazine + N-dealkylated metabolites (ug/L) - TW	2009/03/10	< 0.12	No
Azinphos-methyl (ug/L) - TW	2009/03/10	< 0.21	No
Bendiocarb (ug/L) - TW	2009/03/10	< 0.13	No
Benzene (ug/L) - TW	2009/03/11	< 0.37	No



Benzo(a)pyrene (ug/L) - TW	2009/03/10	< 0.0040	No
Bromoxynil (ug/L) - TW	2009/03/10	< 0.33	No
Carbaryl (ug/L) - TW	2009/03/10	< 0.16	No
Carbofuran (ug/L) - TW	2009/03/10	< 0.37	No
Carbon Tetrachloride (ug/L) - TW	2009/03/11	< 0.41	No
Chlordane:Total (ug/L) - TW	2009/03/10	< 0.11	No
Chlorpyrifos (ug/L) - TW	2009/03/10	< 0.18	No
Cyanazine (ug/L) - TW	2009/03/10	< 0.18	No
Diazinon (ug/L) - TW	2009/03/10	< 0.081	No
Dicamba (ug/L) - TW	2009/03/10	< 0.20	No
1,2-Dichlorobenzene (ug/L) - TW	2009/03/11	< 0.50	No
1,4-Dichlorobenzene (ug/L) - TW	2009/03/11	< 0.21	No
Dichlorodiphenyltrichloroethane(DDT) + metabolites (ug/L) - TW	2009/03/10	< 0.14	No
1,2-Dichloroethane (ug/L) - TW	2009/03/11	< 0.43	No
1,1-Dichloroethylene (ug/L) - TW	2009/03/11	< 0.41	No
Dichloromethane (ug/L) - TW	2009/03/11	< 0.34	No
2,4-Dichlorophenol (ug/L) - TW	2009/03/10	< 0.15	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW	2009/03/10	< 0.19	No
Diclofop-methyl (ug/L) - TW	2009/03/10	< 0.40	No
Dimethoate (ug/L) - TW	2009/03/10	< 0.12	No
Dinoseb (ug/L) - TW	2009/03/10	< 0.36	No
Diquat (ug/L) - TW	2009/03/10	< 1.00	No
Diuron (ug/L) - TW	2009/03/10	< 0.087	No
Glyphosate (ug/L) - TW	2009/03/10	< 6.00	No
Heptachlor+Hepachlor Epoxide (ug/L) - TW	2009/03/10	< 0.11	No
Lindane: (ug/L) - TW	2009/03/10	< 0.056	No
Malathion (ug/L) - TW	2009/03/10	< 0.091	No
Methoxychlor (ug/L) - TW	2009/03/10	< 0.14	No
Metolachlor (ug/L) - TW	2009/03/10	< 0.092	No
Metribuzin (ug/L) - TW	2009/03/10	< 0.12	No
Monochlorobenzene (ug/L) - TW	2009/03/11	< 0.58	No
Paraquat (ug/L) - TW	2009/03/10	< 1.00	No
Parathion (ug/L) - TW	2009/03/10	< 0.18	No
Pentachlorophenol (ug/L) - TW	2009/03/10	< 0.15	No
Phorate (ug/L) - TW	2009/03/10	< 0.11	No
Picloram (ug/L) - TW	2009/03/10	< 0.25	No
Polychlorinated Bichenysl(PCB) (ug/L) - TW	2009/03/10	< 0.040	No
Prometryne (ug/L) - TW	2009/03/10	< 0.23	No



Simazine (ug/L) - TW	2009/03/10	< 0.15	No
THM (ug/L) - DW	2010	17.25	No
Temephos (ug/L) - TW	2009/03/10	< 0.31	No
Terbufos (ug/L) - TW	2009/03/10	< 0.12	No
Tetrachloroethylene (ug/L) - TW	2009/03/11	< 0.45	No
2,3,4,6-Tetrachlorophenol (ug/L) - TW	2009/03/10	< 0.14	No
Triallate (ug/L) - TW	2009/03/10	< 0.10	No
Trichloroethylene (ug/L) - TW	2009/03/11	< 0.38	No
2,4,6-Trichlorophenol (ug/L) - TW	2009/03/10	< 0.25	No
2,4,5-Trichlorophenoxy acetic acid (ug/L) - TW	2009/03/10	< 0.22	No
Trifluralin (ug/L) - TW	2009/03/10	< 0.12	No
Vinyl Chloride (ug/L) - TW	2009/03/11	< 0.17	No

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

<b>Parameter</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Date of Sample</b>
<b>NONE</b>			