

Part III Form 2

Section 11. ANNUAL REPORT.

Drinking-Water System Number:	220003485
Drinking-Water System	Garson Wells and Distribution System
Drinking-Water System Owner:	City of Greater Sudbury
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	From 2009-01-01 To 2009-12-31

<p><u><i>Complete if your Category is Large Municipal Residential or Small Municipal Residential</i></u></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></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;"> <p>www.greatersudbury.ca TDS-Engineering Department</p> </div>	<p><u><i>Complete for all other Categories.</i></u></p> <p>Number of Designated Facilities served: <input type="text" value="0"/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>Number of Interested Authorities you report to: <input type="text" value="0"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
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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

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/Citizen Service Centre
- Public access/notice via other method

Describe your Drinking-Water System

The Garson Distribution System encompasses all municipal distribution in the north east part of Garson, east of the intersection of O'Neil Drive W. and Falconbridge Road and North to include the Old Skead Rd. area of Garson. The Garson System includes INCO Well #1 located approximately 275 m east of the intersection of Spruce St. and Falconbridge Hwy., Garson Wells 1&3 located at 3450 Falconbridge Hwy., a pressure sustaining valve at the corner of O'Neil Drive W. and Falconbridge Hwy. In the case of an emergency, the pressure sustaining valve ensures a water supply to Garson by connecting the Garson and Sudbury/Wanapitei Systems. The system's wells take water from an unconfined aquifer in a sand and gravel formation at the Inco Well #1, and a sand, gravel, boulder formation at Garson 1&3. The water is disinfected by chlorination and fluoridated at the well sites before it enters the distribution system. A common chemical room and a chlorine contact chamber is installed at the Garson 1&3 site. Inco Garson Well #1 includes an oversized pipe on discharge that provides chlorine contact time.

List all water treatment chemicals used over this reporting period

Sodium Hypochlorite UN#1791, Hydrofluosilicic Acid UN#1778

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

Well protection and security upgrades: \$50,000.00

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

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
2009/06/10	Fluoride	2	mg/l	Resample/Re-test;	2009/06/11

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: INCO GARSON WELL#1					
	51	0 to 0	0 to 2		
Raw: ORELL ST. WELL #3					
	51	0 to 0	0 to 0		
Raw: ORELL ST. WELL#1					
	51	0 to 0	0 to 0		
Treated: GARSON INCO # 1 WELL TREATED					
	51	0 to 0	0 to 0	51	0 to 10
Treated: GARSON ORELL #1 & #3 WELL SUPPLY					
	51	0 to 0	0 to 0	51	0 to 10
Distribution					
	199	0 to 0	0 to 0	43	0 to 20

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 #)
Chlorine Residual Distribution System	8,760	0.13 - 2.17 mg/L

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

GARSON INCO # 1 WELL TREATED

Turbidity	8,760	0.04 - 2.00 NTU
Chlorine	8,760	0.34 - 3.14 mg/L
Fluoride (If the DWS provides fluoridation)	8,760	0.20 - 2.00 mg/L

GARSON ORELL #1 & #3 WELL SUPPLY

Turbidity	8,760	0.00 - 2.00 NTU
Chlorine	8,760	0.80 - 2.19 mg/L
Fluoride (If the DWS provides fluoridation)	8,760	0.20 - 0.70 mg/L

*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 or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Lead	2009/12/09	<0.001	mg/L	No

GARSON INCO # 1 WELL TREATED

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	2008/12/21	0.0005	mg/L	No
Arsenic	2008/12/21	0.0037	mg/L	No
Barium	2008/12/21	0.0456	mg/L	No
Boron	2008/12/21	0.015	mg/L	No
Cadmium	2008/12/21	0.0001	mg/L	No
Chromium	2008/12/21	0.0017	mg/L	No
Mercury	2008/12/21	0.0001	mg/L	No
Selenium	2008/12/21	0.0012	mg/L	No
Uranium	2008/12/21	0.001	mg/L	No
Fluoride	2004/01/19	0.1	mg/L	No
Nitrate	2009/03/16	0.84	mg/L	No
	2009/06/14	1.04	mg/L	No
	2009/09/13	0.96	mg/L	No
	2009/12/14	0.96	mg/L	No
Nitrite	2009/03/16	0.05	mg/L	No
	2009/06/14	0.05	mg/L	No
	2009/09/13	0.05	mg/L	No
	2009/12/14	0.05	mg/L	No
Sodium	2005/12/23	47.00	mg/L	Yes

GARSON ORELL #1 & #3 WELL SUPPLY

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	2008/12/21	0.0005	mg/L	No
Arsenic	2008/12/21	0.0036	mg/L	No
Barium	2008/12/21	0.0415	mg/L	No
Boron	2008/12/21	0.0072	mg/L	No
Cadmium	2008/12/21	0.0001	mg/L	No
Chromium	2008/12/21	0.0014	mg/L	No
Mercury	2008/12/21	0.00001	mg/L	No
Selenium	2008/12/21	0.0014	mg/L	No
Uranium	2008/12/21	0.001	mg/L	No
Fluoride	2004/01/19	0.1	mg/L	No

Nitrate	2009/03/16	0.56	mg/L	No
	2009/06/15	0.10	mg/L	No
	2009/09/13	0.57	mg/L	No
	2009/12/15	0.59	mg/L	No
Nitrite	2009/03/16	0.05	mg/L	No
	2009/06/15	0.05	mg/L	No
	2009/09/13	0.05	mg/L	No
	2009/12/15	0.05	mg/L	No
Sodium	2005/12/14	15.60	mg/L	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
Plumbing	88	0.001 - 0.0027 mg/L	0
Distribution	19	0.001 - 0.001 mg/L	0

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
THM (NOTE: show latest annual average)	2009	0.0037	mg/L	No

GARSON INCO # 1 WELL TREATED

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	2008/12/21	0.00041	mg/L	No
Aldicarb	2008/12/21	0.0006	mg/L	No
Aldrin + Dieldrin	2008/12/21	0.000004	mg/L	No
Atrazine + N-dealkylated metabolites	2008/12/21	0.0009	mg/L	No
Azinphos-methyl	2008/12/21	0.00031	mg/L	No
Bendiocarb	2008/12/21	0.0012	mg/L	No
Benzene	2008/12/21	0.00025	mg/L	No
Benzo(a)pyrene	2008/12/21	0.00001	mg/L	No
Bromoxynil	2008/12/21	0.00052	mg/L	No
Carbaryl	2008/12/21	0.0012	mg/L	No
Carbofuran	2008/12/21	0.0012	mg/L	No
Carbon Tetrachloride	2008/12/21	0.00025	mg/L	No
Chlordane (Total)	2008/12/21	0.000004	mg/L	No
Chlorpyrifos	2008/12/21	0.00031	mg/L	No
Cyanazine	2008/12/21	0.00031	mg/L	No
Diazinon	2008/12/21	0.00031	mg/L	No
Dicamba	2008/12/21	0.00021	mg/L	No
1,2-Dichlorobenzene	2008/12/21	0.00025	mg/L	No
1,4-Dichlorobenzene	2008/12/21	0.00025	mg/L	No
(DDT) + metabolites	2008/12/21	0.000005	mg/L	No
1,2-Dichloroethane	2008/12/21	0.00025	mg/L	No

1,1-Dichloroethylene (vinylidene chloride)	2008/12/21	0.00025	mg/L	No
Dichloromethane	2008/12/21	0.00025	mg/L	No
2-4 Dichlorophenol	2008/12/21	0.000056	mg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	2008/12/21	0.00021	mg/L	No
Diclofop-methyl	2008/12/21	0.00021	mg/L	No
Dimethoate	2008/12/21	0.00031	mg/L	No
Dinoseb	2008/12/21	0.000052	mg/L	No
Diquat	2008/12/21	0.007	mg/L	No
Diuron	2008/12/21	0.006	mg/L	No
Glyphosate	2008/12/21	0.02	mg/L	No
Heptachlor + Heptachlor Epoxide	2008/12/21	0.000004	mg/L	No
Linadane (Total)	2008/12/21	0.00000052	mg/L	No
Malathion	2008/12/21	0.00031	mg/L	No
Methoxychlor	2008/12/21	0.0000014	mg/L	No
Metolachlor	2008/12/21	0.00021	mg/L	No
Metribuzin	2008/12/21	0.00021	mg/L	No
Monochlorobenzene	2008/12/21	0.00025	mg/L	No
Paraquat	2008/12/21	0.001	mg/L	No
Parathion	2008/12/21	0.00021	mg/L	No
Pentachlorophenol	2008/12/21	0.000056	mg/L	No
Phorate	2008/12/21	0.00031	mg/L	No
Picloram	2008/12/21	0.000052	mg/L	No
Polychlorinated Biphenyls(PCB)	2008/12/21	0.0000043	mg/L	No
Prometryne	2008/12/21	0.00021	mg/L	No
Simazine	2008/12/21	0.00031	mg/L	No
Temephos	2006/02/23	0.02	mg/L	No
Terbufos	2008/12/21	0.00021	mg/L	No
Tetrachloroethylene	2008/12/21	0.00025	mg/L	No
2,3,4,6-Tetrachlorophenol	2008/12/21	0.000056	mg/L	No
Triallate	2008/12/21	0.00021	mg/L	No
Trichloroethylene	2008/12/21	0.00025	mg/L	No
2,4,6-Trichlorophenol	2008/12/21	0.000056	mg/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	2008/12/21	0.000052	mg/L	No
Trifluralin	2008/12/21	0.00021	mg/L	No
Vinyl Chloride	2008/12/21	0.00025	mg/L	No

GARSON ORELL #1 & #3 WELL SUPPLY

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	2008/12/21	0.00042	mg/L	No
Aldicarb	2008/12/21	0.0006	mg/L	No
Aldrin + Dieldrin	2008/12/21	0.000004	mg/L	No
Atrazine + N-dealkylated metabolites	2008/12/21	0.0009	mg/L	No
Azinphos-methyl	2008/12/21	0.00031	mg/L	No
Bendiocarb	2008/12/21	0.0012	mg/L	No
Benzene	2008/12/21	0.00025	mg/L	No
Benzo(a)pyrene	2008/12/21	0.00001	mg/L	No
Bromoxynil	2008/12/21	0.00052	mg/L	No
Carbaryl	2008/12/21	0.0012	mg/L	No
Carbofuran	2008/12/21	0.0012	mg/L	No
Carbon Tetrachloride	2008/12/21	0.00025	mg/L	No

Chlordane (Total)	2008/12/21	0.000004	mg/L	No
Chlorpyrifos	2008/12/21	0.00031	mg/L	No
Cyanazine	2008/12/21	0.00031	mg/L	No
Diazinon	2008/12/21	0.00031	mg/L	No
Dicamba	2008/12/21	0.00021	mg/L	No
1,2-Dichlorobenzene	2008/12/21	0.00025	mg/L	No
1,4-Dichlorobenzene	2008/12/21	0.00025	mg/L	No
(DDT) + metabolites	2008/12/21	0.000005	mg/L	No
1,2-Dichloroethane	2008/12/21	0.00025	mg/L	No
1,1-Dichloroethylene (vinylidene chloride)	2008/12/21	0.00025	mg/L	No
Dichloromethane	2008/12/21	0.00025	mg/L	No
2-4 Dichlorophenol	2008/12/21	0.000055	mg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	2008/12/21	0.00021	mg/L	No
Diclofop-methyl	2008/12/21	0.00021	mg/L	No
Dimethoate	2008/12/21	0.00031	mg/L	No
Dinoseb	2008/12/21	0.000052	mg/L	No
Diquat	2008/12/21	0.007	mg/L	No
Diuron	2008/12/21	0.006	mg/L	No
Glyphosate	2008/12/21	0.02	mg/L	No
Heptachlor + Heptachlor Epoxide	2008/12/21	0.000004	mg/L	No
Linadane (Total)	2008/12/21	0.00000034	mg/L	No
Malathion	2008/12/21	0.00031	mg/L	No
Methoxychlor	2008/12/21	0.00000092	mg/L	No
Metolachlor	2008/12/21	0.00021	mg/L	No
Metribuzin	2008/12/21	0.00021	mg/L	No
Monochlorobenzene	2008/12/21	0.00025	mg/L	No
Paraquat	2008/12/21	0.001	mg/L	No
Parathion	2008/12/21	0.00021	mg/L	No
Pentachlorophenol	2008/12/21	0.000055	mg/L	No
Phorate	2008/12/21	0.00031	mg/L	No
Picloram	2008/12/21	0.000052	mg/L	No
Polychlorinated Biphenyls(PCB)	2008/12/21	0.0000029	mg/L	No
Prometryne	2008/12/21	0.00021	mg/L	No
Simazine	2008/12/21	0.00031	mg/L	No
Temephos	2006/02/23	0.02	mg/L	No
Terbufos	2008/12/21	0.00021	mg/L	No
Tetrachloroethylene	2008/12/21	0.00317	mg/L	No
2,3,4,6-Tetrachlorophenol	2008/12/21	0.000055	mg/L	No
Triallate	2008/12/21	0.00021	mg/L	No
Trichloroethylene	2008/12/21	0.00025	mg/L	No
2,4,6-Trichlorophenol	2008/12/21	0.000055	mg/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	2008/12/21	0.000052	mg/L	No
Trifluralin	2008/12/21	0.00021	mg/L	No
Vinyl Chloride	2008/12/21	0.00025	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

(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)