QMS Document Last Revision Date: January 5, 2018

Ontario Drinking-Water Systems Regulation O. Reg. 170-03 (s)11

New Lowell 2018 Annual Report

Drinking-Water System Number: 220003706

Drinking-Water System Name: New Lowell Drinking Water System

Drinking-Water System Owner: The Corporation of the Township of Clearview

Drinking-Water System Category: Large Municipal Residential Period being reported: January – December 2018

This Drinking-Water System does not serve more than 10,000 people.

This annual report is available to the public at no charge on the Clearview website at www.clearview.ca

The Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection at the Clearview Municipal Office 217 Gideon Street, Stayner and at the Clearview public works building at 5833 27/28 Side Road, Stayner.

No other Drinking Water Systems receive their drinking water from this system.

This annual report is available free of charge on our web-site, and at the locations listed above. Notice of the report availability is provided on the Clearview web-site and on digital signboards throughout Clearview. Report availability is also advertised in the local newspaper.

Description of the system:

The water source for this system is three groundwater source wells and the Collingwood-New Tecumseth pipe-line. Disinfection is provided with sodium hypochlorite. Water storage is in a four-cell concrete reservoir with a total capacity of 1,440 m³. There are approximately 330 active service connections. There are 59 hydrants throughout the system for fire protection.

Chemicals used for treatment include 12% Sodium Hypochlorite.

Significant expenses incurred to install, repair, or replace equipment: Well # 6 – Video Inspection, Sampling and Report - \$6200

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	Corrective	Corrective
			Measure	Action	Action
					Date
N/A	N/A	N/A	N/A	N/A	N/A

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Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

Sample Type	Number of	Range of	Range of	Number	Range of
	Samples	E.Coli Or	Total Coliform	of HPC	HPC Results
		Fecal	Results	Samples	(min #)-
		Results	(min #)-(max		(max #)
		(min #)-(max	#)		
		#)	CFU/100 mL		CFU/100 mL
		CFU/100 mL			
Raw – Well # 1	52	0 – 0	0 – 10	0	NA
Raw – Well # 2	52	0 – 0	0 – 0	0	NA
Raw – Well # 6	0	N/A	N/A	0	NA
Treated	52	0 – 0	0 – 0	52	<10 – 410
Distribution	156	0 - 0	0 - 0	40	<10 – 210

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

Parameter	Number of Grab Samples	Range of Results (min #)-(max #)	Unit of Measure
System Chlorine	420	0.23 – 1.16	mg/L
Chlorine	8760	0.38 - 1.21	mg/L
Turbidity			
Raw - Well # 1	12	0.91 – 1.24	NTU
Raw - Well # 2	12	0.86 – 1.50	NTU
Raw - Well # 6	0	N/A	NTU

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

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 #)	Unit of Measure	Number of Exceedances
Plumbing	0	NA	mg/L	NA
Distribution	0	NA	mg/L	NA

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Samples required under Schedule 13

Parameter	Last Date Sampled	Result	Unit of Measure
THM's (annual running average)	10/16/2018	0.0461	mg/L
HAA's (annual running average)	10/16/2018	0.0208	mg/L
Nitrate	10/16/2018	0.2	mg/L
Nitrite	10/16/2018	< 0.1	mg/L
Sodium	10/09/2014	6.0	mg/L
Fluoride	07/18/2017	< 0.1	mg/L

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

- Appendix - A

The most recent sample results of Organic parameters sampled during this reporting period. – Appendix – B

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

APPENDIX A INORGANIC PARAMETERS (SCHEDULE 23)



Final Report

C.O.C.: DWCV161206C REPORT No. B16-36452

Report To:

Clearview, Township of 217 Gideon Street, Box 200 Stayner Ontario LOM 1S0 Canada

Attention: Todd Patton

DATE RECEIVED: 06-Dec-16

DATE REPORTED: 09-Dec-16

SAMPLE MATRIX: Drinking Water

Caduceon Environmental Laboratories

110 West Beaver Creek Rd Unit 14

Richmond Hill ON L4B 1J9

Tel: 289-475-5442 Fax: 289-562-1963

JOB/PROJECT NO.: New Lowell

P.O. NUMBER: Sch.23 WATERWORKS NO. 220003706

			Client I.D.		NL Treated		
			Sample I.D.		B16-36452-1		
			Date Collect	ed	06-Dec-16		
Parameter	Units	R.L.	Reference Method	Date/Site Analyzed			
Antimony	mg/L	0.0001	EPA 200.8	08-Dec-16/O	< 0.0001		
Arsenic	mg/L	0.0001	EPA 200.8	08-Dec-16/O	0.0005		
Barium	mg/L	0.001	SM 3120	08-Dec-16/O	0.014		
Boron	mg/L	0.005	SM 3120	08-Dec-16/O	0.009		
Cadmium	mg/L	0.00002	EPA 200.8	08-Dec-16/O	< 0.00002		
Chromium	mg/L	0.002	SM 3120	08-Dec-16/O	< 0.002		
Mercury	mg/L	0.00002	SM 3112 B	09-Dec-16/O	< 0.00002		
Selenium	mg/L	0.001	EPA 200.8	08-Dec-16/O	< 0.001		
Uranium	mg/L	0.00005	EPA 200.8	08-Dec-16/O	0.00020		
Free Chlorine	mg/L		n/a	06-Dec-16/R	0.72		

¹ Free Chlorine results provided by client.

R.L. = Reporting Limit

Test methods may be modified from specified reference method unless indicated by an * Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill

APPENDIX B ORGANIC PARAMETERS (SCHEDULE 24)



Final Report

C.O.C.: DWC180213V REPORT No. B18-03853

Report To:

Clearview, Township of 217 Gideon Street, Box 200 Stayner Ontario L0M 1S0 Canada

Attention: Todd Patton

DATE RECEIVED: 13-Feb-18

DATE REPORTED: 05-Mar-18
SAMPLE MATRIX: Drinking Water

Caduceon Environmental Laboratories

112 Commerce Park Drive Barrie ON L4N 8W8 Tel: 705-252-5743

Fax: 705-252-5746

JOB/PROJECT NO.: New Lowell

P.O. NUMBER:

WATERWORKS NO. 220003706

			Client I.D.:		NL Treated		OD	ws
			Sample I.D.:		B18-03853-1			Type of
			Date Collecte	d:	12-Feb-18		Objective	Objective
Parameter	Units	R.L.	Reference Method	Date/Site Analyzed			-	
Benzene	μg/L	0.5	EPA 8260	14-Feb-18/O	< 0.5		1	MAC
Carbon Tetrachloride	μg/L	0.2	EPA 8260	14-Feb-18/O	< 0.2		2	MAC
Dichlorobenzene,1,2-	μg/L	0.1	EPA 8260	14-Feb-18/O	< 0.1		3,200	AO,MAC
Dichlorobenzene,1,4-	μg/L	0.2	EPA 8260	14-Feb-18/O	< 0.2		1,5	AO,MAC
Dichloroethane,1,2-	μg/L	0.1	EPA 8260	14-Feb-18/O	< 0.1		5	IMAC
Dichloroethene, 1,1-	μg/L	0.1	EPA 8260	14-Feb-18/O	< 0.1		14	MAC
Dichloromethane (Methylene Chloride)	μg/L	0.3	EPA 8260	14-Feb-18/O	< 0.3		50	MAC
Monochlorobenzene (Chlorobenzene)	μg/L	0.2	EPA 8260	14-Feb-18/O	< 0.2		80	MAC
Tetrachloroethylene	μg/L	0.2	EPA 8260	14-Feb-18/O	< 0.2		10	MAC
Trichloroethylene	μg/L	0.1	EPA 8260	14-Feb-18/O	< 0.1		5	MAC
Vinyl Chloride	μg/L	0.2	EPA 8260	14-Feb-18/O	< 0.2		1	MAC
Alachlor	μg/L	0.3	EPA 8270	02-Mar-18/K	< 0.3		5	IMAC
Atrazine + Metabolites	μg/L	0.5	Calc.	02-Mar-18/K	< 0.5		5	IMAC
Azinphos-methyl	μg/L	1	EPA 8270	02-Mar-18/K	< 1		20	MAC
Benzo(a)pyrene	μg/L	0.005	EPA 8270	02-Mar-18/K	< 0.005		0.01	MAC
Bromoxynil	μg/L	0.3	EPA 8270	02-Mar-18/K	< 0.3		5	IMAC
Carbaryl	μg/L	3	EPA 8270	02-Mar-18/K	< 3		90	MAC
Carbofuran	μg/L	1	EPA 8270	02-Mar-18/K	< 1		90	MAC
Chlorpyrifos	μg/L	0.5	EPA 8270	02-Mar-18/K	< 0.5		90	MAC
Diazinon	μg/L	1	EPA 8270	02-Mar-18/K	< 1		20	MAC
Dicamba	μg/L	5	EPA 8270	02-Mar-18/K	< 5		120	MAC
Dichlorophenol, 2,4-	μg/L	0.1	EPA 8270	02-Mar-18/K	< 0.1		0.3,900	AO,MAC

ODWS - Ontario Drinking Water Standards

AO - Aesthetic Objectives

IMAC - Interim Maximum Acceptable Concentration

MAC - Maximum Acceptable Concentration

OG - Operational Guidelines

R.L. = Reporting Limit

Test methods may be modified from specified reference method unless indicated by an *

Site Analyzed=K-Kingston, W-Windsor, O-Ottawa, R-Richmond Hill, B-Barrie



Final Report

C.O.C.: DWC180213V REPORT No. B18-03853

Report To:

Clearview, Township of 217 Gideon Street, Box 200 Stayner Ontario L0M 1S0 Canada

Attention: Todd Patton

DATE RECEIVED: 13-Feb-18

DATE REPORTED: 05-Mar-18

SAMPLE MATRIX: Drinking Water

Caduceon Environmental Laboratories

112 Commerce Park Drive Barrie ON L4N 8W8 Tel: 705-252-5743

Fax: 705-252-5746

JOB/PROJECT NO.: New Lowell

P.O. NUMBER:

WATERWORKS NO. 220003706

			Client I.D.:		NL Treated		ODWS	
			Sample I.D.:		B18-03853-1			Type of
			Date Collecte	d:	12-Feb-18	0	bjective	Objective
Parameter	Units	R.L.	Reference Method	Date/Site Analyzed				
Dichlorophenoxy acetic acid, 2,4- (2,4-D)	μg/L	5	EPA 8270	02-Mar-18/K	< 5		100	IMAC
Diclofop-methyl	μg/L	0.5	EPA 8270	02-Mar-18/K	< 0.5		9	MAC
Dimethoate	μg/L	1	EPA 8270	02-Mar-18/K	< 1		20	IMAC
Diquat	μg/L	5	EPA 549.1	22-Feb-18/K	< 5		70	MAC
Diuron	μg/L	5	EPA 8270	02-Mar-18/K	< 5		150	MAC
Glyphosate	μg/L	25	EPA 547	22-Feb-18/K	< 25		280	IMAC
Malathion	μg/L	5	EPA 8270	02-Mar-18/K	< 5		190	MAC
Metolachlor	μg/L	3	EPA 8270	02-Mar-18/K	< 3		50	IMAC
Metribuzin	μg/L	3	EPA 8270	02-Mar-18/K	< 3		80	MAC
Paraquat	μg/L	1	EPA 549.1	22-Feb-18/K	< 1		10	IMAC
Pentachlorophenol	μg/L	0.1	EPA 8270	02-Mar-18/K	< 0.1		30,60	AO,MAC
Phorate	μg/L	0.3	EPA 8270	02-Mar-18/K	< 0.3		2	IMAC
Picloram	μg/L	5	EPA 8270	02-Mar-18/K	< 5		190	IMAC
Poly-Chlorinated Biphenyls (PCB's)	μg/L	0.05	EPA 8082	20-Feb-18/K	< 0.05		3	IMAC
Prometryne	μg/L	0.1	EPA 8270	02-Mar-18/K	< 0.1		1	IMAC
Simazine	μg/L	0.5	EPA 8270	02-Mar-18/K	< 0.5		10	IMAC
Terbufos	μg/L	0.3	EPA 8270	02-Mar-18/K	< 0.3		1	IMAC
Tetrachlorophenol, 2,3,4,6-	μg/L	0.1	EPA 8270	02-Mar-18/K	< 0.1		1,100	AO,MAC
Triallate	μg/L	10	EPA 8270	02-Mar-18/K	< 10		230	MAC
Trichlorophenol 2,4,6-	μg/L	0.1	EPA 8270	02-Mar-18/K	< 0.1		2,5	AO,MAC
Trifluralin	μg/L	0.5	EPA 8270	02-Mar-18/K	< 0.5		45	IMAC
MCPA	μg/L	10	EPA 8151A	01-Mar-18/K	< 10		0.1	MAC
Free Chlorine	mg/L		n/a	13-Feb-18/B	0.72			

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Final Report

C.O.C.: DWC180213V REPORT No. B18-03853

Report To:

Caduceon Environmental Laboratories

Clearview, Township of112 Commerce Park Drive217 Gideon Street, Box 200Barrie ON L4N 8W8Stayner Ontario L0M 1S0 CanadaTel: 705-252-5743

Attention: Todd Patton Fax: 705-252-5746

DATE RECEIVED: 13-Feb-18 JOB/PROJECT NO.: New Lowell

DATE REPORTED: 05-Mar-18 P.O. NUMBER:

SAMPLE MATRIX: Drinking Water WATERWORKS NO. 220003706

			Client I.D.:		NL Treated		ODWS	
		Sample I.D.:		B18-03853-1		Objective	Type of	
			Date Collected:		12-Feb-18	•	Objective	Objective
Parameter	Units	R.L.	Reference Method	Date/Site Analyzed				

¹ Free chlorine results provided by client.

ODWS - Ontario Drinking Water Standards

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