QMS Document Last Revision Date: December 23, 2021

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

New Lowell 2021 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 2021

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 County Road 96, Stayner.

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

This annual report is available free of charge on our website, and at the locations listed above. Notice of the report availability is provided on the Clearview website and social media accounts. 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 pipeline. Disinfection is provided with sodium hypochlorite. Water storage is in a four-cell concrete reservoir with a total capacity of 1,770 m³. There are approximately 334 active service connections. There are 57 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 House 1 & 2 Building refurbishment - \$15,700

Clearview Township Document # 313 Revision # 002

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
				7.00.01.	Date
NA	NA	NA	NA	NA	NA

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

Sample Type	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #) CFU/100 mL	Number of HPC Samples	Range of HPC Results (min #)- (max #) CFU/100 mL
		CFU/100 mL	, , , , ,		2 2, 22
Raw – Well # 1	53	0 - NDOGN ¹	0 – NDOGN	0	NA
Raw – Well # 2	52	0 – NDOGN	0 – NDOGN	0	NA
Raw – Well # 6	0	NA	NA	0	NA
Treated	52	0 - 0	0 - 0	52	<10 - 390
Distribution	156	0 - 0	0 - 0	40	<10 - 30

¹ NDOGN = No Data; Overgrown with non-target bacteria.

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 416		0.32 - 1.73	mg/L
Chlorine	8760	0.60 - 1.64	mg/L
Turbidity			
Raw – Well # 1	12	0.29 – 1.22	NTU
Raw – Well # 2	aw – Well # 2 12		NTU
Raw - Well # 6	0	NA	NTU

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

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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	Number of	Range of Lead	Unit of	Number of	
Type	Samples	Results	Measure	Exceedances	
		(min#) - (max #)			
Plumbing	0	NA	mg/L	NA	
Distribution 0		NA	mg/L	NA	

Samples required under Schedule 13

Parameter	Date Sampled	Result	Unit of Measure
THM's	2021	0.0485	mg/L
(annual running average)			
HAA's	2021	0.0225	mg/L
(annual running average)			
Nitrate	01/18/2021	0.3	mg/L
	04/15/2021	0.3	
	07/15/2021	0.3	
	10/21/2021	0.2	
Nitrite	01/18/2021	< 0.1	mg/L
	04/15/2021	< 0.1	
	07/15/2021	< 0.1	
	10/21/2021	< 0.1	
Sodium	11/25/2021	5.9	mg/L
Fluoride	07/18/2017	< 0.1	mg/L

Other sampling

Parameter	Date Sampled	Result	Unit of Measure	
Chloride	11/25/2021	11.3	mg/L	
Hardness	08/28/2019	103	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.: DWC191203S23A REPORT No. B19-39036

Report To:

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

Attention: Todd Patton

DATE RECEIVED: 03-Dec-19
DATE REPORTED: 09-Dec-19
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: NL Schedule 23 WATERWORKS NO. 220003706

		ſ	Client I.D.:		NL Tested	OD	ws
			Sample I.D.:		B19-39036-1	Ohioativa	Type of
			Date Collecte	d:	03-Dec-19	Objective	Objective
Parameter	Units	R.L.	Reference Method	Date/Site Analyzed			
Antimony	mg/L	0.0001	EPA 200.8	06-Dec-19/O	< 0.0001	0.006,0.006	IMAC,MAC
Arsenic	mg/L	0.0001	EPA 200.8	06-Dec-19/O	0.0003	0.025,0.01	IMAC,MAC
Barium	mg/L	0.001	SM 3120	05-Dec-19/O	0.013	1	MAC
Boron	mg/L	0.005	SM 3120	05-Dec-19/O	0.016	5,5	IMAC,MAC
Cadmium	mg/L	0.000015	EPA 200.8	06-Dec-19/O	< 0.000015	0.005	MAC
Chromium	mg/L	0.002	SM 3120	05-Dec-19/O	< 0.002	0.05	MAC
Mercury	mg/L	0.00002	SM 3112 B	06-Dec-19/O	< 0.00002	0.001	MAC
Selenium	mg/L	0.001	EPA 200.8	06-Dec-19/O	< 0.001	0.05	MAC
Uranium	mg/L	0.00005	EPA 200.8	06-Dec-19/O	0.00015	0.02	MAC
Free Chlorine	mg/L		n/a	03-Dec-19/B	0.89		

¹ Free chlorine results provided by client.

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

Christine Burke Lab Manager

The analytical results reported herein refer to the samples as received. Reproduction of this analytical report in full or in part is prohibited without prior consent from Caduceon Environmental Laboratories.

APPENDIX B ORGANIC PARAMETERS (SCHEDULE 24)



Schedule 24

Final Report

C.O.C.: DWTOC210208B1 REPORT No. B21-03741

Report To:

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

Attention: Todd Patton

DATE RECEIVED: 08-Feb-21

DATE REPORTED: 22-Feb-21

SAMPLE MATRIX: Drinking Water

Caduceon Environmental Laboratories

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

Fax: 705-252-5746

P.O. NUMBER:

JOB/PROJECT NO.: New Lowell

WATERWORKS NO. 220003706

			Client I.D.		NL Treated		
			Sample I.D.		B21-03741-1		
			Date Collect	ed	08-Feb-21		
Parameter	Units	R.L.	Reference Method	Date/Site Analyzed			
Alachlor	μg/L	0.3	EPA 8270	12-Feb-21/K	< 0.3		
Atrazine + Metabolites	μg/L	0.5	Calc.	12-Feb-21/K	< 0.5		
Azinphos-methyl	μg/L	1	EPA 8270	12-Feb-21/K	< 1		
Benzo(a)pyrene	μg/L	0.006	EPA 8270	12-Feb-21/K	< 0.006		
Bromoxynil	μg/L	0.5	EPA 8270	12-Feb-21/K	< 0.5		
Carbaryl	μg/L	3	EPA 8270	12-Feb-21/K	< 3		
Carbofuran	μg/L	1	EPA 8270	12-Feb-21/K	< 1		
Chlorpyrifos	μg/L	0.5	EPA 8270	12-Feb-21/K	< 0.5		
Diazinon	μg/L	1	EPA 8270	12-Feb-21/K	< 1		
Dicamba	μg/L	10	EPA 8270	12-Feb-21/K	< 10		
Dichlorophenol, 2,4-	μg/L	0.2	EPA 8270	12-Feb-21/K	< 0.2		
Dichlorophenoxy acetic acid, 2,4- (2,4-D)	μg/L	10	EPA 8270	12-Feb-21/K	< 10		
Diclofop-methyl	μg/L	0.9	EPA 8270	12-Feb-21/K	< 0.9		
Dimethoate	μg/L	1	EPA 8270	12-Feb-21/K	< 1		
Diquat	μg/L	5	EPA 549.1	16-Feb-21/K	< 5		
Diuron	μg/L	5	EPA 8270	12-Feb-21/K	< 5		
Glyphosate	μg/L	25	EPA 547	11-Feb-21/K	< 25		
Malathion	μg/L	5	EPA 8270	12-Feb-21/K	< 5		
Metolachlor	μg/L	3	EPA 8270	12-Feb-21/K	< 3		
Metribuzin	μg/L	3	EPA 8270	12-Feb-21/K	< 3		
Paraquat	μg/L	1	EPA 549.1	16-Feb-21/K	< 1		
Pentachlorophenol	μg/L	0.2	EPA 8270	12-Feb-21/K	< 0.2		
Phorate	μg/L	0.3	EPA 8270	12-Feb-21/K	< 0.3		
Picloram	μg/L	15	EPA 8270	12-Feb-21/K	< 15		

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

Christine Burke Lab Manager



Final Report

C.O.C.: DWTOC210208B1 REPORT No. B21-03741

Report To:

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

Attention: Todd Patton

DATE RECEIVED: 08-Feb-21

DATE REPORTED: 22-Feb-21

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: Schedule 24 WATERWORKS NO. 220003706

			Client I.D.		NL Treated		
			Sample I.D.		B21-03741-1		
			Date Collect	ed	08-Feb-21		
Parameter	Units	R.L.	Reference Method	Date/Site Analyzed			
Poly-Chlorinated Biphenyls (PCB's)	μg/L	0.05	EPA 8082	11-Feb-21/K	< 0.05		
Prometryne	μg/L	0.1	EPA 8270	12-Feb-21/K	< 0.1		
Simazine	μg/L	0.5	EPA 8270	12-Feb-21/K	< 0.5		
Terbufos	μg/L	0.5	EPA 8270	12-Feb-21/K	< 0.5		
Tetrachlorophenol, 2,3,4,6-	μg/L	0.2	EPA 8270	12-Feb-21/K	< 0.2		
Triallate	μg/L	10	EPA 8270	12-Feb-21/K	< 10		
Trichlorophenol 2,4,6-	μg/L	0.2	EPA 8270	12-Feb-21/K	< 0.2		
Trifluralin	μg/L	0.5	EPA 8270	12-Feb-21/K	< 0.5		
MCPA	μg/L	10	EPA 8151A	22-Feb-21/K	< 10		
Free Chlorine	mg/L		n/a	08-Feb-21/B	1.42		

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,B-Barrie

Christine Burke Lab Manager



Schedule 24

Final Report

C.O.C.: DWTOC210208B2 REPORT No. B21-03742

Report To:

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

Attention: Todd Patton

DATE RECEIVED: 08-Feb-21

DATE REPORTED: 16-Feb-21

SAMPLE MATRIX: Drinking Water

Caduceon Environmental Laboratories

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

Fax: 705-252-5746

P.O. NUMBER:

JOB/PROJECT NO.: New Lowell

WATERWORKS NO. 220003706

ſ			Client I.D.		NL Treated		
			Sample I.D.		B21-03742-1		
			Date Collect	ed	08-Feb-21		
Parameter	Units	R.L.	Reference Method	Date/Site Analyzed			
Benzene	μg/L	0.5	EPA 8260	12-Feb-21/R	< 0.5		
Carbon Tetrachloride	μg/L	0.2	EPA 8260	12-Feb-21/R	< 0.2		
Dichlorobenzene,1,2-	μg/L	0.5	EPA 8260	12-Feb-21/R	< 0.5		
Dichlorobenzene,1,4-	μg/L	0.5	EPA 8260	12-Feb-21/R	< 0.5		
Dichloroethylene,1,1-	μg/L	0.5	EPA 8260	12-Feb-21/R	< 0.5		
Dichloroethane,1,2-	μg/L	0.5	EPA 8260	12-Feb-21/R	< 0.5		
Dichloromethane (Methylene Chloride)	μg/L	5	EPA 8260	12-Feb-21/R	< 5		
Monochlorobenzene (Chlorobenzene)	μg/L	0.5	EPA 8260	12-Feb-21/R	< 0.5		
Tetrachloroethylene	μg/L	0.5	EPA 8260	12-Feb-21/R	< 0.5		
Trichloroethylene	μg/L	0.5	EPA 8260	12-Feb-21/R	< 0.5		
Vinyl Chloride	μg/L	0.2	EPA 8260	12-Feb-21/R	< 0.2		
Free Chlorine	mg/L		n/a	08-Feb-21/B	1.42		

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,B-Barrie

Christine Burke Lab Manager