

Town of New Tecumseth 2016 Alliston Drinking Water System Annual Report



Prepared in accordance with Section 11 of Ontario Regulation 170/03

For the Period of

January 1 to December 31, 2016

System Rating: Water Distribution and Supply Subsystem Class II

Drinking Water System No.: 220001174

Municipal DW License No.: 123-101, Issue No. 2

February 1, 2017

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1. INTRODUCTION

In accordance with Ontario Regulation 170/03 (O.Reg.170/03): Drinking Water Systems, the Town of New Tecumseth has prepared this Annual Report which is required to be completed no later than February 28th of every year. This report covers the period of January 1st to December 31st, 2016 and the information provided complies with the reporting requirements outlined in Section 11 of O.Reg.170/03.

A summary of the Town of New Tecumseth's drinking water system description is outlined below:

Drinking-Water System Number:	220001174
Drinking-Water System Name:	Alliston Water Supply System
Drinking-Water System Owner:	Corporation of the Town of New Tecumseth
Drinking-Water System Category:	Large Municipal Residential

2. REPORTING REQUIREMENTS (Section 11 - O.Reg.170/03)

2.1 Availability of Annual Water Report

This report has been prepared in accordance with Section 11 of Ontario Regulation 170/03 and is available, free of charge as follows:

- via the Town of New Tecumseth website (<http://newtecumseth.ca/>)
- via Public Request (email: drinkingwater@newtecumseth.ca or phone 705-435-3900 ext. 1432)

The users of water from the Town of New Tecumseth Alliston Drinking Water System are advised through the Town of New Tecumseth's website and local newspaper when this report is available and how to obtain a copy.

2.2 Drinking Water System Receiving Water

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

Drinking Water System Name	Drinking Water System Number
Kingsmere Village Distribution System	2600094133

2.3 Description of Drinking-Water System

The Alliston Water Supply System consists of six groundwater production wells and is supplemented with surface water from the Raymond A. Barker Ultra-filtration Plant in Collingwood and distributed via a 600 mm diameter transmission main to the Alliston Reservoir. It also consists of four in-ground reservoirs with a total capacity of 15,788 m³ and one elevated storage tank with a capacity of approximately 4,500 m³.

The Alliston Reservoir is the central location for the Supervisory Control and Data Acquisition (SCADA) system that provides various monitoring and control over the Alliston Water System. The Alliston Reservoir houses a high lift pumping station dedicated to the Honda of Canada Plant.

The Alliston Water Supply system distributes treated water to the communities of Alliston and Beeton, which includes approximately 22,700 consumers (based on 2016 Census from Statistics Canada). There are 6,250 service connections, comprising of residential, institutional, commercial and industrial consumers. In addition there are approximately 130 kilometers of water main and 650 hydrants.

Treated water from the Alliston distribution system is conveyed to Earl Rowe Provincial Park via a dedicated transmission main.

The Hillcrest Well Supply System operates as a self-contained system with one groundwater production well and one reservoir in the northern part of Alliston. The Hillcrest Well Supply System distributes treated water to the community of Hillcrest, which is composed of approximately 101 residential service connections. In addition, there are approximately 1.6 kilometers of water main and 11 fire hydrants. The Hillcrest system has a Pressure Sustaining Valve (PSV) that connects to the Alliston Water Supply System to allow water from the Alliston system to flow into the Hillcrest system should the pressure drop below a predetermined level. This provides additional capacity for fire protection and flexibility of supply from the Alliston Distribution System. Hillcrest Water System was not in service for 2016. Water was provided to the residents from the Alliston Water System.

2.4 Water Treatment Chemicals

The following water treatment chemicals were utilized during the reporting period:

- Sodium Hypochlorite (12%)
- Sodium Silicate

2.5 Significant Expenses Incurred

The following major expenses were incurred during the reporting period to install, repair or replace required equipment:

A brief summary and value of the expenses incurred, including those outlined above, are as follows:

Maintenance Activity	Costs Incurred (2016)
Flow Meter Calibration	\$1,645
SCADA and Server upgrades (both water and wastewater)	\$98,109
Alliston Well #5 Rehabilitation	\$25,197
Alliston Well #6 Rehabilitation	\$26,965
McKelvey Bulk Water Card System	\$36,337
McKelvey Gated Access – Site Security	\$16,320

2.6 Sampling and Testing

Drinking water samples were collected and tested in accordance of O.Reg. 170/03 and tested in accordance with O.Reg. 169/03.

2.6.1 Schedule 7 - Operational Checks

Operational checks including raw water turbidity, and free chlorine (treated and distribution) were conducted in accordance with Schedule 7 of O.Reg.170/03. The operational testing conducted during this reporting period are summarized in Table 1 of this report.

2.6.2 Schedule 10 - Microbiological Sampling and Testing

Microbiological testing on raw, treated and distribution water samples were conducted in accordance with Schedule 10-2, 10-3 and 10-4 of O.Reg.170/03. The microbiological testing and sampling conducted during this reporting period are summarized in Tables 2, 2.1 and 2.2 of this report.

In addition to the required microbiological testing from O. Reg. 170/03 (i.e. Total Coliform and E. Coli) Tables 2.1 and 2.2, include bacteriological health-related parameter; Heterotrophic Plate Count (HPC). HPC is a useful operational tool for monitoring general bacteriological water quality throughout the treatment process and in the distribution system. HPC results are not an indicator of water safety and, as such, should not be used as an indicator of potential adverse human health effects.

2.6.3 Schedule 13 - Chemical Testing

Chemical testing for organic and inorganic parameters was conducted on treated water samples in accordance with Schedule 13, Sections 13.2 (Schedule 23), 13.4 (Schedule 24), 13.8 and 13.9. The latest 36-month and 60-month test results are summarized in Table 3 of this report.

Chemical testing for trihalomethanes (THMs) and nitrate and nitrite was conducting quarterly in accordance with Schedule 13.6 and 13.7 of O.Reg 170/03 respectively. THMs are samples solely from the distribution system and nitrate and nitrites are samples at the reservoir (treated samples). The latest test results are summarized in in Table 3 of this report.

2.6.4 Schedule 15.1 – Lead

Lead and Alkalinity samples are collected from several locations in the distribution system in accordance with Schedule 15.1. Lead samples are required to be done every three year and was completed in 2014. Alkalinity samples are required to be sampled between December 15th and April 15th and June 15th and October 15th every year. The latest test results are summarized in Table 4 of this report.

2.6.5 Schedule 16 – Reporting of Adverse Test Results and Other Problem and Schedule 17 – Corrective Actions

Adverse water quality incidents (AWQI) were reported in accordance with Schedule 16 and corrective actions related to each incident were completed in accordance with Schedule 17. A summary of the AWQI's and associated corrective actions that occurred during this reporting period is included in Table 5 of this report.

Tables

**Table 1 - Schedule 7 Operational Checks
Summary of Raw and Treated Samples – Turbidity**

Sampling Location	Number of Samples	NTU (min/max)
Raw Water Turbidity		
Well #1	12	0.25/1.39
Well #4	12	0.25/0.84
Well #5	11	0.12/0.50
Well #6	11	0.14/0.44
Well #7	12	0.13/0.46
Well #8	12	0.11/0.35
Hillcrest Well	0	0

**Table 1.1 - Schedule 7 Operational Checks
Summary of Treated and Distribution Samples – Free Chlorine**

Sampling Location	Number of Samples	mg/L (min/max)
Treated Water Free Chlorine		
Well #1	8760*	0.60/2.20
Well #4	8760*	0.00/2.20
Well #5	8760*	0.00/2.20
Well #6	8760*	0.03/2.20
Well #7	8760*	0.61/2.20
Well #8	8760*	0.60/2.20
Hillcrest Well	**	
Parsons Road Reservoir	8760*	0.83/2.20
Mowder Boulevard Reservoir	8760*	1.22/2.20
Distribution Water Free Chlorine		
McKelvey Reservoir	8760*	0.75/2.20
Springs Reservoir	8760*	1.00/2.20

Notes:

- *8760 represents Continuous Monitoring
- ** Hillcrest Well was not in service in 2016 except for regulatory sampling and no water was directed to the distribution system.
- Low Chlorine residuals that are recorded by continuous monitoring equipment during equipment malfunctions / well not running or power outages are not considered to be an adverse event. These incidents are responded to by operations staff for resolution. Also, the value of 0.00 recorded by the continuous chlorine analyzer could be a result of equipment abnormality / SCADA issues / maintenance work or calibration.

**Table 2 - Schedule 10 Microbiological Sampling and Testing
Summary of Distribution System Samples**

Source	Number of Samples	E.Coli (min/max)	Total Coliform (min/max)	HPC (min/max)
Distribution System				
Routine Sampling Points	792	0/0	0/24	0/420
Other (main breaks, new construction)	79	0/0	0/0	0/1640
Total Distribution Samples		871		

**Table 2.1 - Schedule 10 Microbiological Sampling and Testing
Summary of Treated Water Samples**

Source	Number of Samples	E.Coli (min/max)	Total Coliform (min/max)	HPC (min/max)
Treated Water				
Well #1	52	0/0	0/0	0/2
Well #4	52	0/0	0/0	0/1
Well #5	52	0/0	0/0	0/3
Well #6	52	0/0	0/0	0/780
Well #7	52	0/0	0/0	0/1
Well #8	52	0/0	0/0	0/37
Hillcrest Well	4	0/0	0/0	0/1
Parsons Road Reservoir	52	0/0	0/0	0/68
Mowder Reservoir	52	0/0	0/0	0/1
McKelvey Reservoir	52	0/0	0/1	0/154
Springs Reservoir	52	0/0	0/24	0/3
Meter Chamber #2 (Pipeline)	52	0/0	0/0	0/6
Total Number of Treated Samples	576			

**Table 2.2 - Schedule 10 Microbiological Sampling and Testing
Summary of Raw Water Samples**

Source	Number of Samples	E.Coli (min/max)	Total Coliform (min/max)
Raw Water			
Well #1	52	0/0	0/0
Well #4	52	0/0	0/0
Well #5	52	0/0	0/0
Well #6	52	0/0	0/0
Well #7	52	0/0	0/0
Well #8	52	0/0	0/0
Hillcrest Well	4	0/0	0/0
Total Number of Raw Samples	316		

Notes:

**Table 3 - Schedule 13 Chemical Sampling and Testing
Summary of Treated Water Samples – Inorganics (Page 1 of 2)**

Parameter	Sample Date (mm/dd/yr)	Result Value	Exceedance	Standard
Well #1				
Antimony	02/23/2015	0.02 <MDL	No	6.0
Arsenic	02/23/2015	0.5	No	25
Barium	02/23/2015	104	No	1000
Boron	02/23/2015	148	No	5000
Cadmium	02/23/2015	0.003 <MDL	No	5.0
Chromium	02/23/2015	0.03 <MDL	No	50
Mercury	02/23/2015	0.03	No	1.0
Selenium	02/23/2015	1 <MDL	No	10
Uranium	02/23/2015	0.041	No	20
Well #4				
Antimony	03/16/2015	0.02	No	6.0
Arsenic	03/16/2015	0.3	No	25
Barium	03/16/2015	120	No	1000
Boron	03/16/2015	110	No	5000
Cadmium	03/16/2015	0.008	No	5.0
Chromium	03/16/2015	0.07	No	50
Mercury	03/16/2015	0.02	No	1.0
Selenium	03/16/2015	1 <MDL	No	10
Uranium	03/16/2015	0.006	No	20
Well #5				
Antimony	02/23/2015	0.02 <MDL	No	6.0
Arsenic	02/23/2015	0.7	No	25
Barium	02/23/2015	85.7	No	1000
Boron	02/23/2015	86	No	5000
Cadmium	02/23/2015	0.003 <MDL	No	5.0
Chromium	02/23/2015	0.03 <MDL	No	50
Mercury	02/23/2015	0.01	No	1.0
Selenium	02/23/2015	1 <MDL	No	10
Uranium	02/23/2015	0.016	No	20
Well #6				
Antimony	02/24/2015	0.02 <MDL	No	6.0
Arsenic	02/24/2015	0.2	No	25
Barium	02/24/2015	106	No	1000
Boron	02/24/2015	78	No	5000
Cadmium	02/24/2015	0.003 <MDL	No	5.0
Chromium	02/24/2015	0.03 <MDL	No	50
Mercury	02/24/2015	0.04	No	1.0
Selenium	02/24/2015	1 <MDL	No	10
Uranium	02/24/2015	0.002 <MDL	No	20
Well #7				
Antimony	02/23/2015	0.02 <MDL	No	6.0
Arsenic	02/23/2015	0.2 <MDL	No	25
Barium	02/23/2015	126	No	1000
Boron	02/23/2015	18.9	No	5000
Cadmium	02/23/2015	0.003 <MDL	No	5.0
Chromium	02/23/2015	0.03 <MDL	No	50
Mercury	02/23/2015	0.02	No	1.0
Selenium	02/23/2015	1 <MDL	No	10
Uranium	02/23/2015	0.012	No	20

Notes:

- Results expressed in µg/L
- MDL – Maximum Detection Limit

**Table 3 - Schedule 13 Chemical Sampling and Testing
Summary of Treated Water Samples – Inorganics (Page 2 of 2)**

Parameter	Sample Date (mm/dd/yr)	Result Value	Exceedance	Standard
Well #8				
Antimony	04/07/2014	0.02 <MDL	No	6.0
Arsenic	04/07/2014	2.7	No	25
Barium	04/07/2014	48.9	No	1000
Boron	04/07/2014	98	No	5000
Cadmium	04/07/2014	0.004 <MDL	No	5.0
Chromium	04/07/2014	1.5	No	50
Mercury	04/07/2014	0.01 <MDL	No	1.0
Selenium	04/07/2014	1 <MDL	No	10
Uranium	04/07/2014	0.017	No	20
Parsons Road Reservoir				
Antimony	02/23/2015	0.15	No	6.0
Arsenic	02/23/2015	0.4	No	25
Barium	02/23/2015	15.8	No	1000
Boron	02/23/2015	17.3	No	5000
Cadmium	02/23/2015	0.008	No	5.0
Chromium	02/23/2015	0.06	No	50
Mercury	02/23/2015	0.01	No	1.0
Selenium	02/23/2015	1 <MDL	No	10
Uranium	02/23/2015	0.223	No	20
Hillcrest Well				
Antimony	04/14/2016	0.02 <MDL	No	6.0
Arsenic	04/14/2016	0.2 <MDL	No	25
Barium	04/14/2016	101	No	1000
Boron	04/14/2016	138	No	5000
Cadmium	04/14/2016	0.008	No	5.0
Chromium	04/14/2016	0.25	No	50
Mercury	04/14/2016	0.1 <MDL	No	1.0
Selenium	04/14/2016	0.04 <MDL	No	10
Uranium	04/14/2016	0.084	No	20

Notes:

- Results expressed in µg/L
- MDL – Maximum Detection Limit

**Table 3.1 - Schedule 13 Chemical Sampling and Testing
Summary of Treated Water Samples – Organics (Page 1 of 8)**

Parameter	Sample Date (mm/dd/yr)	Result Value	Exceedance	Standard
Well #1				
Alachlor	02/23/2015	0.02<MDL	No	5.0
Aldicarb	02/23/2015	0.01<MDL	No	9.0
Aldrin+Dieldrin	02/23/2015	0.01<MDL	No	0.7
Atrazine+N-dealkylated metabolites	02/23/2015	0.01<MDL	No	5.0
Azinphos-methyl	02/23/2015	0.02<MDL	No	20.0
Bendiocarb	02/23/2015	0.01<MDL	No	40.0
Benzene	02/23/2015	0.32<MDL	No	5.0
Benzo(a)pyrene	02/23/2015	0.004<MDL	No	0.01
Bromoxynil	02/23/2015	0.33<MDL	No	5.0
Carbaryl	02/23/2015	0.01<MDL	No	90.0
Carbofuran	02/23/2015	0.01<MDL	No	90.0
Carbon Tetrachloride	02/23/2015	0.16<MDL	No	5.0
Chlordane (Total)	02/23/2015	0.01<MDL	No	7.0
Chlorpyrifos	02/23/2015	0.02<MDL	No	90.0
Cyanazine	02/23/2015	0.03<MDL	No	10.0
Diazinon	02/23/2015	0.02<MDL	No	20.0
Dicamba	02/23/2015	0.20<MDL	No	120
1,2-Dichlorobenzene	02/23/2015	0.41<MDL	No	200
1,4-Dichlorobenzene	02/23/2015	0.36<MDL	No	5.0
Dichlorodiphenyltrichloroethane (DDT) + metabolites	02/23/2015	0.01<MDL	No	30.0
1,2-dichloroethane	02/23/2015	0.35<MDL	No	5.0
1,1-Dichloroethylene (vinylidene chloride)	02/23/2015	0.33<MDL	No	14.0
Dichloromethane	02/23/2015	0.35<MDL	No	50.0
2,4-Dichlorophenol	02/23/2015	0.15<MDL	No	900
2,4-Dichlorophenoxy acetic acid (2,4-D)	02/23/2015	0.19<MDL	No	100
Diclofop-methyl	02/23/2015	0.40<MDL	No	9.0
Dimethoate	02/23/2015	0.03<MDL	No	20.0
Dinoseb	02/23/2015	0.36<MDL	No	10.0
Diquat	02/23/2015	1<MDL	No	70.0
Diuron	02/23/2015	0.03<MDL	No	150
Glyphosate	02/23/2015	1<MDL	No	280
Heptachlor + Heptachlor Epoxide	02/23/2015	0.01<MDL	No	3.0
Lindane (Total)	02/23/2015	0.01<MDL	No	4.0
Malathion	02/23/2015	0.02<MDL	No	190
Methoxychlor	02/23/2015	0.01<MDL	No	900
Metolachlor	02/23/2015	0.01<MDL	No	50.0
Metribuzin	02/23/2015	0.02<MDL	No	80.0
Monochlorobenzene	02/23/2015	0.3<MDL	No	80.0
Paraquat	02/23/2015	1<MDL	No	10.0
Parathion	02/23/2015	0.02<MDL	No	50.0
Pentachlorophenol	02/23/2015	0.15<MDL	No	60.0
Phorate	02/23/2015	0.01<MDL	No	2.0
Picloram	02/23/2015	1<MDL	No	190
Polychlorinated Biphenyls (PCB)	02/23/2015	0.04<MDL	No	3.0
Prometryne	02/23/2015	0.03<MDL	No	1.0
Simazine	02/23/2015	0.01<MDL	No	10.0
Temphos	02/23/2015	0.01<MDL	No	280
Terbufos	02/23/2015	0.01<MDL	No	1.0
Tetrachloroethylene (perchloroethylene)	02/23/2015	0.35<MDL	No	30.0
2,3,4,6-Tetrachlorophenol	02/23/2015	0.20<MDL	No	100
Triallate	02/23/2015	0.01<MDL	No	230
Trichloroethylene	02/23/2015	0.44<MDL	No	5.0
2,4,6-Trichlorophenol	02/23/2015	0.25<MDL	No	5.0
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	02/23/2015	0.22<MDL	No	280
Trifluralin	02/23/2015	0.02<MDL	No	45.0
Vinyl Chloride	02/23/2015	0.17<MDL	No	2.0

Notes:

- Results expressed in µg/L
- MDL – Maximum Detection Limit

**Table 3.1 - Schedule 13 Chemical Sampling and Testing
Summary of Treated Water Samples – Organics (Page 2 of 8)**

Parameter	Sample Date (mm/dd/yr)	Result Value	Exceedance	Standard
Well #4				
Alachlor	03/16/2015	0.02<MDL	No	5.0
Aldicarb	03/16/2015	0.01<MDL	No	9.0
Aldrin+Dieldrin	03/16/2015	0.01<MDL	No	0.7
Atrazine+N-dealkylated metabolites	03/16/2015	0.01<MDL	No	5.0
Azinphos-methyl	03/16/2015	0.02<MDL	No	20.0
Bendiocarb	03/16/2015	0.01<MDL	No	40.0
Benzene	03/16/2015	0.32<MDL	No	5.0
Benzo(a)pyrene	03/16/2015	0.004<MDL	No	0.01
Bromoxynil	03/16/2015	0.33<MDL	No	5.0
Carbaryl	03/16/2015	0.01<MDL	No	90.0
Carbofuran	03/16/2015	0.01<MDL	No	90.0
Carbon Tetrachloride	03/16/2015	0.16<MDL	No	5.0
Chlordane (Total)	03/16/2015	0.01<MDL	No	7.0
Chlorpyrifos	03/16/2015	0.02<MDL	No	90.0
Cyanazine	03/16/2015	0.03<MDL	No	10.0
Diazinon	03/16/2015	0.02<MDL	No	20.0
Dicamba	03/16/2015	0.20<MDL	No	120
1,2-Dichlorobenzene	03/16/2015	0.41<MDL	No	200
1,4-Dichlorobenzene	03/16/2015	0.36<MDL	No	5.0
Dichlorodiphenyltrichloroethane (DDT) + metabolites	03/16/2015	0.01<MDL	No	30.0
1,2-dichloroethane	03/16/2015	0.35<MDL	No	5.0
1,1-Dichloroethylene (vinylidene chloride)	03/16/2015	0.33<MDL	No	14.0
Dichloromethane	03/16/2015	0.35<MDL	No	50.0
2,4-Dichlorophenol	03/16/2015	0.15<MDL	No	900
2,4-Dichlorophenoxy acetic acid (2,4-D)	03/16/2015	0.19<MDL	No	100
Diclofop-methyl	03/16/2015	0.40<MDL	No	9.0
Dimethoate	03/16/2015	0.03<MDL	No	20.0
Dinoseb	03/16/2015	0.36<MDL	No	10.0
Diquat	03/16/2015	1<MDL	No	70.0
Diuron	03/16/2015	0.03<MDL	No	150
Glyphosate	03/16/2015	1<MDL	No	280
Heptachlor + Heptachlor Epoxide	03/16/2015	0.01<MDL	No	3.0
Lindane (Total)	03/16/2015	0.01<MDL	No	4.0
Malathion	03/16/2015	0.02<MDL	No	190
Methoxychlor	03/16/2015	0.01<MDL	No	900
Metolachlor	03/16/2015	0.01<MDL	No	50.0
Metribuzin	03/16/2015	0.02<MDL	No	80.0
Monochlorobenzene	03/16/2015	0.3<MDL	No	80.0
Paraquat	03/16/2015	1<MDL	No	10.0
Parathion	03/16/2015	0.02<MDL	No	50.0
Pentachlorophenol	03/16/2015	0.15<MDL	No	60.0
Phorate	03/16/2015	0.01<MDL	No	2.0
Picloram	03/16/2015	1<MDL	No	190
Polychlorinated Biphenyls (PCB)	03/16/2015	0.04<MDL	No	3.0
Prometryne	03/16/2015	0.03<MDL	No	1.0
Simazine	03/16/2015	0.01<MDL	No	10.0
Temphos	03/16/2015	0.01<MDL	No	280
Terbufos	03/16/2015	0.01<MDL	No	1.0
Tetrachloroethylene (perchloroethylene)	03/16/2015	0.35<MDL	No	30.0
2,3,4,6-Tetrachlorophenol	03/16/2015	0.20<MDL	No	100
Triallate	03/16/2015	0.01<MDL	No	230
Trichloroethylene	03/16/2015	0.44<MDL	No	5.0
2,4,6-Trichlorophenol	03/16/2015	0.25<MDL	No	5.0
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	03/16/2015	0.22<MDL	No	280
Trifluralin	03/16/2015	0.02<MDL	No	45.0
Vinyl Chloride	03/16/2015	0.17<MDL	No	2.0

Notes:

- Results expressed in µg/L
- MDL – Maximum Detection Limit

**Table 3.1 - Schedule 13 Chemical Sampling and Testing
Summary of Treated Water Samples – Organics (Page 3 of 8)**

Parameter	Sample Date (mm/dd/yr)	Result Value	Exceedance	Standard
Well #5				
Alachlor	02/23/2015	0.02<MDL	No	5.0
Aldicarb	02/23/2015	0.01<MDL	No	9.0
Aldrin+Dieldrin	02/23/2015	0.01<MDL	No	0.7
Atrazine+N-dealkylated metabolites	02/23/2015	0.01<MDL	No	5.0
Azinphos-methyl	02/23/2015	0.02<MDL	No	20.0
Bendiocarb	02/23/2015	0.01<MDL	No	40.0
Benzene	02/23/2015	0.32<MDL	No	5.0
Benzo(a)pyrene	02/23/2015	0.004<MDL	No	0.01
Bromoxynil	02/23/2015	0.33<MDL	No	5.0
Carbaryl	02/23/2015	0.01<MDL	No	90.0
Carbofuran	02/23/2015	0.01<MDL	No	90.0
Carbon Tetrachloride	02/23/2015	0.16<MDL	No	5.0
Chlordane (Total)	02/23/2015	0.01<MDL	No	7.0
Chlorpyrifos	02/23/2015	0.02<MDL	No	90.0
Cyanazine	02/23/2015	0.03<MDL	No	10.0
Diazinon	02/23/2015	0.02<MDL	No	20.0
Dicamba	02/23/2015	0.20<MDL	No	120
1,2-Dichlorobenzene	02/23/2015	0.41<MDL	No	200
1,4-Dichlorobenzene	02/23/2015	0.36<MDL	No	5.0
Dichlorodiphenyltrichloroethane (DDT) + metabolites	02/23/2015	0.01<MDL	No	30.0
1,2-dichloroethane	02/23/2015	0.35<MDL	No	5.0
1,1-Dichloroethylene (vinylidene chloride)	02/23/2015	0.33<MDL	No	14.0
Dichloromethane	02/23/2015	0.35<MDL	No	50.0
2,4-Dichlorophenol	02/23/2015	0.15<MDL	No	900
2,4-Dichlorophenoxy acetic acid (2,4-D)	02/23/2015	0.19<MDL	No	100
Diclofop-methyl	02/23/2015	0.40<MDL	No	9.0
Dimethoate	02/23/2015	0.03<MDL	No	20.0
Dinoseb	02/23/2015	0.36<MDL	No	10.0
Diquat	02/23/2015	1<MDL	No	70.0
Diuron	02/23/2015	0.03<MDL	No	150
Glyphosate	02/23/2015	1<MDL	No	280
Heptachlor + Heptachlor Epoxide	02/23/2015	0.01<MDL	No	3.0
Lindane (Total)	02/23/2015	0.01<MDL	No	4.0
Malathion	02/23/2015	0.02<MDL	No	190
Methoxychlor	02/23/2015	0.01<MDL	No	900
Metolachlor	02/23/2015	0.01<MDL	No	50.0
Metribuzin	02/23/2015	0.02<MDL	No	80.0
Monochlorobenzene	02/23/2015	0.3<MDL	No	80.0
Paraquat	02/23/2015	1<MDL	No	10.0
Parathion	02/23/2015	0.02<MDL	No	50.0
Pentachlorophenol	02/23/2015	0.15<MDL	No	60.0
Phorate	02/23/2015	0.01<MDL	No	2.0
Picloram	02/23/2015	1<MDL	No	190
Polychlorinated Biphenyls (PCB)	02/23/2015	0.04<MDL	No	3.0
Prometryne	02/23/2015	0.03<MDL	No	1.0
Simazine	02/23/2015	0.01<MDL	No	10.0
Temphos	02/23/2015	0.01<MDL	No	280
Terbufos	02/23/2015	0.01<MDL	No	1.0
Tetrachloroethylene (perchloroethylene)	02/23/2015	0.35<MDL	No	30.0
2,3,4,6-Tetrachlorophenol	02/23/2015	0.20<MDL	No	100
Triallate	02/23/2015	0.01<MDL	No	230
Trichloroethylene	02/23/2015	0.44<MDL	No	5.0
2,4,6-Trichlorophenol	02/23/2015	0.25<MDL	No	5.0
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	02/23/2015	0.22<MDL	No	280
Trifluralin	02/23/2015	0.02<MDL	No	45.0
Vinyl Chloride	02/23/2015	0.17<MDL	No	2.0

Notes:

- Results expressed in µg/L
- MDL – Maximum Detection Limit

**Table 3.1 - Schedule 13 Chemical Sampling and Testing
Summary of Treated Water Samples – Organics (Page 4 of 8)**

Parameter	Sample Date (mm/dd/yr)	Result Value	Exceedance	Standard
Well #6				
Alachlor	02/24/2015	0.02<MDL	No	5.0
Aldicarb	02/24/2015	0.01<MDL	No	9.0
Aldrin+Dieldrin	02/24/2015	0.01<MDL	No	0.7
Atrazine+N-dealkylated metabolites	02/24/2015	0.01<MDL	No	5.0
Azinphos-methyl	02/24/2015	0.02<MDL	No	20.0
Bendiocarb	02/24/2015	0.01<MDL	No	40.0
Benzene	02/24/2015	0.32<MDL	No	5.0
Benzo(a)pyrene	02/24/2015	0.004<MDL	No	0.01
Bromoxynil	02/24/2015	0.33<MDL	No	5.0
Carbaryl	02/24/2015	0.01<MDL	No	90.0
Carbofuran	02/24/2015	0.01<MDL	No	90.0
Carbon Tetrachloride	02/24/2015	0.16<MDL	No	5.0
Chlordane (Total)	02/24/2015	0.01<MDL	No	7.0
Chlorpyrifos	02/24/2015	0.02<MDL	No	90.0
Cyanazine	02/24/2015	0.03<MDL	No	10.0
Diazinon	02/24/2015	0.02<MDL	No	20.0
Dicamba	02/24/2015	0.20<MDL	No	120
1,2-Dichlorobenzene	02/24/2015	0.41<MDL	No	200
1,4-Dichlorobenzene	02/24/2015	0.36<MDL	No	5.0
Dichlorodiphenyltrichloroethane (DDT) + metabolites	02/24/2015	0.01<MDL	No	30.0
1,2-dichloroethane	02/24/2015	0.35<MDL	No	5.0
1,1-Dichloroethylene (vinylidene chloride)	02/24/2015	0.33<MDL	No	14.0
Dichloromethane	02/24/2015	0.35<MDL	No	50.0
2,4-Dichlorophenol	02/24/2015	0.15<MDL	No	900
2,4-Dichlorophenoxy acetic acid (2,4-D)	02/24/2015	0.19<MDL	No	100
Diclofop-methyl	02/24/2015	0.40<MDL	No	9.0
Dimethoate	02/24/2015	0.03<MDL	No	20.0
Dinoseb	02/24/2015	0.36<MDL	No	10.0
Diquat	02/24/2015	1<MDL	No	70.0
Diuron	02/24/2015	0.03<MDL	No	150
Glyphosate	02/24/2015	1<MDL	No	280
Heptachlor + Heptachlor Epoxide	02/24/2015	0.01<MDL	No	3.0
Lindane (Total)	02/24/2015	0.01<MDL	No	4.0
Malathion	02/24/2015	0.02<MDL	No	190
Methoxychlor	02/24/2015	0.01<MDL	No	900
Metolachlor	02/24/2015	0.01<MDL	No	50.0
Metribuzin	02/24/2015	0.02<MDL	No	80.0
Monochlorobenzene	02/24/2015	0.3<MDL	No	80.0
Paraquat	02/24/2015	1<MDL	No	10.0
Parathion	02/24/2015	0.02<MDL	No	50.0
Pentachlorophenol	02/24/2015	0.15<MDL	No	60.0
Phorate	02/24/2015	0.01<MDL	No	2.0
Picloram	02/24/2015	1<MDL	No	190
Polychlorinated Biphenyls (PCB)	02/24/2015	0.04<MDL	No	3.0
Prometryne	02/24/2015	0.03<MDL	No	1.0
Simazine	02/24/2015	0.01<MDL	No	10.0
Temephos	02/24/2015	0.01<MDL	No	280
Terbufos	02/24/2015	0.01<MDL	No	1.0
Tetrachloroethylene (perchloroethylene)	02/24/2015	0.35<MDL	No	30.0
2,3,4,6-Tetrachlorophenol	02/24/2015	0.20<MDL	No	100
Triallate	02/24/2015	0.01<MDL	No	230
Trichloroethylene	02/24/2015	0.44<MDL	No	5.0
2,4,6-Trichlorophenol	02/24/2015	0.25<MDL	No	5.0
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	02/24/2015	0.22<MDL	No	280
Trifluralin	02/24/2015	0.02<MDL	No	45.0
Vinyl Chloride	02/24/2015	0.17<MDL	No	2.0

Notes:

- Results expressed in µg/L
- MDL – Maximum Detection Limit

**Table 3.1 - Schedule 13 Chemical Sampling and Testing
Summary of Treated Water Samples – Organics (Page 5 of 8)**

Parameter	Sample Date (mm/dd/yr)	Result Value	Exceedance	Standard
Well #7				
Alachlor	02/23/2015	0.02<MDL	No	5.0
Aldicarb	02/23/2015	0.01<MDL	No	9.0
Aldrin+Dieldrin	02/23/2015	0.01<MDL	No	0.7
Atrazine+N-dealkylated metabolites	02/23/2015	0.01<MDL	No	5.0
Azinphos-methyl	02/23/2015	0.02<MDL	No	20.0
Bendiocarb	02/23/2015	0.01<MDL	No	40.0
Benzene	02/23/2015	0.32<MDL	No	5.0
Benzo(a)pyrene	02/23/2015	0.004<MDL	No	0.01
Bromoxynil	02/23/2015	0.33<MDL	No	5.0
Carbaryl	02/23/2015	0.01<MDL	No	90.0
Carbofuran	02/23/2015	0.01<MDL	No	90.0
Carbon Tetrachloride	02/23/2015	0.16<MDL	No	5.0
Chlordane (Total)	02/23/2015	0.01<MDL	No	7.0
Chlorpyrifos	02/23/2015	0.02<MDL	No	90.0
Cyanazine	02/23/2015	0.03<MDL	No	10.0
Diazinon	02/23/2015	0.02<MDL	No	20.0
Dicamba	02/23/2015	0.20<MDL	No	120
1,2-Dichlorobenzene	02/23/2015	0.41<MDL	No	200
1,4-Dichlorobenzene	02/23/2015	0.36<MDL	No	5.0
Dichlorodiphenyltrichloroethane (DDT) + metabolites	02/23/2015	0.01<MDL	No	30.0
1,2-dichloroethane	02/23/2015	0.35<MDL	No	5.0
1,1-Dichloroethylene (vinylidene chloride)	02/23/2015	0.33<MDL	No	14.0
Dichloromethane	02/23/2015	0.35<MDL	No	50.0
2,4-Dichlorophenol	02/23/2015	0.15<MDL	No	900
2,4-Dichlorophenoxy acetic acid (2,4-D)	02/23/2015	0.19<MDL	No	100
Diclofop-methyl	02/23/2015	0.40<MDL	No	9.0
Dimethoate	02/23/2015	0.03<MDL	No	20.0
Dinoseb	02/23/2015	0.36<MDL	No	10.0
Diquat	02/23/2015	1<MDL	No	70.0
Diuron	02/23/2015	0.03<MDL	No	150
Glyphosate	02/23/2015	1<MDL	No	280
Heptachlor + Heptachlor Epoxide	02/23/2015	0.01<MDL	No	3.0
Lindane (Total)	02/23/2015	0.01<MDL	No	4.0
Malathion	02/23/2015	0.02<MDL	No	190
Methoxychlor	02/23/2015	0.01<MDL	No	900
Metolachlor	02/23/2015	0.01<MDL	No	50.0
Metribuzin	02/23/2015	0.02<MDL	No	80.0
Monochlorobenzene	02/23/2015	0.3<MDL	No	80.0
Paraquat	02/23/2015	1<MDL	No	10.0
Parathion	02/23/2015	0.02<MDL	No	50.0
Pentachlorophenol	02/23/2015	0.15<MDL	No	60.0
Phorate	02/23/2015	0.01<MDL	No	2.0
Picloram	02/23/2015	1<MDL	No	190
Polychlorinated Biphenyls (PCB)	02/23/2015	0.04<MDL	No	3.0
Prometryne	02/23/2015	0.03<MDL	No	1.0
Simazine	02/23/2015	0.01<MDL	No	10.0
Temephos	02/23/2015	0.01<MDL	No	280
Terbufos	02/23/2015	0.01<MDL	No	1.0
Tetrachloroethylene (perchloroethylene)	02/23/2015	0.35<MDL	No	30.0
2,3,4,6-Tetrachlorophenol	02/23/2015	0.20<MDL	No	100
Triallate	02/23/2015	0.01<MDL	No	230
Trichloroethylene	02/23/2015	0.44<MDL	No	5.0
2,4,6-Trichlorophenol	02/23/2015	0.25<MDL	No	5.0
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	02/23/2015	0.22<MDL	No	280
Trifluralin	02/23/2015	0.02<MDL	No	45.0
Vinyl Chloride	02/23/2015	0.17<MDL	No	2.0

Notes

- Results expressed in µg/L
- MDL – Maximum Detection Limit

**Table 3.1 - Schedule 13 Chemical Sampling and Testing
Summary of Treated Water Samples – Organics (Page 6 of 8)**

Parameter	Sample Date (mm/dd/yr)	Result Value	Exceedance	Standard
Well #8				
Alachlor	04/07/2014	0.02<MDL	No	5.0
Aldicarb	04/07/2014	0.01<MDL	No	9.0
Aldrin+Dieldrin	04/07/2014	0.01<MDL	No	0.7
Atrazine+N-dealkylated metabolites	04/07/2014	0.01<MDL	No	5.0
Azinphos-methyl	04/07/2014	0.02<MDL	No	20.0
Bendiocarb	04/07/2014	0.01<MDL	No	40.0
Benzene	04/07/2014	0.32<MDL	No	5.0
Benzo(a)pyrene	04/07/2014	0.004<MDL	No	0.01
Bromoxynil	04/07/2014	0.33<MDL	No	5.0
Carbaryl	04/07/2014	0.01<MDL	No	90.0
Carbofuran	04/07/2014	0.01<MDL	No	90.0
Carbon Tetrachloride	04/07/2014	0.16<MDL	No	5.0
Chlordane (Total)	04/07/2014	0.01<MDL	No	7.0
Chlorpyrifos	04/07/2014	0.02<MDL	No	90.0
Cyanazine	04/07/2014	0.03<MDL	No	10.0
Diazinon	04/07/2014	0.02<MDL	No	20.0
Dicamba	04/07/2014	0.20<MDL	No	120
1,2-Dichlorobenzene	04/07/2014	0.41<MDL	No	200
1,4-Dichlorobenzene	04/07/2014	0.36<MDL	No	5.0
Dichlorodiphenyltrichloroethane (DDT) + metabolites	04/07/2014	0.01<MDL	No	30.0
1,2-dichloroethane	04/07/2014	0.35<MDL	No	5.0
1,1-Dichloroethylene (vinylidene chloride)	04/07/2014	0.33<MDL	No	14.0
Dichloromethane	04/07/2014	0.35<MDL	No	50.0
2,4-Dichlorophenol	04/07/2014	0.15<MDL	No	900
2,4-Dichlorophenoxy acetic acid (2,4-D)	04/07/2014	0.19<MDL	No	100
Diclofop-methyl	04/07/2014	0.40<MDL	No	9.0
Dimethoate	04/07/2014	0.03<MDL	No	20.0
Dinoseb	04/07/2014	0.36<MDL	No	10.0
Diquat	04/07/2014	1<MDL	No	70.0
Diuron	04/07/2014	0.03<MDL	No	150
Glyphosate	04/07/2014	1<MDL	No	280
Heptachlor + Heptachlor Epoxide	04/07/2014	0.01<MDL	No	3.0
Lindane (Total)	04/07/2014	0.01<MDL	No	4.0
Malathion	04/07/2014	0.02<MDL	No	190
Methoxychlor	04/07/2014	0.01<MDL	No	900
Metolachlor	04/07/2014	0.01<MDL	No	50.0
Metribuzin	04/07/2014	0.02<MDL	No	80.0
Monochlorobenzene	04/07/2014	0.3<MDL	No	80.0
Paraquat	04/07/2014	1<MDL	No	10.0
Parathion	04/07/2014	0.02<MDL	No	50.0
Pentachlorophenol	04/07/2014	0.15<MDL	No	60.0
Phorate	04/07/2014	0.01<MDL	No	2.0
Picloram	04/07/2014	1<MDL	No	190
Polychlorinated Biphenyls (PCB)	04/07/2014	0.04<MDL	No	3.0
Prometryne	04/07/2014	0.03<MDL	No	1.0
Simazine	04/07/2014	0.01<MDL	No	10.0
Temephos	04/07/2014	0.01<MDL	No	280
Terbufos	04/07/2014	0.01<MDL	No	1.0
Tetrachloroethylene (perchloroethylene)	04/07/2014	0.35<MDL	No	30.0
2,3,4,6-Tetrachlorophenol	04/07/2014	0.20<MDL	No	100
Triallate	04/07/2014	0.01<MDL	No	230
Trichloroethylene	04/07/2014	0.44<MDL	No	5.0
2,4,6-Trichlorophenol	04/07/2014	0.25<MDL	No	5.0
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	04/07/2014	0.22<MDL	No	280
Trifluralin	04/07/2014	0.02<MDL	No	45.0
Vinyl Chloride	04/07/2014	0.17<MDL	No	2.0

Notes:

- Results expressed in µg/L
- MDL – Maximum Detection Limit

**Table 3.1 - Schedule 13 Chemical Sampling and Testing
Summary of Treated Water Samples – Organics (Page 7 of 8)**

Parameter	Sample Date (mm/dd/yr)	Result Value	Exceedance	Standard
Parsons Road Reservoir				
Alachlor	02/23/2015	0.02<MDL	No	5.0
Aldicarb	02/23/2015	0.01<MDL	No	9.0
Aldrin+Dieldrin	02/23/2015	0.01<MDL	No	0.7
Atrazine+N-dealkylated metabolites	02/23/2015	0.01	No	5.0
Azinphos-methyl	02/23/2015	0.02<MDL	No	20.0
Bendiocarb	02/23/2015	0.01<MDL	No	40.0
Benzene	02/23/2015	0.32<MDL	No	5.0
Benzo(a)pyrene	02/23/2015	0.004<MDL	No	0.01
Bromoxynil	02/23/2015	0.33<MDL	No	5.0
Carbaryl	02/23/2015	0.01<MDL	No	90.0
Carbofuran	02/23/2015	0.01<MDL	No	90.0
Carbon Tetrachloride	02/23/2015	0.16<MDL	No	5.0
Chlordane (Total)	02/23/2015	0.01<MDL	No	7.0
Chlorpyrifos	02/23/2015	0.02<MDL	No	90.0
Cyanazine	02/23/2015	0.03<MDL	No	10.0
Diazinon	02/23/2015	0.02<MDL	No	20.0
Dicamba	02/23/2015	0.20<MDL	No	120
1,2-Dichlorobenzene	02/23/2015	0.41<MDL	No	200
1,4-Dichlorobenzene	02/23/2015	0.36<MDL	No	5.0
Dichlorodiphenyltrichloroethane (DDT) + metabolites	02/23/2015	0.01<MDL	No	30.0
1,2-dichloroethane	02/23/2015	0.35<MDL	No	5.0
1,1-Dichloroethylene (vinylidene chloride)	02/23/2015	0.33<MDL	No	14.0
Dichloromethane	02/23/2015	0.35<MDL	No	50.0
2,4-Dichlorophenol	02/23/2015	0.15<MDL	No	900
2,4-Dichlorophenoxy acetic acid (2,4-D)	02/23/2015	0.19<MDL	No	100
Diclofop-methyl	02/23/2015	0.40<MDL	No	9.0
Dimethoate	02/23/2015	0.03<MDL	No	20.0
Dinoseb	02/23/2015	0.36<MDL	No	10.0
Diquat	02/23/2015	1<MDL	No	70.0
Diuron	02/23/2015	0.03<MDL	No	150
Glyphosate	02/23/2015	1<MDL	No	280
Heptachlor + Heptachlor Epoxide	02/23/2015	0.01<MDL	No	3.0
Lindane (Total)	02/23/2015	0.01<MDL	No	4.0
Malathion	02/23/2015	0.02<MDL	No	190
Methoxychlor	02/23/2015	0.01<MDL	No	900
Metolachlor	02/23/2015	0.01<MDL	No	50.0
Metribuzin	02/23/2015	0.02<MDL	No	80.0
Monochlorobenzene	02/23/2015	0.3<MDL	No	80.0
Paraquat	02/23/2015	1<MDL	No	10.0
Parathion	02/23/2015	0.02<MDL	No	50.0
Pentachlorophenol	02/23/2015	0.15<MDL	No	60.0
Phorate	02/23/2015	0.01<MDL	No	2.0
Picloram	02/23/2015	1<MDL	No	190
Polychlorinated Biphenyls (PCB)	02/23/2015	0.04<MDL	No	3.0
Prometryne	02/23/2015	0.03<MDL	No	1.0
Simazine	02/23/2015	0.01<MDL	No	10.0
Temephos	02/23/2015	0.01<MDL	No	280
Terbufos	02/23/2015	0.01<MDL	No	1.0
Tetrachloroethylene (perchloroethylene)	02/23/2015	0.35<MDL	No	30.0
2,3,4,6-Tetrachlorophenol	02/23/2015	0.20<MDL	No	100
Triallate	02/23/2015	0.01<MDL	No	230
Trichloroethylene	02/23/2015	0.44<MDL	No	5.0
2,4,6-Trichlorophenol	02/23/2015	0.25<MDL	No	5.0
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	02/23/2015	0.22<MDL	No	280
Trifluralin	02/23/2015	0.02<MDL	No	45.0
Vinyl Chloride	02/23/2015	0.17<MDL	No	2.0

Notes:

- Results expressed in µg/L
- MDL – Maximum Detection Limit

**Table 3.1 - Schedule 13 Chemical Sampling and Testing
Summary of Treated Water Samples – Organics (Page 8 of 8)**

Parameter	Sample Date (mm/dd/yr)	Result Value	Exceedance	Standard
Hillcrest Well				
Alachlor	04/14/2016	0.02<MDL	No	5.0
Atrazine+N-dealkylated metabolites	04/14/2016	0.01<MDL	No	5.0
Azinphos-methyl	04/14/2016	0.05<MDL	No	20.0
Benzene	04/14/2016	0.32<MDL	No	5.0
Benzo(a)pyrene	04/14/2016	0.004<MDL	No	0.01
Bromoxynil	04/14/2016	0.33<MDL	No	5.0
Carbaryl	04/14/2016	0.05<MDL	No	90.0
Carbofuran	04/14/2016	0.01<MDL	No	90.0
Carbon Tetrachloride	04/14/2016	0.16<MDL	No	5.0
Chlorpyrifos	04/14/2016	0.02<MDL	No	90.0
Diazinon	04/14/2016	0.02<MDL	No	20.0
Dicamba	04/14/2016	0.20<MDL	No	120
1,2-Dichlorobenzene	04/14/2016	0.41<MDL	No	200
1,4-Dichlorobenzene	04/14/2016	0.36<MDL	No	5.0
1,2-dichloroethane	04/14/2016	0.35<MDL	No	5.0
1,1-Dichloroethylene (vinylidene chloride)	04/14/2016	0.33<MDL	No	14.0
Dichloromethane	04/14/2016	0.35<MDL	No	50.0
2,4-Dichlorophenol	04/14/2016	0.15<MDL	No	900
2,4-Dichlorophenoxy acetic acid (2,4-D)	04/14/2016	0.19<MDL	No	100
Diclofop-methyl	04/14/2016	0.40<MDL	No	9.0
Dimethoate	04/14/2016	0.03<MDL	No	20.0
Diquat	04/14/2016	1<MDL	No	70.0
Diuron	04/14/2016	0.03<MDL	No	150
Glyphosate	04/14/2016	1<MDL	No	280
Malathion	04/14/2016	0.02<MDL	No	190
MCPA	04/14/2016	0.00012<MDL	No	
Metolachlor	04/14/2016	0.01<MDL	No	50.0
Metribuzin	04/14/2016	0.02<MDL	No	80.0
Monochlorobenzene	04/14/2016	0.3<MDL	No	80.0
Paraquat	04/14/2016	1<MDL	No	10.0
Pentachlorophenol	04/14/2016	0.15<MDL	No	60.0
Phorate	04/14/2016	0.01<MDL	No	2.0
Picloram	04/14/2016	1<MDL	No	190
Polychlorinated Biphenyls (PCB)	04/14/2016	0.04<MDL	No	3.0
Prometryne	04/14/2016	0.03<MDL	No	1.0
Simazine	04/14/2016	0.01<MDL	No	10.0
Terbufos	04/14/2016	0.01<MDL	No	1.0
Tetrachloroethylene (perchloroethylene)	04/14/2016	0.35<MDL	No	30.0
2,3,4,6-Tetrachlorophenol	04/14/2016	0.20<MDL	No	100
Triallate	04/14/2016	0.01<MDL	No	230
Trichloroethylene	04/14/2016	0.44<MDL	No	5.0
2,4,6-Trichlorophenol	04/14/2016	0.25<MDL	No	5.0
Trifluralin	04/14/2016	0.02<MDL	No	45.0
Vinyl Chloride	04/14/2016	0.17<MDL	No	2.0

Notes:

- Results expressed in µg/L
- MDL – Maximum Detection Limit

**Table 3.2 - Schedule 13 Chemical Sampling and Testing
Summary of Treated Water Samples – Trihalomethanes**

Date	THM Results	THM Running Annual Average	Exceedance	Standard
Distribution – Dugdale Avenue Sampling Station				
January 11, 2016	33.0	40.8	No	100
April 11, 2016	27.0			
July 11, 2016	61.0			
October 11, 2016	42.0			

Notes:

- Results expressed in µg/L

**Table 3.3 - Schedule 13 Chemical Sampling and Testing
Summary of Treated Water Samples – Nitrite and Nitrate (Page 1 of 2)**

Parameter	Sample Date (mm/dd/yr)	Result Value	Exceedance	Standard
Well #1				
Nitrite	01/11/2016	0.003 <MDL	No	1.0
	04/11/2016	0.003 <MDL		
	07/11/2016	0.003 <MDL		
	10/11/2016	0.003 <MDL		
Nitrate	01/11/2016	0.013	No	10.0
	04/11/2016	0.014		
	07/11/2016	0.010		
	10/11/2016	0.017		
Well #4				
Nitrite	01/11/2016	0.003 <MDL	No	1.0
	04/18/2016	0.003 <MDL		
	07/11/2016	0.003 <MDL		
	10/11/2016	0.003 <MDL		
Nitrate	01/11/2016	0.007	No	10.0
	04/18/2016	0.006		
	07/11/2016	0.007		
	10/11/2016	0.011		
Well #5				
Nitrite	01/11/2016	0.003 <MDL	No	1.0
	04/11/2016	0.003 <MDL		
	07/11/2016	0.003 <MDL		
	10/11/2016	0.003 <MDL		
Nitrate	01/11/2016	0.006	No	10.0
	04/11/2016	0.012		
	07/11/2016	0.006 <MDL		
	10/11/2016	0.007		
Well #6				
Nitrite	01/11/2016	0.003 <MDL	No	1.0
	04/11/2016	0.003 <MDL		
	07/11/2016	0.003 <MDL		
	10/11/2016	0.003 <MDL		
Nitrate	01/11/2016	0.006	No	10.0
	04/11/2016	0.008		
	07/11/2016	0.009		
	10/11/2016	0.008		

**Table 3.3 - Schedule 13 Chemical Sampling and Testing
Summary of Treated Water Samples – Nitrite and Nitrate (Page 2 of 2)**

Parameter	Sample Date (mm/dd/yr)	Result Value	Exceedance	Standard
Well #7				
Nitrite	01/11/2016	0.003 <MDL	No	1.0
	04/11/2016	0.003 <MDL		
	07/11/2016	0.003 <MDL		
	10/11/2016	0.003 <MDL		
Nitrate	01/11/2016	0.006 <MDL	No	10.0
	04/11/2016	0.006 <MDL		
	07/11/2016	0.006 <MDL		
	10/11/2016	0.008		
Well #8				
Nitrite	01/11/2016	0.003 <MDL	No	1.0
	04/11/2016	0.003 <MDL		
	07/11/2016	0.003 <MDL		
	10/11/2016	0.003 <MDL		
Nitrate	01/11/2016	0.012	No	10.0
	04/11/2016	0.009		
	07/11/2016	0.020		
	10/11/2016	0.009		
Parsons Road Reservoir				
Nitrite	01/11/2016	0.003 <MDL	No	1.0
	04/11/2016	0.003 <MDL		
	07/11/2016	0.003 <MDL		
	10/11/2016	0.003 <MDL		
Nitrate	01/11/2016	0.267	No	10.0
	04/11/2016	0.280		
	07/11/2016	0.220		
	10/11/2016	0.228		
Hillcrest Well				
Nitrite	01/12/2016	0.003 <MDL	No	1.0
	04/14/2016	0.003 <MDL		
	07/12/2016	0.003 <MDL		
	10/12/2016	0.003 <MDL		
Nitrate	01/12/2016	0.034	No	10.0
	04/14/2016	0.752		
	07/12/2016	0.017		
	10/12/2016	0.031		

Notes:

- Results expressed in mg/L

**Table 3.4 - Schedule 13 Chemical Sampling and Testing
Summary of Treated Water Samples – Sodium and Fluoride**

Parameter	Sample Date (mm/dd/yr)	Result Value	Exceedance	Standard
Well #1				
Sodium	12/11/2012	31.8	Yes	200*
Fluoride	12/11/2012	0.19	No	1.5
Well #4				
Sodium	12/11/2012	37.6	Yes	200*
Fluoride	12/11/2012	0.17	No	1.5
Well #5				
Sodium	12/11/2012	23.4	No	200*
Fluoride	12/11/2012	0.18	No	1.5
Well #6				
Sodium	12/11/2012	32.1	Yes	200*
Fluoride	12/11/2012	0.17	No	1.5
Well #7				
Sodium	12/11/2012	7.1	No	200*
Fluoride	12/11/2012	0.10	No	1.5
Well #8				
Sodium	12/11/2012	30.8	Yes	200*
Fluoride	12/11/2012	0.22	No	1.5
Parsons Road Reservoir				
Sodium	12/11/2012	6.3	No	200*
Fluoride	12/11/2012	0.08	No	1.5
Hillcrest Well				
Sodium	10/12/2016	26.3	No	200*
Fluoride	10/12/2016	0.24	No	1.5

Notes:

- Results expressed in mg/L

* The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/l so that this information may be communicated to local physicians for their use with patients on sodium restricted diets.

**Table 4 – Schedule 15.1 Lead
Summary of Lead Samples**

Parameter	Sample Date (mm/dd/yr)	Number of Samples	Range of Results (min/max)	Exceedance	Standard
Lead (Distribution System)	04/07/2014 10/14/2014	8	0.08 – 0.98 µg/l	No	10 µg/l
Alkalinity (Distribution System)	04/11/2016 10/11/2016	8	76 – 90 mg/l	N/A	30 – 500*

Notes:

*Aesthetic Objective under the Ontario Drinking Water Standards, Objectives, and Guidelines

**Table 5 – Details of Adverse Water Quality Incidents (AWQIs) and Corrective Actions
(Schedule 16 & 17)**

AWQI #	Incident Date (mm/dd/yr)	Location	Parameter	Result	Unit of Measure	Corrective Action Taken	Corrective Action Date (mm/dd/yr)
129009	03/30/2016	Distribution System	Total Coliform	1	cfu/100ml	Checked chlorine residual at adverse location 1.58 mg/l. Re-sampled at location and upstream and downstream April 1 st . Results all negative. No further action required.	04/05/2016
130098	07/04/2016	Distribution System	Total Coliform	1	cfu/100 ml	Checked Chlorine residual at adverse location 1.46 mg/l. Re-sampled at location and upstream and downstream on July 7 th . Courier did not deliver samples to lab until July 11 th which is past the holding time for samples to be valid. Regular sampling was done on July 11 th and these samples were used to fulfil the AWQI requirement. Results came back negative. No further action required.	07/13/2016
131001	08/29/2016	Distribution System	Total Coliform	24	cfu/100ml	Checked Chlorine residual at adverse location 0.96 mg/l. Re-sampled at location and upstream and downstream on September 1 st . Results all negative. No further action required.	09/07/2016