



Birr Drinking Water System

2024 Annual Performance & Summary Report

Date: February 25, 2025

Owner: Municipality of Middlesex Centre

Operating Authority: Municipality of Middlesex Centre

Alternative Formats: If you require this document in an alternative format, please contact the Municipality of Middlesex Centre at 519-666-0190 or customerservice@middlesexcentre.on.ca

Contents

Introduction	1
Section A – System Description	1
Section B – Significant Modifications & Replacements	2
Section C – Microbiological Testing	2
(I) E. coli & Total Coliform	2
(II) Heterotrophic Plate Count (HPC).....	2
Section D – Chemical Testing	3
Nitrate and nitrate	3
Trihalomethanes (THM) and Haloacetic Acids (HAA)	3
Sodium and Fluoride	4
Lead Testing Program.....	4
Ontario Regulation 170/03, Schedules 23 & 24 Sampling	4
Section E – Operational Monitoring.....	6
(I) Chlorine Residual	6
(II) Turbidity.....	6
Section F – Water Quantity	7
Raw Water Flows	7
System Capability Assessment	8
Rated capacity assessment	8
Section G – Non-Compliance Findings & Adverse Results	9
(I) Non-Compliance Findings	9
(II) Summary of Reporting Test Results and Other Problems (Schedule 16).....	9
Appendix A - Analytical Data.....	A
Appendix B - Drinking Water System Forms 2(A) & 2(B)	B

List of Graphs

Graph 1 - Monthly Average & Maximum Raw Water Flows	7
Graph 2 - Treated Water Monthly Flow	9

List of Tables

Table 1 - Modifications & Replacements	2
Table 2 - E. Coli & Total Coliform Samples	2
Table 3 - Heterotrophic Plate Count (HPC) Samples	2
Table 4 - Quarterly Nitrate & Nitrite Summary.....	3
Table 5 - Trihalomethane (THM) & Haloacetic Acids (HAA).....	3
Table 6 – Sodium & Fluoride.....	4
Table 7 – Lead Sampling	4

Table 8 – Schedule 23 & 24 Sampling	5
Table 9 – Chlorine Residuals	6
Table 10 – Turbidity.....	7
Table 11 – Rated Capacity	7
Table 12 – Monthly Raw Water Flows.....	7
Table 13 – Treated Water Flow for Year	8
Table 14 - Comparison of Treated Water Rates.....	8

Introduction

The Municipality of Middlesex Centre has prepared a report summarizing system operation and water quality for the Birr Drinking Water System. The reports details the latest water quality testing results, water quantity statistics and any adverse conditions that may have occurred for 2024 calendar year. They are available for review by the end of February on the Municipality of Middlesex Centre website at www.middlesexcentre.on.ca/services/residents/water or by contacting the Public Works & Engineering Department.

All efforts have been made to ensure the information presented in this report is accurate. If you have any questions or comments concerning the report, please contact the Municipality of Middlesex Centre.

Table 1 – Plant Information

Drinking Water System	Birr Well Supply System
Drinking Water System Number	220005492
Drinking Water System Owner & Contact Information	Municipality of Middlesex Centre Small Municipal Residential System 10227 Ilderton Road, RR #2 Ilderton, Ontario N0M 2A0
Reporting Period	January 1, 2024 to December 31, 2024

Section A – System Description

The Birr Drinking Water System, owned and operated by the Municipality of Middlesex Centre, is a ground water supply system serving the Village of Birr that presently services 18 lots on Gwendolyn Street with an estimated population of 53 residents. This system consists of one (1) drilled well, rated at 88m³/day operating under the *Permit to Take Water* # 3415-A3JHTY. Raw well water is pumped into a concrete reservoir. The raw water is disinfected using a 6% sodium hypochlorite disinfection system, consisting of one storage tank and two chemical metering pumps (one duty and one standby) with a feed line discharging into the underground reservoir. Two submersible high lift pumps, then pump the water through a 150 mm water main to the distribution system. The system operates under Municipal Drinking Water License Number 052-104 and Drinking Water Works Permit Number 052-204.

MECP licensed water drinking water operators maintain the system and its operations and collect regulated samples. In the event of failure of critical operational requirements automated alarms are relayed through a third-party system to operators for prompt response.

Section B – Significant Modifications & Replacements

Table 1 - Modifications & Replacements

Date	Modification/Replacement	Value
Sep 4	Replaced turbidity analyzer controller with SC4500 model	\$4,900
Oct 22	replaced well pump and motor. Completed video inspection of well	\$7,985
Nov 21	replace discharge piping from flow meter to flange exiting building. New piping includes 2" flushing port, sample tap and isolation valve	\$6,117

Section C – Microbiological Testing

(I) E. coli & Total Coliform

Bacteriological tests for E. coli and total coliforms are collected from the raw water at the facility monthly and treated water from the distribution system weekly. Extra samples are taken after major repairs or maintenance work. Any E. coli or total coliform results above 0 cfu/100 mL in the treated distribution water must be reported to the Ministry of the Environment, Conservation and Parks (MECP) and Medical Officer of Health (MOH). Resamples and any other required actions are taken as quickly as possible. The results from the 2024 sampling program are shown on the table below. There was no reportable incident that occurred during this reporting period.

Table 2 - E. Coli & Total Coliform Samples

Parameter	# of Samples	EC Range (cfu/1mL) min - max	TC Range (cfu/1mL) min - max
Raw	13	0 - 0	0 - 1
Distribution	29	0 - 0	0 - 0

(II) Heterotrophic Plate Count (HPC)

Water distribution system HPC analyses is required on a bi-weekly basis. HPC should be less than 500 colonies per 1 mL. Results over 500 colonies per 1 mL may indicate a change in water quality but it is not considered an indicator of unsafe water. The 2024 results are shown in Table 3 below.

On August 28th a sample was collected that had a result of 2000 cfu/1ml, the average for the reporting period without the outlier was 10. The cause of the abnormal result is unknown.

Table 3 - Heterotrophic Plate Count (HPC) Samples

Parameter	# of Samples	HPC Range (cfu/1mL) min - max
Distribution	28	10 - 2000

Section D – Chemical Testing

The Safe Drinking Water Act requires periodic testing of the water for chemical parameters. The sampling frequency varies for different types and sizes of water systems. If the concentration of a parameter is above half of the Maximum Allowable Concentration (MAC) under the Ontario Drinking Water Quality Standards, an increased testing frequency of once every three months is required by the Regulation. Where concerns regarding a parameter exist, the MECP can also require additional sampling be undertaken.

Nitrate and nitrite

Nitrate and nitrite samples are required every 3 months in normal operation. Results of testing can be seen in Table 4.

Table 4 - Quarterly Nitrate & Nitrite Summary

Parameter	Result (mg/L)	MAC (mg/L)	Exceedance
Nitrate			
1st Quarter - January	0.012	10	No
2nd Quarter - April	0.011	10	No
3rd Quarter - July	0.013	10	No
4th Quarter - October	0.012	10	No
Nitrite			
1st Quarter - January	0.003	1	No
2nd Quarter - April	0.003	1	No
3rd Quarter - July	0.003	1	No
4th Quarter - October	0.003	1	No

Trihalomethanes (THM) and Haloacetic Acids (HAA)

THM and HAA are by-products of the disinfection process. Sampling for these parameters, within the distribution system, is required every 3 months. The results are calculated as an annual running average, which is summarized in Table 5. There were no exceedances in the last four quarters.

Table 5 - Trihalomethane (THM) & Haloacetic Acids (HAA)

Parameter	Result (µg/L)	RAA (µg/L)	MAC (µg/L)	Exceedance
Trihalomethane				
1st Quarter - January	54	57.3	100	No
2nd Quarter - April	52	56.8	100	No
3rd Quarter - July	64	59.8	100	No
4th Quarter - October	71	60.3	100	No
Haloacetic Acid (HAA)				
1st Quarter - January	44.8	34.6	80	No
2nd Quarter - April	44.0	37.2	80	No
3rd Quarter - July	41.5	39.5	80	No
4th Quarter - October	30.3	40.2	80	No

Sodium and Fluoride

Samples are analyzed every five (5) years as required. Sodium levels greater than 20 mg/L are to be reported to the MECP and MLHU. Regulated actions are as directed by the medical officer of health. Table 6 shows the results of testing that was completed in this 5-year cycle. Sodium and Fluoride samples are scheduled to be collected in January 2027.

Table 6 – Sodium & Fluoride

Parameter	Sample Date	Result Value (mg/L)	MAC (mg/L)
Sodium	January 17, 2022	40.9	20
Sodium	February 1, 2022	47.6	20
Fluoride	January 17, 2022 ³	1.28	1.5

Lead Testing Program

Lead sampling occurs twice a year in winter and summer months. As per Schedule D of the Birr Municipal Drinking Water Licence (MDWL) # 052-104, Issue 8 sampling requirement is reduced to 1 distribution sample during each period. This reduction remains in effect until the end of the winter sample period in 2027.

Samples that are found to contain lead greater than the Maximum Acceptable Concentration (MAC) of 10 micrograms per liter (µg/l) are required to be reported to the MLHU and MECP.

Distribution alkalinity is an aesthetic objective / Operational Guideline with a range between 30 mg/l to 500 mg/l.

Table 7 summarizes the sampling period results for 2024. There were no exceedances for the reporting period.

Table 7 – Lead Sampling

Parameter	Result	MAC	Exceedance
Winter Sample (Dec. 15 – April 15)			
Lead (µg/l)	0.02	10	No
Distribution Alkalinity (mg/l)	203	*30 - 500	No
Distribution pH	7.34	6.50 - 8.50	No
Summer Sample (June 15 – Oct. 15)			
Lead (µg/l)	0.03	10	No
Distribution Alkalinity	200	*30 - 500	No
Distribution pH	8.10	6.50 - 8.50	No

Ontario Regulation 170/03, Schedules 23 & 24 Sampling

Sampling for Inorganic and Organic parameters is required every 5 years for secure groundwater wells. The most recent sampling occurred on January 17, 2022. Table 8 summarizes the results. No exceedances were reported.

The next scheduled date for sampling under this regulation is in January 2027.

Table 8 – Schedule 23 & 24 Sampling

Sample Date: 17-Jan-22		
Parameter	Treated Water Value	Exceedance
Antimony [ug/L]	0.6 <MDL	No
Arsenic [ug/L]	0.2 <MDL	No
Barium [ug/L]	479	No
Boron [ug/L]	216	No
Cadmium [ug/L]	0.018	No
Chromium [ug/L]	0.1	No
Mercury [ug/L]	0.01 <MDL	No
Selenium [ug/L]	0.04 <MDL	No
Uranium [ug/L]	0.011	No
Benzene [ug/L]	0.32 <MDL	No
Carbon tetrachloride [ug/L]	0.17 <MDL	No
1,2-Dichlorobenzene [ug/L]	0.41 <MDL	No
1,4-Dichlorobenzene [ug/L]	0.36 <MDL	No
1,1-Dichloroethylene (vinylidene chloride) [ug/L]	0.33 <MDL	No
1,2-Dichloroethane [ug/L]	0.35 <MDL	No
Dichloromethane [ug/L]	0.35 <MDL	No
Monochlorobenzene [ug/L]	0.3 <MDL	No
Tetrachloroethylene (perchloroethylene) [ug/L]	0.35 <MDL	No
Trichloroethylene [ug/L]	0.44 <MDL	No
Vinyl Chloride [ug/L]	0.17 <MDL	No
Diquat [ug/L]	1 <MDL	No
Paraquat [ug/L]	1 <MDL	No
Glyphosate [ug/L]	1 <MDL	No
Polychlorinated Biphenyls (PCBs) - Total [ug/L]	0.04 <MDL	No
Benzo(a)pyrene [ug/L]	0.004 <MDL	No
Alachlor [ug/L]	0.02 <MDL	No
Atrazine + N-dealkylated metabolites [ug/L]	0.01 <MDL	No
Atrazine [ug/L]	0.01 <MDL	No
Desethyl atrazine [ug/L]	0.01 <MDL	No
Azinphos-methyl [ug/L]	0.05 <MDL	No
Carbaryl [ug/L]	0.05 <MDL	No
Carbofuran [ug/L]	0.01 <MDL	No
Chlorpyrifos [ug/L]	0.02 <MDL	No
Diazinon [ug/L]	0.02 <MDL	No
Dimethoate [ug/L]	0.06 <MDL	No
Diuron [ug/L]	0.03 <MDL	No
Malathion [ug/L]	0.02 <MDL	No
Metolachlor [ug/L]	0.01 <MDL	No
Metribuzin [ug/L]	0.02 <MDL	No
Phorate [ug/L]	0.01 <MDL	No
Prometryne [ug/L]	0.03 <MDL	No
Simazine [ug/L]	0.01 <MDL	No
Terbufos [ug/L]	0.01 <MDL	No
Triallate [ug/L]	0.01 <MDL	No
Trifluralin [ug/L]	0.02 <MDL	No

Sample Date: 17-Jan-22		
Parameter	Treated Water Value	Exceedance
2,4-dichlorophenoxyacetic acid (2,4-D) [ug/L]	0.19 <MDL	No
Bromoxynil [ug/L]	0.33 <MDL	No
Dicamba [ug/L]	0.20 <MDL	No
Diclofop-methyl [ug/L]	0.40 <MDL	No
MCPA [mg/L]	0.00012 <MDL	No
Picloram [ug/L]	1 <MDL	No
2,4-dichlorophenol [ug/L]	0.15 <MDL	No
2,4,6-trichlorophenol [ug/L]	0.25 <MDL	No
2,3,4,6-tetrachlorophenol [ug/L]	0.20 <MDL	No
Pentachlorophenol [ug/L]	0.15 <MDL	No

Section E – Operational Monitoring

(I) Chlorine Residual

Free chlorine levels of the treated water are monitored continuously at the discharge point of the Water Treatment Facility. Residual chlorine, providing disinfection within the distribution system, is monitored twice weekly at a minimum. A target of 0.20 mg/L has been established as a minimum target. A free chlorine level lower than 0.05 mg/L must be reported and corrective action taken.

There were no exceedances for the reporting. A summary of the chlorine residual readings is provided in Table 9.

Table 9 – Chlorine Residuals

Parameter	# of Samples	Results Range min - max
Chlorine residual in distribution (mg/L)	106	0.44 - 1.38
Chlorine residual after treatment (mg/L)	Continuous	0.38 - 2.32

(II) Turbidity

Turbidity of treated water is continuously monitored at the treatment facility, as a change in turbidity can indicate an operational problem. Turbidity of the raw well water is checked monthly. This parameter is measured in nephelometric turbidity units (NTU) and under Regulation 170/03 turbidity in groundwater is not reportable however, turbidity should be < 1 NTU at the treatment plant and < 5 NTU in the distribution system. There was a max turbidity of 5.00 NTU that had occurred on October 25th that was the result of the installation of a new well pump, operators were on site flushing the after installation. Consultation with turbidimeter manufacture lead to the discovery of a broken measurement vial and desiccant cartridge in the unit that were replaced. Microbiological samples were collected the same day, results were 0 cfu/1mL for E.coli and total coliforms for both raw and distribution and <10 cfu/mL for heterotrophic plate count for distribution only. A summary of the monitoring results for 2024 is provided in the table below.

Table 10 – Turbidity

Parameter	# of Samples	Results Range min - max
Turbidity	Continuous	0.05 – 5.00

Section F – Water Quantity

Raw Water Flows

Continuous monitoring of flowrates from supply wells into the treatment system and from the facility into the distribution system is required by Regulation 170/03. The Municipal Drinking Water License and Permit to Take Water issued by the MECP regulate the amount of water that can be utilized over a given time period, as shown in Table 11. A summary of the 2024 flows is provided in Table 12.

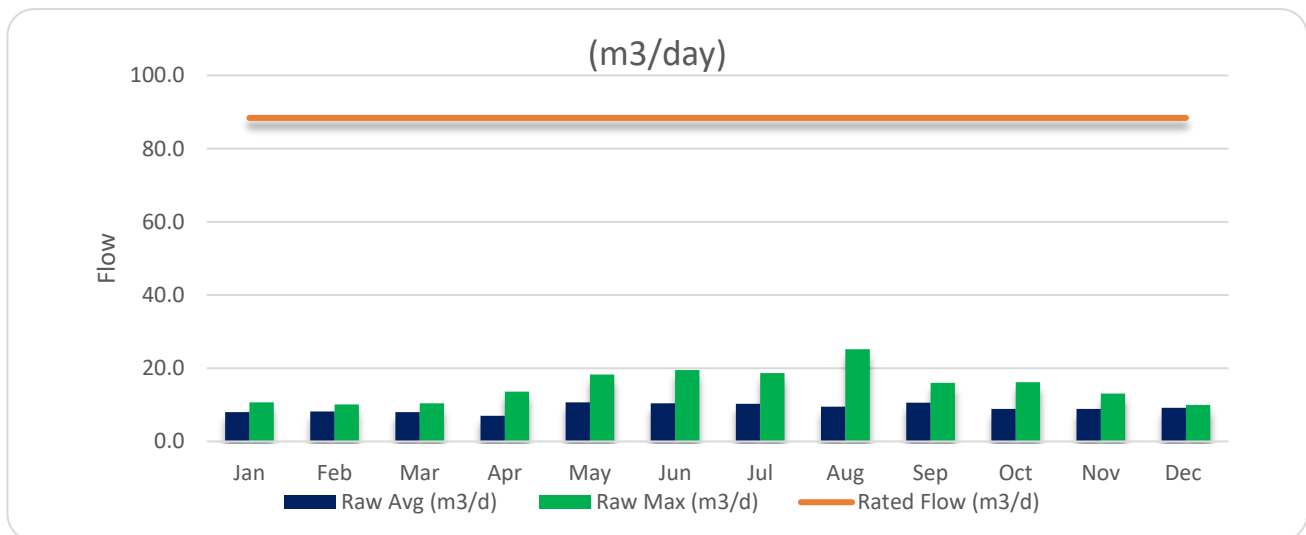
Table 11 – Rated Capacity

Flow summary	
Permit to Take Water Limits	88.376 m ³ /d
	82 L/min

Table 12 – Monthly Raw Water Flows

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
Rated Flow (m ³ /d)	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
Raw Avg (m ³ /d)	8.0	8.2	8.0	7.0	10.7	10.4	10.3	9.5	10.6	8.9	8.9	9.2	9.1
Raw Max (m ³ /d)	10.7	10.1	10.4	13.6	18.3	19.5	18.7	25.2	16.0	16.2	13.1	10.0	15.2

Graph 1 - Monthly Average & Maximum Raw Water Flows



System Capability Assessment

Table 13 – Treated Water Flow for Year

2024 Average Daily Treated Water Flow	9.1 m3/day
2024 Maximum Daily Treated Water Flow	24 m3/day
2024 Average Monthly Treated Water Flow	9.1 m3
2024 Total Amount of Treated Water Supplied	3,343 m3

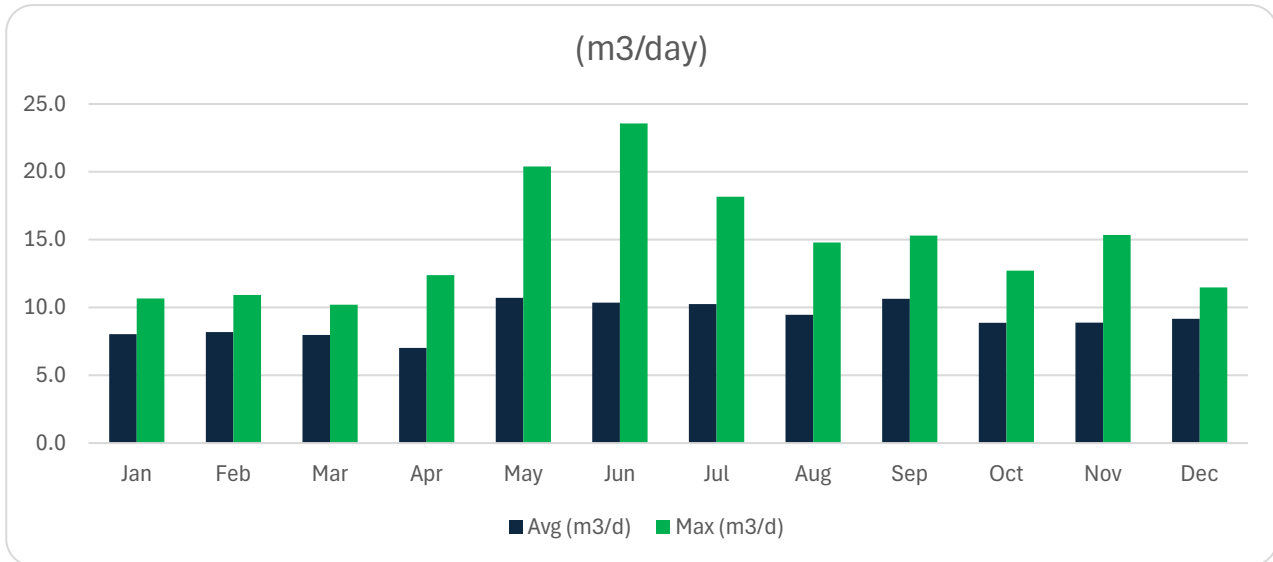
Rated capacity assessment

The table below illustrates the water supplied to the distribution system and the capacity of the system.

Table 14 - Comparison of Treated Water Rates

Month	Total Flow (m3)	Monthly Raw Average Flow (m3/day)	Max Raw Flow (m3/day)	Max Raw Flow (L/s)	Avg Flow/Rated Capacity (%)
January	249	8.0	10.7	10.66	9%
February	238	8.2	10.1	10.92	9%
March	247	8.0	10.4	10.20	9%
April	211	7.0	13.6	12.38	8%
May	332	10.7	18.3	20.39	12%
June	311	10.4	19.5	23.57	12%
July	318	10.3	18.7	18.16	12%
August	293	9.5	25.2	14.79	11%
September	319	10.6	16.0	15.30	12%
October	275	8.9	16.2	12.72	10%
November	266	8.9	13.1	15.35	10%
December	284	9.2	10.0	11.48	10%
Average Flow	279	9.1	15.2	14.66	10%
Maximum Flow	332	10.7	25.2	23.57	12%
Total Flow	3,343	--	--	--	--

Graph 2 - Treated Water Monthly Flow



Section G – Non-Compliance Findings & Adverse Results

Non-compliance issues are typically identified by either the Operating Authority or the MECP Drinking Water Inspectors. All non-compliance issues are investigated, corrective actions taken and documented using the Municipalities Drinking Water Quality Management System (DWQMS) procedures.

(I) Non-Compliance Findings

The MECP conducted an announced routine inspection of the Birr Drinking Water System on May 9th, 2024. The system was given a 100% rating for the inspection with zero non-compliance findings

(II) Summary of Reporting Test Results and Other Problems (Schedule 16)

There were no Adverse Water Quality Indicator incidents during the reporting period.

Appendix A - Analytical Data

SGS Canada Inc.

657 Consortium Court
London - Ontario - N6E 2S8
Phone: 519-672-4500 FAX: 519-672-0361

08-January-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 03 January 2024

LR Report: CA20229-JAN24

10227 Ilderton Rd.
Ilderton, ON
N0M 2A0, Canada

Copy: #1

Phone: 519-666-0190 ext 255
Fax: 519-666-0271

CERTIFICATE OF ANALYSIS

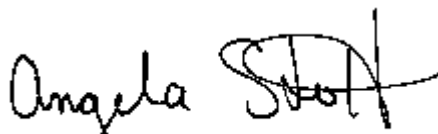
Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	03-Jan-24	03-Jan-24	03-Jan-24
2: Analysis Start Time		---	---	19:30	19:30	18:40
3: Analysis Completed Date		---	---	05-Jan-24	05-Jan-24	05-Jan-24
4: Analysis Completed Time		---	---	17:33	17:33	17:33
5: MAC		---	---	0	0	---
6: 35E33 RW 35E33 Well #2	02-Jan-24 11:12	11.4	---	0	0	---
7: 1A0E6 DW 1A0E6 Sample Station	02-Jan-24 11:27	11.4	0.95	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001



Angela Stott, B.Sc.
Branch Manager-London
Environment, Health & Safety



Works #: 220005492

SGS Canada Inc.

P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - K0L 2H0
Phone: 705-652-2000 FAX: 705-652-6365

08-January-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

10227 Ilderton Rd.
Ilderton, ON
N0M 2A0, Canada

Date Rec. : 03 January 2024
LR Report: CA30115-JAN24

Copy: #1

Phone: 519-666-0190 ext 255
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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt at London Lab °C	Temperature Upon Receipt at Lakefield Lab °C	Nitrite (as N) mg/L	Nitrate (as N) mg/L	Nitrate + Nitrite (as N) mg/L
1: Analysis Start Date		---	---	06-Jan-24	06-Jan-24	06-Jan-24
2: Analysis Start Time		---	---	14:19	14:19	14:19
3: Analysis Completed Date		---	---	08-Jan-24	08-Jan-24	08-Jan-24
4: Analysis Completed Time		---	---	10:21	10:21	10:21
5: MAC		---	---	1	10	---
6: MDL		---	---	0.003	0.006	0.006
7: 35E35 TW 35E35 Water Treatment Facility	02-Jan-24 11:10	11.1	4.0	0.003 <MDL	0.012	0.012

MAC - Maximum Acceptable Concentration
MDL - SGS Method Detection Limit

Method Descriptions

Parameter	Description	SGS Method Code
Nitrate (as N)	Nitrate by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001
Nitrate + Nitrite (as N)	Total Nitrate/Nitrite by Ion Chromatograph	ME-CA-[ENV]IC-LAK-AN-001
Nitrite (as N)	Nitrite by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001

Hawley Anderson, Hon.B.Sc
Project Specialist,
Environment, Health & Safety

SGS Canada Inc.

P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2H0
Phone: 705-652-2000 FAX: 705-652-6365

11-January-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 03 January 2024
LR Report: CA30116-JAN24

10227 Ilderton Rd.
Ilderton, ON
N0M 2A0, Canada

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Phone: 519-666-0190 ext 255
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CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: AO/OG	6: MDL	7: RW 35E33 Well #2
Sample Date & Time							02-Jan-24 11:14
Temperature Upon Receipt [at London Lab °C]	---	---	---	---	---	---	11.4
Temperature Upon Receipt [at Lakefield Lab °C]	---	---	---	---	---	---	4.0
Bicarbonate [mg/L as CaCO ₃]	05-Jan-24	14:49	08-Jan-24	10:53	---	2	208
Carbonate [mg/L as CaCO ₃]	05-Jan-24	14:49	08-Jan-24	10:53	---	2	2 <MDL
Total Suspended Solids [mg/L]	08-Jan-24	09:46	09-Jan-24	09:28	---	2	8
Sulphide [ug/L]	05-Jan-24	11:19	08-Jan-24	10:21	50	6	6 <MDL
Iron [ug/L]	10-Jan-24	19:56	11-Jan-24	13:03	300	7	456
Manganese [ug/L]	10-Jan-24	19:56	11-Jan-24	13:03	50	0.01	11.0

AO/OG - Aesthetic Objective / Operational Guideline
MDL - SGS Method Detection Limit

Method Descriptions

Units	Description	SGS Method Code
mg/L as CaCO ₃	Bicarbonate by Titration	ME-CA-[ENV]EWL-LAK-AN-006
mg/L as CaCO ₃	Carbonate by Titration	ME-CA-[ENV]EWL-LAK-AN-006
ug/L	Iron by ICP-MS drinking water	ME-CA-[ENV]SPE-LAK-AN-006
ug/L	Manganese by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
ug/L	Sulphide by Skalar	ME-CA-[ENV]SFA-LAK-AN-008
mg/L	Total Suspended Solids	ME-CA-[ENV]EWL-LAK-AN-004


 Carrie Greenlaw
 Project Specialist,
 Environment, Health & Safety



Works #: 220005492

SGS Canada Inc.

P.O. Box 4300 - 185 Concession St.
 Lakefield - Ontario - K0L 2H0
 Phone: 705-652-2000 FAX: 705-652-6365

11-January-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 04 January 2024

LR Report: CA30125-JAN24

10227 Ilderton Rd.
 Ilderton, ON
 N0M 2A0, Canada

Copy: #1

Phone: 519-666-0190 ext 255
 Fax: 519-666-0271

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: MAC	6: MDL	7: 1A0E6 DW 1A0E6 Blow-Off
Sample Date & Time							04-Jan-24 09:15
Temperature Upon Receipt [at London Lab °C]	---	---	---	---	---	---	3.6
Temperature Upon Receipt [at Lakefield Lab °C]	---	---	---	---	---	---	4.0
Trihalomethanes (total) [ug/L]	08-Jan-24	13:59	10-Jan-24	14:48	100 (RAA)	0.37	54
Bromodichloromethane [ug/L]	08-Jan-24	13:59	10-Jan-24	14:48	--	0.26	6.6
Bromoform [ug/L]	08-Jan-24	13:59	10-Jan-24	14:48	--	0.34	0.34 <MDL
Chloroform [ug/L]	08-Jan-24	13:59	10-Jan-24	14:48	--	0.29	47
Dibromochloromethane [ug/L]	08-Jan-24	13:59	10-Jan-24	14:48	--	0.37	0.85
Total Haloacetic Acids (HAA5) [ug/L]	10-Jan-24	14:30	11-Jan-24	12:38	80 (RAA)	5.3	44.8
Chloroacetic Acid [ug/L]	10-Jan-24	14:30	11-Jan-24	12:38	---	4.7	4.7 <MDL
Bromoacetic Acid [ug/L]	10-Jan-24	14:30	11-Jan-24	12:38	---	2.9	2.9 <MDL
Dichloroacetic Acid [ug/L]	10-Jan-24	14:30	11-Jan-24	12:38	---	2.6	17.7
Dibromoacetic Acid [ug/L]	10-Jan-24	14:30	11-Jan-24	12:38	---	2.0	2.0 <MDL
Trichloroacetic Acid [ug/L]	10-Jan-24	14:30	11-Jan-24	12:38	---	5.3	27.1

MAC - Maximum Acceptable Concentration

MDL - SGS Method Detection Limit

Method Descriptions

Parameter	Description	SGS Method Code
Bromoacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Bromodichloromethane	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
Bromoform	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
Chloroacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Chloroform	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
Dibromoacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Dibromochloromethane	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
Dichloroacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Total Haloacetic Acids (HAA5)	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Trichloroacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Trihalomethanes (total)	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004



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Works #: 220005492

LR Report : CA30125-JAN24

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15-January-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 10 January 2024

LR Report: CA20513-JAN24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCl Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	11-Jan-24	11-Jan-24	11-Jan-24
2: Analysis Start Time		---	---	13:50	13:50	12:35
3: Analysis Completed Date		---	---	12-Jan-24	12-Jan-24	15-Jan-24
4: Analysis Completed Time		---	---	15:13	15:13	10:38
5: MAC		---	---	0	0	---
6: 1A0E6 DW 1A0E6 Sample Station	10-Jan-24 09:45	8.2	0.99	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001



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Works #: 220005492

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08-January-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 03 January 2024
LR Report: CA30115-JAN24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt at London Lab °C	Temperature Upon Receipt at Lakefield Lab °C	Nitrite (as N) mg/L	Nitrate (as N) mg/L	Nitrate + Nitrite (as N) mg/L
1: Analysis Start Date		---	---	06-Jan-24	06-Jan-24	06-Jan-24
2: Analysis Start Time		---	---	14:19	14:19	14:19
3: Analysis Completed Date		---	---	08-Jan-24	08-Jan-24	08-Jan-24
4: Analysis Completed Time		---	---	10:21	10:21	10:21
5: MAC		---	---	1	10	---
6: MDL		---	---	0.003	0.006	0.006
7: 35E35 TW 35E35 Water Treatment Facility	02-Jan-24 11:10	11.1	4.0	0.003 <MDL	0.012	0.012

MAC - Maximum Acceptable Concentration
MDL - SGS Method Detection Limit

Method Descriptions

Parameter	Description	SGS Method Code
Nitrate (as N)	Nitrate by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001
Nitrate + Nitrite (as N)	Total Nitrate/Nitrite by Ion Chromatograph	ME-CA-[ENV]IC-LAK-AN-001
Nitrite (as N)	Nitrite by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001

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11-January-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 03 January 2024
LR Report: CA30116-JAN24

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CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: AO/OG	6: MDL	7: RW 35E33 Well #2
Sample Date & Time							02-Jan-24 11:14
Temperature Upon Receipt [at London Lab °C]	---	---	---	---	---	---	11.4
Temperature Upon Receipt [at Lakefield Lab °C]	---	---	---	---	---	---	4.0
Bicarbonate [mg/L as CaCO ₃]	05-Jan-24	14:49	08-Jan-24	10:53	---	2	208
Carbonate [mg/L as CaCO ₃]	05-Jan-24	14:49	08-Jan-24	10:53	---	2	2 <MDL
Total Suspended Solids [mg/L]	08-Jan-24	09:46	09-Jan-24	09:28	---	2	8
Sulphide [ug/L]	05-Jan-24	11:19	08-Jan-24	10:21	50	6	6 <MDL
Iron [ug/L]	10-Jan-24	19:56	11-Jan-24	13:03	300	7	456
Manganese [ug/L]	10-Jan-24	19:56	11-Jan-24	13:03	50	0.01	11.0

AO/OG - Aesthetic Objective / Operational Guideline
MDL - SGS Method Detection Limit

Method Descriptions

Units	Description	SGS Method Code
mg/L as CaCO ₃	Bicarbonate by Titration	ME-CA-[ENV]EWL-LAK-AN-006
mg/L as CaCO ₃	Carbonate by Titration	ME-CA-[ENV]EWL-LAK-AN-006
ug/L	Iron by ICP-MS drinking water	ME-CA-[ENV]SPE-LAK-AN-006
ug/L	Manganese by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
ug/L	Sulphide by Skalar	ME-CA-[ENV]SFA-LAK-AN-008
mg/L	Total Suspended Solids	ME-CA-[ENV]EWL-LAK-AN-004


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 Project Specialist,
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Works #: 220005492

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11-January-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 04 January 2024

LR Report: CA30125-JAN24

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CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: MAC	6: MDL	7: 1A0E6 DW 1A0E6 Blow-Off
Sample Date & Time							04-Jan-24 09:15
Temperature Upon Receipt [at London Lab °C]	---	---	---	---	---	---	3.6
Temperature Upon Receipt [at Lakefield Lab °C]	---	---	---	---	---	---	4.0
Trihalomethanes (total) [ug/L]	08-Jan-24	13:59	10-Jan-24	14:48	100 (RAA)	0.37	54
Bromodichloromethane [ug/L]	08-Jan-24	13:59	10-Jan-24	14:48	--	0.26	6.6
Bromoform [ug/L]	08-Jan-24	13:59	10-Jan-24	14:48	--	0.34	0.34 <MDL
Chloroform [ug/L]	08-Jan-24	13:59	10-Jan-24	14:48	--	0.29	47
Dibromochloromethane [ug/L]	08-Jan-24	13:59	10-Jan-24	14:48	--	0.37	0.85
Total Haloacetic Acids (HAA5) [ug/L]	10-Jan-24	14:30	11-Jan-24	12:38	80 (RAA)	5.3	44.8
Chloroacetic Acid [ug/L]	10-Jan-24	14:30	11-Jan-24	12:38	---	4.7	4.7 <MDL
Bromoacetic Acid [ug/L]	10-Jan-24	14:30	11-Jan-24	12:38	---	2.9	2.9 <MDL
Dichloroacetic Acid [ug/L]	10-Jan-24	14:30	11-Jan-24	12:38	---	2.6	17.7
Dibromoacetic Acid [ug/L]	10-Jan-24	14:30	11-Jan-24	12:38	---	2.0	2.0 <MDL
Trichloroacetic Acid [ug/L]	10-Jan-24	14:30	11-Jan-24	12:38	---	5.3	27.1

MAC - Maximum Acceptable Concentration

MDL - SGS Method Detection Limit

Method Descriptions

Parameter	Description	SGS Method Code
Bromoacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Bromodichloromethane	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
Bromoform	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
Chloroacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Chloroform	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
Dibromoacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Dibromochloromethane	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
Dichloroacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Total Haloacetic Acids (HAA5)	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Trichloroacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Trihalomethanes (total)	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004



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15-January-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 10 January 2024
LR Report: CA20513-JAN24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCl Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	11-Jan-24	11-Jan-24	11-Jan-24
2: Analysis Start Time		---	---	13:50	13:50	12:35
3: Analysis Completed Date		---	---	12-Jan-24	12-Jan-24	15-Jan-24
4: Analysis Completed Time		---	---	15:13	15:13	10:38
5: MAC		---	---	0	0	---
6: 1A0E6 DW 1A0E6 Sample Station	10-Jan-24 09:45	8.2	0.99	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001



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19-January-2024

Mun of Middlesex Centre (Birr)
Attn : Brian Watson

Date Rec. : 17 January 2024

LR Report: CA20802-JAN24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCl Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	17-Jan-24	17-Jan-24	17-Jan-24
2: Analysis Start Time		---	---	16:30	16:30	15:50
3: Analysis Completed Date		---	---	19-Jan-24	19-Jan-24	19-Jan-24
4: Analysis Completed Time		---	---	14:06	14:06	14:06
5: MAC		---	---	0	0	---
6: 1A0E6 DW 1A0E6 Blowoff	16-Jan-24 11:46	5.3	1.38	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001


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26-January-2024

Mun of Middlesex Centre (Birr)
Attn : Brian Watson

Date Rec. : 24 January 2024
LR Report: CA21073-JAN24

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Fax: 519-666-0271

CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	24-Jan-24	24-Jan-24	24-Jan-24
2: Analysis Start Time		---	---	16:15	16:15	15:45
3: Analysis Completed Date		---	---	26-Jan-24	26-Jan-24	26-Jan-24
4: Analysis Completed Time		---	---	14:52	14:52	14:52
5: MAC		---	---	0	0	---
6: 1A0E6 DW 1A0E6 Blow-off	23-Jan-24 09:53	4.8	1.31	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001


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09-February-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 07 February 2024
LR Report: CA20270-FEB24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCl Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	07-Feb-24	07-Feb-24	07-Feb-24
2: Analysis Start Time		---	---	18:15	18:15	16:55
3: Analysis Completed Date		---	---	09-Feb-24	09-Feb-24	09-Feb-24
4: Analysis Completed Time		---	---	16:34	16:34	16:34
5: MAC		---	---	0	0	---
6: 1A0E6 DW 1A0E6 Sample Station	06-Feb-24 11:54	6.7	1.24	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001



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16-February-2024

Mun of Middlesex Centre (Birr)
Attn : Brian Watson

Date Rec. : 14 February 2024
LR Report: CA20548-FEB24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Total Coliform cfu/100mL	E.Coli cfu/100mL
1: Analysis Start Date		---	14-Feb-24	14-Feb-24
2: Analysis Start Time		---	17:15	17:15
3: Analysis Completed Date		---	16-Feb-24	16-Feb-24
4: Analysis Completed Time		---	16:08	16:08
5: MAC		---	0	0
6: 35E33 RW 35E33 Well #2	13-Feb-24 10:06	7.8	0	0

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001


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Works #: 220005492

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23-February-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 21 February 2024
LR Report: CA20825-FEB24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	21-Feb-24	21-Feb-24	21-Feb-24	21-Feb-24
2: Analysis Start Time		---	---	15:45	15:45	15:45	15:15
3: Analysis Completed Date		---	---	23-Feb-24	23-Feb-24	23-Feb-24	23-Feb-24
4: Analysis Completed Time		---	---	13:00	13:00	13:00	13:00
5: MAC		---	---	0	0	---	---
6: 1A0E6 DW 1A0E6 Sample Station	20-Feb-24 10:19	5.9	1.22	0	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/100mL	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001



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Works #: 220005492

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08-March-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 06 March 2024
LR Report: CA20266-MAR24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCl Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	06-Mar-24	06-Mar-24	06-Mar-24
2: Analysis Start Time		---	---	15:55	15:55	15:20
3: Analysis Completed Date		---	---	08-Mar-24	08-Mar-24	08-Mar-24
4: Analysis Completed Time		---	---	14:34	14:34	14:34
5: MAC		---	---	0	0	---
6: 35E33 RW 35E33 Well #2	05-Mar-24 10:00	7.1	---	0	0	---
7: 1A0E6 DW 1A0E6 Sample Station	05-Mar-24 10:10	7.1	1.15	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001



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25-March-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 20 March 2024
LR Report: CA20872-MAR24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	20-Mar-24	20-Mar-24	20-Mar-24	20-Mar-24
2: Analysis Start Time		---	---	16:20	16:20	16:20	15:55
3: Analysis Completed Date		---	---	22-Mar-24	22-Mar-24	22-Mar-24	22-Mar-24
4: Analysis Completed Time		---	---	16:35	16:35	16:35	16:35
5: MAC		---	---	0	0	---	---
6: 1A0E6 DW 1A0E6 Sample Station	19-Mar-24 11:43	6.1	1.31	0	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/100mL	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001



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08-April-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 03 April 2024

LR Report: CA20173-APR24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	04-Apr-24	04-Apr-24	04-Apr-24
2: Analysis Start Time		---	---	11:05	11:05	10:45
3: Analysis Completed Date		---	---	08-Apr-24	08-Apr-24	08-Apr-24
4: Analysis Completed Time		---	---	12:13	12:13	12:13
5: MAC		---	---	0	0	---
6: 35E33 RW 35E33 Well #2	02-Apr-24 12:01	6.6	---	0	0	---
7: 1A0E6 DW 1A0E6 Sample Station	02-Apr-24 12:07	6.6	1.01	0	0	10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001


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Works #: 220005492

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08-April-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 03 April 2024

LR Report: CA30073-APR24

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CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: MAC	6: MDL	7: 1A0E6 DW 1A0E6 Sample Station	8: 35E35 TW 35E35 Water Treatment Facility
Sample Date & Time							02-Apr-24 12:07	02-Apr-24 11:57
Temperature Upon Receipt [at London Lab °C]	---	---	---	---	---	---	6.6	6.6
Temperature Upon Receipt [at Lakefield Lab °C]	---	---	---	---	---	---	8.0	8.0
Field Free Chlorine [mg/L]	---	---	---	---	---	---	1.01	---
Nitrite (as N) [mg/L]	05-Apr-24	19:14	08-Apr-24	10:19	1.0	0.003	---	0.003 <MDL
Nitrate (as N) [mg/L]	05-Apr-24	19:14	08-Apr-24	10:19	10	0.006	---	0.011
Nitrate + Nitrite (as N) [mg/L]	05-Apr-24	19:14	08-Apr-24	10:19	---	0.006	---	0.011
Trihalomethanes (total) [ug/L]	04-Apr-24	14:16	05-Apr-24	10:26	100 (RAA)	0.37	52	---
Bromodichloromethane [ug/L]	04-Apr-24	14:16	05-Apr-24	10:26	---	0.26	6.2	---
Bromoform [ug/L]	04-Apr-24	14:16	05-Apr-24	10:26	---	0.34	0.34 <MDL	---
Chloroform [ug/L]	04-Apr-24	14:16	05-Apr-24	10:26	---	0.29	45	---
Dibromochloromethane [ug/L]	04-Apr-24	14:16	05-Apr-24	10:26	---	0.37	0.78	---
Total Haloacetic Acids (HAA5) [ug/L]	04-Apr-24	12:51	05-Apr-24	13:13	80 (RAA)	5.3	44.0	---
Chloroacetic Acid [ug/L]	04-Apr-24	12:51	05-Apr-24	13:13	---	4.7	4.7 <MDL	---
Bromoacetic Acid [ug/L]	04-Apr-24	12:51	05-Apr-24	13:13	---	2.9	2.9 <MDL	---
Dichloroacetic Acid [ug/L]	04-Apr-24	12:51	05-Apr-24	13:13	---	2.6	19.6	---
Dibromoacetic Acid [ug/L]	04-Apr-24	12:51	05-Apr-24	13:13	---	2.0	2.0 <MDL	---
Trichloroacetic Acid [ug/L]	04-Apr-24	12:51	05-Apr-24	13:13	---	5.3	24.4	---

MAC - Maximum Acceptable Concentration

MDL - SGS Method Detection Limit

Method Descriptions

Units	Description	SGS Method Code
ug/L	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
ug/L	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
ug/L	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
ug/L	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
ug/L	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
ug/L	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
ug/L	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
ug/L	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
mg/L	Nitrate by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001
mg/L	Total Nitrate/Nitrite by Ion Chromatograph	ME-CA-[ENV]IC-LAK-AN-001
mg/L	Nitrite by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001
ug/L	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013

SGS Canada Inc.

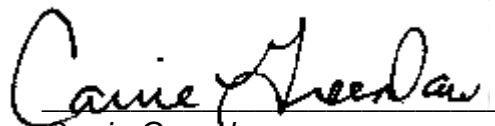
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LR Report : CA30073-APR24

Units	Description	SGS Method Code
ug/L	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
ug/L	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004



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23-April-2024
Mun of Middlesex Centre (Birr)
Attn : Brian Watson
Date Rec. : 17 April 2024

LR Report: CA20900-APR24

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N0M 2A0, Canada

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCl Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	17-Apr-24	17-Apr-24	17-Apr-24
2: Analysis Start Time		---	---	17:10	17:10	16:25
3: Analysis Completed Date		---	---	23-Apr-24	23-Apr-24	23-Apr-24
4: Analysis Completed Time		---	---	14:47	14:47	14:47
5: MAC		---	---	0	0	---
6: 1A0E6 DW Sample Station	16-Apr-24 13:32	9.3	0.97	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001


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06-May-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 01 May 2024

LR Report: CA20085-MAY24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	01-May-24	01-May-24	01-May-24	01-May-24
2: Analysis Start Time		---	---	18:45	18:45	18:45	18:20
3: Analysis Completed Date		---	---	06-May-24	06-May-24	06-May-24	06-May-24
4: Analysis Completed Time		---	---	10:16	10:16	10:16	10:16
5: MAC		---	---	0	0	---	---
6: 1A0E6 DW 1A0E6 Sample Station	30-Apr-24 11:51	4.8	1.06	0	0	0	10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/100mL	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001



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10-May-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 08 May 2024

LR Report: CA20445-MAY24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Total Coliform cfu/100mL	E.Coli cfu/100mL
1: Analysis Start Date		---	08-May-24	08-May-24
2: Analysis Start Time		---	16:50	16:50
3: Analysis Completed Date		---	10-May-24	10-May-24
4: Analysis Completed Time		---	14:40	14:40
5: MAC		---	0	0
6: 35E33 RW 35E33 Well #2	07-May-24 13:18	14.7	0	0

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001



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Works #: 220005492

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17-May-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 15 May 2024

LR Report: CA20821-MAY24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	15-May-24	15-May-24	15-May-24	15-May-24
2: Analysis Start Time		---	---	16:05	16:05	16:05	15:40
3: Analysis Completed Date		---	---	17-May-24	17-May-24	17-May-24	17-May-24
4: Analysis Completed Time		---	---	13:51	13:51	13:51	13:51
5: MAC		---	---	0	0	---	---
6: 1A0E6 DW 1A0E6 Sample Station	14-May-24 10:30	9.1	0.71	0	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/100mL	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001



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04-June-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

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Date Rec. : 29 May 2024
LR Report: CA21518-MAY24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL
1: Analysis Start Date		---	---	29-May-24	29-May-24	29-May-24
2: Analysis Start Time		---	---	14:55	14:55	14:55
3: Analysis Completed Date		---	---	31-May-24	31-May-24	31-May-24
4: Analysis Completed Time		---	---	14:43	14:43	14:43
5: MAC		---	---	0	0	---
6: 1A0E6 DW 1A0E6 Sample Station	28-May-24 09:20	7.7	0.73	0	0	0

Sample ID	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date	29-May-24
2: Analysis Start Time	14:20
3: Analysis Completed Date	31-May-24
4: Analysis Completed Time	14:43
5: MAC	---
6: 1A0E6 DW 1A0E6 Sample Station	10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/100mL	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001



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LR Report : CA21518-MAY24

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07-June-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 05 June 2024
LR Report: CA20296-JUN24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Total Coliform cfu/100mL	E.Coli cfu/100mL
1: Analysis Start Date		---	05-Jun-24	05-Jun-24
2: Analysis Start Time		---	17:50	17:50
3: Analysis Completed Date		---	07-Jun-24	07-Jun-24
4: Analysis Completed Time		---	15:13	15:13
5: MAC		---	0	0
6: 35E33 RW 35E33 Well #2	04-Jun-24 12:53	14.5	0	0

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001



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17-June-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 12 June 2024
LR Report: CA20657-JUN24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	12-Jun-24	12-Jun-24	12-Jun-24	12-Jun-24
2: Analysis Start Time		---	---	17:15	17:15	17:15	16:50
3: Analysis Completed Date		---	---	14-Jun-24	14-Jun-24	14-Jun-24	14-Jun-24
4: Analysis Completed Time		---	---	15:10	15:10	15:10	15:10
5: MAC		---	---	0	0	---	---
6: 1A0E6 DW 1A0E6 Sample Station	11-Jun-24 12:20	11.8	0.96	0	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Parameter	Description	SGS Method Code
E.Coli	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Heterotrophic Plate Count (HPC)	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
Total Coliform	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Total Coliform Background	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001

Angela Stott, B.Sc.
Branch Manager-London
Environment, Health & Safety



Works #: 220005492

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28-June-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 26 June 2024
LR Report: CA21485-JUN24

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N0M 2A0, Canada

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Fax: 519-666-0271

CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	26-Jun-24	26-Jun-24	26-Jun-24	26-Jun-24
2: Analysis Start Time		---	---	17:30	17:30	17:30	16:55
3: Analysis Completed Date		---	---	28-Jun-24	28-Jun-24	28-Jun-24	28-Jun-24
4: Analysis Completed Time		---	---	15:50	15:50	15:50	15:50
5: MAC		---	---	0	0	---	---
6: 1A0E6 DW 1A0E6 Sample Station	25-Jun-24 10:17	10.6	0.80	0	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Parameter	Description	SGS Method Code
E.Coli	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Heterotrophic Plate Count (HPC)	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
Total Coliform	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Total Coliform Background	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001

Angela Stott, B.Sc.
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Works #: 220005492

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08-July-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 03 July 2024
LR Report: CA20175-JUL24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Total Coliform cfu/100mL	E.Coli cfu/100mL
1: Analysis Start Date		---	03-Jul-24	03-Jul-24
2: Analysis Start Time		---	16:55	16:55
3: Analysis Completed Date		---	05-Jul-24	05-Jul-24
4: Analysis Completed Time		---	16:01	16:01
5: MAC		---	0	0
6: 35E33 RW 35E33 Well #2	02-Jul-24 15:50	10.6	0	0

MAC - Maximum Acceptable Concentration

Method Descriptions

Parameter	Description	SGS Method Code
E.Coli	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Total Coliform	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001

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Works #: 220005492

11-July-2024

Date Rec. : 03 July 2024
LR Report: CA30083-JUL24

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CERTIFICATE OF ANALYSIS

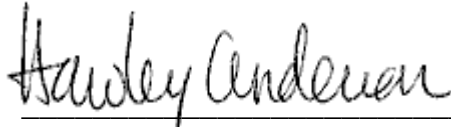
Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: MAC	6: MDL	7: 1A0E6 DW 1A0E6 Sample Station	8: 35E35 TW 35E35 Water Treatment Facility
Sample Date & Time							02-Jul-24 16:13	02-Jul-24 15:52
Temperature Upon Receipt [at London Lab °C]	---	---	---	---	---	---	10.6	10.6
Temperature Upon Receipt [at Lakefield Lab °C]	---	---	---	---	---	---	10.0	10.0
Field Free Chlorine [mg/L]	---	---	---	---	---	---	1.22	---
Nitrite (as N) [mg/L]	06-Jul-24	10:35	08-Jul-24	15:32	1.0	0.003	---	0.003 <MDL
Nitrate (as N) [mg/L]	06-Jul-24	10:35	08-Jul-24	15:32	10	0.006	---	0.013
Nitrate + Nitrite (as N) [mg/L]	06-Jul-24	10:35	08-Jul-24	15:32	---	0.006	---	0.013
Trihalomethanes (total) [ug/L]	05-Jul-24	10:03	08-Jul-24	12:38	100 (RAA)	0.37	64	---
Bromodichloromethane [ug/L]	05-Jul-24	10:03	08-Jul-24	12:38	---	0.26	7.6	---
Bromoform [ug/L]	05-Jul-24	10:03	08-Jul-24	12:38	---	0.34	0.34 <MDL	---
Chloroform [ug/L]	05-Jul-24	10:03	08-Jul-24	12:38	---	0.29	55	---
Dibromochloromethane [ug/L]	05-Jul-24	10:03	08-Jul-24	12:38	---	0.37	1.1	---
Total Haloacetic Acids (HAA5) [ug/L]	09-Jul-24	07:45	10-Jul-24	14:20	80 (RAA)	5.3	41.5	---
Chloroacetic Acid [ug/L]	09-Jul-24	07:45	10-Jul-24	14:20	---	4.7	4.7 <MDL	---
Bromoacetic Acid [ug/L]	09-Jul-24	07:45	10-Jul-24	14:20	---	2.9	2.9 <MDL	---
Dichloroacetic Acid [ug/L]	09-Jul-24	07:45	10-Jul-24	14:20	---	2.6	18.0	---
Dibromoacetic Acid [ug/L]	09-Jul-24	07:45	10-Jul-24	14:20	---	2.0	2.0 <MDL	---
Trichloroacetic Acid [ug/L]	09-Jul-24	07:45	10-Jul-24	14:20	---	5.3	23.5	---

MAC - Maximum Acceptable Concentration
MDL - SGS Method Detection Limit

Method Descriptions

Parameter	Description	SGS Method Code
Bromoacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Bromodichloromethane	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
Bromoform	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
Chloroacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Chloroform	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
Dibromoacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Dibromochloromethane	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
Dichloroacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Nitrate (as N)	Nitrate by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001
Nitrate + Nitrite (as N)	Total Nitrate/Nitrite by Ion Chromatograph	ME-CA-[ENV]IC-LAK-AN-001
Nitrite (as N)	Nitrite by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001
Total Haloacetic Acids (HAA5)	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Trichloroacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Trihalomethanes (total)	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004


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15-July-2024

Mun of Middlesex Centre (Birr)
Attn : Brian Watson

Date Rec. : 10 July 2024
LR Report: CA20600-JUL24

10227 Ilderton Rd.
Ilderton, ON
N0M 2A0, Canada

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Phone: 519-666-0190 ext 255
Fax: 519-666-0271

CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	10-Jul-24	10-Jul-24	10-Jul-24	10-Jul-24
2: Analysis Start Time		---	---	18:15	18:15	18:15	17:50
3: Analysis Completed Date		---	---	15-Jul-24	15-Jul-24	15-Jul-24	15-Jul-24
4: Analysis Completed Time		---	---	09:16	09:16	09:16	09:16
5: MAC		---	---	0	0	---	---
6: 1A0E6 DW 1A0E6 Sample Station	09-Jul-24 11:35	3.6	0.85	0	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/100mL	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001


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29-July-2024

Mun of Middlesex Centre (Birr)
Attn : Brian Watson

Date Rec. : 24 July 2024
LR Report: CA21371-JUL24

10227 Ilderton Rd.
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N0M 2A0, Canada

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	24-Jul-24	24-Jul-24	24-Jul-24	24-Jul-24
2: Analysis Start Time		---	---	16:20	16:20	16:20	15:39
3: Analysis Completed Date		---	---	26-Jul-24	26-Jul-24	26-Jul-24	26-Jul-24
4: Analysis Completed Time		---	---	16:26	16:26	16:26	16:26
5: MAC		---	---	0	0	---	---
6: 1A0E6 DW 1A0E6 Sample Station	23-Jul-24 12:00	11.5	0.60	0	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/100mL	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001


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09-August-2024

Mun of Middlesex Centre (Birr)
Attn : Brian Watson

Date Rec. : 07 August 2024
LR Report: CA20280-AUG24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	07-Aug-24	07-Aug-24	07-Aug-24	07-Aug-24
2: Analysis Start Time		---	---	14:40	14:40	14:40	14:00
3: Analysis Completed Date		---	---	09-Aug-24	09-Aug-24	09-Aug-24	09-Aug-24
4: Analysis Completed Time		---	---	13:26	13:26	13:26	13:26
5: MAC		---	---	0	0	---	---
6: 35E33 RW 35E33 Well #2	06-Aug-24 12:24	12.4	---	1	0	---	---
7: 1A0E6 DW 1A0E6 Sample Station	06-Aug-24 12:55	12.4	0.54	0	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/100mL	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001


Crista Schuster
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Works #: 220005492

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23-August-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

10227 Ilderton Rd.
Ilderton, ON
N0M 2A0, Canada

Date Rec. : 21 August 2024
LR Report: CA21111-AUG24

Copy: #1

Phone: 519-666-0190 ext 255
Fax: 519-666-0271

CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	21-Aug-24	21-Aug-24	21-Aug-24	21-Aug-24
2: Analysis Start Time		---	---	16:45	16:45	16:45	15:48
3: Analysis Completed Date		---	---	23-Aug-24	23-Aug-24	23-Aug-24	23-Aug-24
4: Analysis Completed Time		---	---	15:11	15:11	15:11	15:11
5: MAC		---	---	0	0	---	---
6: 1A0E6 DW 1A0E6 Sample Station	20-Aug-24 11:29	9.6	0.94	0	0	0	>2000

MAC - Maximum Acceptable Concentration

Method Descriptions

Parameter	Description	SGS Method Code
E.Coli	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Heterotrophic Plate Count (HPC)	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
Total Coliform	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Total Coliform Background	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001

Angela Stott, B.Sc.
Branch Manager-London
Environment, Health & Safety



Works #: 220005492

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09-September-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 04 September 2024
LR Report: CA20163-SEP24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	05-Sep-24	05-Sep-24	05-Sep-24	05-Sep-24
2: Analysis Start Time		---	---	09:45	09:45	09:45	09:25
3: Analysis Completed Date		---	---	09-Sep-24	09-Sep-24	09-Sep-24	09-Sep-24
4: Analysis Completed Time		---	---	09:03	09:03	09:03	09:03
5: MAC		---	---	0	0	---	---
6: 35E33 RW 35E33 Well #2	03-Sep-24 11:56	14.6	---	0	0	---	---
7: 1A0E6 DW 1A0E6 Sample Station	03-Sep-24 11:29	14.6	0.44	0	0	0	10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/100mL	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001

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20-September-2024

Mun of Middlesex Centre (Birr)
Attn : Brian Watson

Date Rec. : 18 September 2024
LR Report: CA20984-SEP24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	18-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24
2: Analysis Start Time		---	---	18:30	18:30	18:30	17:30
3: Analysis Completed Date		---	---	20-Sep-24	20-Sep-24	20-Sep-24	20-Sep-24
4: Analysis Completed Time		---	---	15:24	15:24	15:24	15:24
5: MAC		---	---	0	0	---	---
6: 1A0E6 DW 1A0E6 Sample Station	17-Sep-24 11:02	8.1	0.99	0	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/100mL	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001


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07-October-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

10227 Ilderton Rd.
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N0M 2A0, Canada

Date Rec. : 02 October 2024
LR Report: CA20228-OCT24

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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	02-Oct-24	02-Oct-24	02-Oct-24	02-Oct-24
2: Analysis Start Time		---	---	17:15	17:15	17:15	16:50
3: Analysis Completed Date		---	---	07-Oct-24	07-Oct-24	07-Oct-24	07-Oct-24
4: Analysis Completed Time		---	---	09:27	09:27	09:27	09:27
5: MAC		---	---	0	0	---	---
6: 35E33 RW 35E33 Well #2	01-Oct-24 10:44	8.8	---	0	0	---	---
7: 1A0E6 DW 1A0E6 Sample Station	01-Oct-24 11:11	8.8	0.67	0	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code	PALA
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001	N
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002	N
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001	N
cfu/100mL	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001	N

Accreditation Descriptions

PALA:

SGS Canada Industries & Environment conforms to the requirements of ISO/IEC 17025: 2005 for specific tests as listed on their scope of accreditation found at https://www.ceaegouv.qc.ca/documents/publications/listes.htm#labo_accr. Analytes and SGS Method Codes marked with a "Y" in the "PALA" column in the table denote ISO/IEC17025: 2005 accreditation



Crista Schuster
Project Specialist-London,
Environment, Health & Safety



Works #: 220005492

SGS Canada Inc.

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Phone: 705-652-2000 FAX: 705-652-6365

08-October-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 02 October 2024

LR Report: CA30087-OCT24

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CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: MAC	6: MDL	7: 1A0E6 DW 1A0E6 Sample Station	8: 35E35 TW 35E35 Water Treatment Facility
Sample Date & Time							01-Oct-24 11:11	01-Oct-24 10:44
Temperature Upon Receipt [at London Lab °C]	---	---	---	---	---	---	8.8	8.8
Temperature Upon Receipt [at Lakefield Lab °C]	---	---	---	---	---	---	12.0	12.0
Field Free Chlorine [mg/L]	---	---	---	---	---	---	0.67	---
Nitrite (as N) [mg/L]	04-Oct-24	10:55	07-Oct-24	13:38	1.0	0.003	---	0.003 <MDL
Nitrate (as N) [mg/L]	04-Oct-24	10:55	07-Oct-24	13:38	10	0.006	---	0.012
Nitrate + Nitrite (as N) [mg/L]	04-Oct-24	10:55	07-Oct-24	13:38	---	0.006	---	0.012
Trihalomethanes (total) [ug/L]	07-Oct-24	10:29	08-Oct-24	13:30	100 (RAA)	0.37	71	---
Bromodichloromethane [ug/L]	07-Oct-24	10:29	08-Oct-24	13:30	---	0.26	8.3	---
Bromoform [ug/L]	07-Oct-24	10:29	08-Oct-24	13:30	---	0.34	0.34 <MDL	---
Chloroform [ug/L]	07-Oct-24	10:29	08-Oct-24	13:30	---	0.29	61	---
Dibromochloromethane [ug/L]	07-Oct-24	10:29	08-Oct-24	13:30	---	0.37	0.96	---
Total Haloacetic Acids (HAA5) [ug/L]	07-Oct-24	07:46	08-Oct-24	10:48	80 (RAA)	5.3	30.3	---
Chloroacetic Acid [ug/L]	07-Oct-24	07:46	08-Oct-24	10:48	---	4.7	4.7 <MDL	---
Bromoacetic Acid [ug/L]	07-Oct-24	07:46	08-Oct-24	10:48	---	2.9	2.9 <MDL	---
Dichloroacetic Acid [ug/L]	07-Oct-24	07:46	08-Oct-24	10:48	---	2.6	12.6	---
Dibromoacetic Acid [ug/L]	07-Oct-24	07:46	08-Oct-24	10:48	---	2.0	2.0 <MDL	---
Trichloroacetic Acid [ug/L]	07-Oct-24	07:46	08-Oct-24	10:48	---	5.3	17.6	---

MAC - Maximum Acceptable Concentration

MDL - SGS Method Detection Limit

Method Descriptions

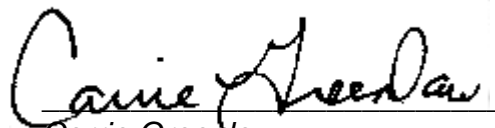
Units	Description	SGS Method Code
ug/L	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
ug/L	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
ug/L	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
ug/L	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
ug/L	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
ug/L	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
ug/L	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
ug/L	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
mg/L	Nitrate by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001
mg/L	Total Nitrate/Nitrite by Ion Chromatograph	ME-CA-[ENV]IC-LAK-AN-001
mg/L	Nitrite by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001
ug/L	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013

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LR Report : CA30087-OCT24

Units	Description	SGS Method Code
ug/L	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
ug/L	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004



Carrie Greenlaw
Project Specialist,
Environment, Health & Safety



Works #: 220005492

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18-October-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 16 October 2024

LR Report: CA20898-OCT24

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Phone: 519-666-0190 ext 255
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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	16-Oct-24	16-Oct-24	16-Oct-24	16-Oct-24
2: Analysis Start Time		---	---	15:55	15:55	15:55	15:35
3: Analysis Completed Date		---	---	18-Oct-24	18-Oct-24	18-Oct-24	18-Oct-24
4: Analysis Completed Time		---	---	13:11	13:11	13:11	13:11
5: MAC		---	---	0	0	---	---
6: 1A0E6 DW 1A0E6 Sample Station	15-Oct-24 12:00	7.1	0.87	0	0	0	10

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/1mL	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/100mL	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001


Cristal Schuster
Project Specialist-London,
Environment, Health & Safety

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657 Consortium Court
London - Ontario - N6E 2S8
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28-October-2024

Mun of Middlesex Centre (Birr)
Attn : Brian Watson

Date Rec. : 26 October 2024

LR Report: CA21405-OCT24

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Phone: 519-666-0190 ext 255
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CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCl Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL
1: Analysis Start Date		---	---	26-Oct-24	26-Oct-24
2: Analysis Start Time		---	---	17:10	17:10
3: Analysis Completed Date		---	---	28-Oct-24	28-Oct-24
4: Analysis Completed Time		---	---	14:24	14:24
5: MAC		---	---	0	0
6: 35E33 RW 35E33 Well #2	25-Oct-24	6.0	---	0	0
7: 35E35 TW 35E35 Water Treatment Facility	25-Oct-24	5.4	0.86	0	0

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001



Cristal Schuster
Project Specialist-London,
Environment, Health & Safety

SGS Canada Inc.

657 Consortium Court
London - Ontario - N6E 2S8
Phone: 519-672-4500 FAX: 519-672-0361

04-November-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 30 October 2024

LR Report: CA21655-OCT24

10227 Ilderton Rd.
Ilderton, ON
N0M 2A0, Canada

Copy: #1

Phone: 519-666-0190 ext 255
Fax: 519-666-0271

CERTIFICATE OF ANALYSIS

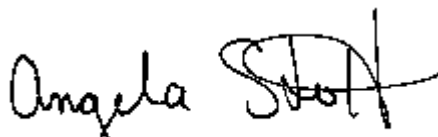
Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	30-Oct-24	30-Oct-24	30-Oct-24	30-Oct-24
2: Analysis Start Time		---	---	17:55	17:55	17:55	17:40
3: Analysis Completed Date		---	---	01-Nov-24	01-Nov-24	01-Nov-24	01-Nov-24
4: Analysis Completed Time		---	---	15:33	15:33	15:33	15:33
5: MAC		---	---	0	0	---	---
6: 1A0E6 DW Sample Station	29-Oct-24 11:20	5.1	0.78	0	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Parameter	Description	SGS Method Code
E.Coli	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Heterotrophic Plate Count (HPC)	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
Total Coliform	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Total Coliform Background	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001



Angela Stott, B.Sc.
Branch Manager-London
Environment, Health & Safety



Works #: 220005492

SGS Canada Inc.

657 Consortium Court
London - Ontario - N6E 2S8
Phone: 519-672-4500 FAX: 519-672-0361

08-November-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 06 November 2024
LR Report: CA20321-NOV24

10227 Ilderton Rd.
Ilderton, ON
N0M 2A0, Canada

Copy: #1

Phone: 519-666-0190 ext 255
Fax: 519-666-0271

CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Total Coliform cfu/100mL	E.Coli cfu/100mL
1: Analysis Start Date		---	06-Nov-24	06-Nov-24
2: Analysis Start Time		---	17:35	17:35
3: Analysis Completed Date		---	08-Nov-24	08-Nov-24
4: Analysis Completed Time		---	14:59	14:59
5: MAC		---	0	0
6: 35E33 RW 35E33 Well #2	05-Nov-24 10:47	5.3	2	0

MAC - Maximum Acceptable Concentration

Method Descriptions

Units	Description	SGS Method Code
cfu/100mL	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
cfu/100mL	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001


Cristal Schuster
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Works #: 220005492

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15-November-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 13 November 2024
LR Report: CA20611-NOV24

10227 Ilderton Rd.
Ilderton, ON
N0M 2A0, Canada

Copy: #1

Phone: 519-666-0190 ext 255
Fax: 519-666-0271

CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	13-Nov-24	13-Nov-24	13-Nov-24	13-Nov-24
2: Analysis Start Time		---	---	15:30	15:30	15:30	14:55
3: Analysis Completed Date		---	---	15-Nov-24	15-Nov-24	15-Nov-24	15-Nov-24
4: Analysis Completed Time		---	---	13:20	13:20	13:20	13:20
5: MAC		---	---	0	0	---	---
6: 1A0E6 DW 1A0E6 Sample Station	12-Nov-24 14:32	6.6	0.79	0	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Parameter	Description	SGS Method Code
E.Coli	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Heterotrophic Plate Count (HPC)	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
Total Coliform	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Total Coliform Background	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001


Cristal Schuster
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Environment, Health & Safety



Works #: 220005492

SGS Canada Inc.

657 Consortium Court
London - Ontario - N6E 2S8
Phone: 519-672-4500 FAX: 519-672-0361

25-November-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 22 November 2024
LR Report: CA21041-NOV24

10227 Ilderton Rd.
Ilderton, ON
N0M 2A0, Canada

Copy: #1

Phone: 519-666-0190 ext 255
Fax: 519-666-0271

CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCl Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	22-Nov-24	22-Nov-24	22-Nov-24	22-Nov-24
2: Analysis Start Time		---	---	16:40	16:40	16:40	16:10
3: Analysis Completed Date		---	---	25-Nov-24	25-Nov-24	25-Nov-24	25-Nov-24
4: Analysis Completed Time		---	---	09:57	09:57	09:57	09:57
5: MAC		---	---	0	0	---	---
6: 1A0E6 DW 1A0E6 Sample Station	21-Nov-24 13:32	5.4	1.11	0	0	0	< 10
7: 35E35 TW 35E35 Water Treatment Facility	21-Nov-24 13:20	5.4	1.27	0	0	0	< 10
8: DW Blow-off	21-Nov-24 13:46	5.4	1.04	0	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Parameter	Description	SGS Method Code
E.Coli	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Heterotrophic Plate Count (HPC)	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
Total Coliform	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Total Coliform Background	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001



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25-November-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 22 November 2024
LR Report: CA21049-NOV24

10227 Ilderton Rd.
Ilderton, ON
N0M 2A0, Canada

Copy: #1

Phone: 519-666-0190 ext 255
Fax: 519-666-0271

CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCl Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	22-Nov-24	22-Nov-24	22-Nov-24	22-Nov-24
2: Analysis Start Time		---	---	16:40	16:40	16:40	16:10
3: Analysis Completed Date		---	---	25-Nov-24	25-Nov-24	25-Nov-24	25-Nov-24
4: Analysis Completed Time		---	---	09:58	09:58	09:58	09:58
5: MAC		---	---	0	0	---	---
6: 1A0E6 DW 1A0E6 Sample Station	22-Nov-24 13:50	11.4	0.89	0	0	0	10
7: 35E35 TW 35E35 Water Treatment Facility	22-Nov-24 13:23	11.4	1.09	0	0	0	< 10
8: DW Blow-Off	22-Nov-24 13:46	11.4	1.04	0	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Parameter	Description	SGS Method Code
E.Coli	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Heterotrophic Plate Count (HPC)	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
Total Coliform	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Total Coliform Background	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001


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Project Specialist-London,
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Works #: 220005492

SGS Canada Inc.

657 Consortium Court
London - Ontario - N6E 2S8
Phone: 519-672-4500 FAX: 519-672-0361

29-November-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 27 November 2024
LR Report: CA21270-NOV24

10227 Ilderton Rd.
Ilderton, ON
N0M 2A0, Canada

Copy: #1

Phone: 519-666-0190 ext 255
Fax: 519-666-0271

CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	27-Nov-24	27-Nov-24	27-Nov-24	27-Nov-24
2: Analysis Start Time		---	---	13:20	13:20	13:20	12:40
3: Analysis Completed Date		---	---	29-Nov-24	29-Nov-24	29-Nov-24	29-Nov-24
4: Analysis Completed Time		---	---	11:28	11:28	11:28	11:28
5: MAC		---	---	0	0	---	---
6: 1A0E6 DW 1A0E6 Sample Station	26-Nov-24 12:00	8.1	0.74	0	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Parameter	Description	SGS Method Code
E.Coli	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Heterotrophic Plate Count (HPC)	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
Total Coliform	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Total Coliform Background	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001


Cristal Schuster
Project Specialist-London,
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Works #: 220005492

SGS Canada Inc.

657 Consortium Court
London - Ontario - N6E 2S8
Phone: 519-672-4500 FAX: 519-672-0361

06-December-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 04 December 2024
LR Report: CA20287-DEC24

10227 Ilderton Rd.
Ilderton, ON
N0M 2A0, Canada

Copy: #1

Phone: 519-666-0190 ext 255
Fax: 519-666-0271

CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Total Coliform cfu/100mL	E.Coli cfu/100mL
1: Analysis Start Date		---	04-Dec-24	04-Dec-24
2: Analysis Start Time		---	16:30	16:30
3: Analysis Completed Date		---	06-Dec-24	06-Dec-24
4: Analysis Completed Time		---	14:41	14:41
5: MAC		---	0	0
6: 35E33 RW 35E33 Well #2	03-Dec-24 11:36	8.9	0	0

MAC - Maximum Acceptable Concentration

Method Descriptions

Parameter	Description	SGS Method Code
E.Coli	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Total Coliform	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001


Cristal Schuster
Project Specialist-London,
Environment, Health & Safety



Works #: 220005492

SGS Canada Inc.

657 Consortium Court
London - Ontario - N6E 2S8
Phone: 519-672-4500 FAX: 519-672-0361

16-December-2024

Mun of Middlesex Centre (Birr)

Attn : Brian Watson

Date Rec. : 11 December 2024
LR Report: CA20610-DEC24

10227 Ilderton Rd.
Ilderton, ON
N0M 2A0, Canada

Copy: #1

Phone: 519-666-0190 ext 255
Fax: 519-666-0271

CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt °C	Field ResCI Free mg/L	Total Coliform cfu/100mL	E.Coli cfu/100mL	Total Coliform Background cfu/100mL	Heterotrophic Plate Count (HPC) cfu/1mL
1: Analysis Start Date		---	---	11-Dec-24	11-Dec-24	11-Dec-24	11-Dec-24
2: Analysis Start Time		---	---	17:40	17:40	17:40	17:15
3: Analysis Completed Date		---	---	13-Dec-24	13-Dec-24	13-Dec-24	13-Dec-24
4: Analysis Completed Time		---	---	15:30	15:30	15:30	15:30
5: MAC		---	---	0	0	---	---
6: 1A0E6 DW 1A0E6 Sample Station	10-Dec-24 10:00	5.0	0.99	0	0	0	< 10

MAC - Maximum Acceptable Concentration

Method Descriptions

Parameter	Description	SGS Method Code
E.Coli	E.Coli by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Heterotrophic Plate Count (HPC)	Heterotrophic Plate Count (HPC) by SP (using SPCA)	ME-CA-[ENV]MIC-LAK-AN-002
Total Coliform	Total Coliform by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001
Total Coliform Background	Background by MF (using DCM)	ME-CA-[ENV]MIC-LAK-AN-001


Cristal Schuster
Project Specialist-London,
Environment, Health & Safety

Appendix B - Drinking Water System Forms 2(A) & 2(B)

Retain Completed Form - Do Not Send to the Ministry

Part 1 - Drinking Water Works Permit Number

(Insert the Drinking Water Works Permit number authorizing minor modifications or replacements to the Drinking Water System)
052-204 Issue #4

Part 2 - Description of Minor Modifications or Replacements (Use attachments if required)

Birr Drinking Water System

Replaced online turbidity meter analyzer SC 200 controller with SC4500 controller.


The description shall include:

- 1) An identification of the system component being modified or replaced;
- 2) The location of the works being modified or replaced; and
- 3) A brief description of the modification or replacement

Part 3 - Verification by Owner

I hereby verify that

- 1) The minor modifications or replacements described in Part 2 of this form meets the requirements of the conditions of the Drinking Water Works Permit identified in Part 1 of this form which authorizes the minor modifications or replacements; and
- 2) I am authorized by the owner to complete this verification.

Name of Owner Municipality of Middlesex Centre	Name of Owner Representative Eric Joudrey
Signature 	Date (yyyy/mm/dd) 2024/09/04

**Form 2 - Record of Minor
Modifications or Replacements to the
Drinking Water System****RETAIN COMPLETED FORM - DO NOT SEND TO MOE****Part 1 - Drinking Water Works Permit Number***(Insert the Drinking Water Works Permit number authorizing minor modifications or replacements to the Drinking Water System)*

052-204 Issue #4

Part 2 - Description of Minor Modifications or Replacements (Use attachments if required)

Birr Drinking Water System

Replaced well pump and motor with new Grundfos 0.50 HP pump and motor.

The description shall include:

- 1) An identification of the system component being modified or replaced;
- 2) The location of the works being modified or replaced; and
- 3) A brief description of the modification or replacement

Part 3 - Verification by Owner

I hereby verify that

- 1) The minor modifications or replacements described in Part 2 of this form meets the requirements of the conditions of the Drinking Water Works Permit identified in Part 1 of this form which authorizes the minor modifications or replacements; and
- 2) I am authorized by the owner to complete this verification.

Name of Owner (Print)

Name of Owner Representative (Print)

Municipality of Middlesex Centre

Brian Watson

Signature

Date (yyyy/mm/dd)



2024/10/22

Form 2 - Record of Minor Modifications or Replacements to the Drinking Water System

Retain Completed Form - Do Not Send to the Ministry

Part 1 - Drinking Water Works Permit Number

(Insert the Drinking Water Works Permit number authorizing minor modifications or replacements to the Drinking Water System)
052-204 Issue #4

Part 2 - Description of Minor Modifications or Replacements (Use attachments if required)

Replaced 2" in-house Discharge pipping from PVC to stainless steel.

The description shall include:

- 1) An identification of the system component being modified or replaced;
- 2) The location of the works being modified or replaced; and
- 3) A brief description of the modification or replacement

Part 3 - Verification by Owner


I hereby verify that

- 1) The minor modifications or replacements described in Part 2 of this form meets the requirements of the conditions of the Drinking Water Works Permit identified in Part 1 of this form which authorizes the minor modifications or replacements; and
- 2) I am authorized by the owner to complete this verification.

Name of Owner
Municipality of middlesexCentre

Name of Owner Representative
Cromwell Damile

Signature



Date (yyyy/mm/dd)
2024/11/21



MUNICIPALITY OF MIDDLESEX CENTRE
 10227 Ilderton Road – RR 2 Ilderton, ON N0M 2A0
 P 519-666-0190 – Web: www.middlesexcentre.on.ca

EQUIPMENT DISINFECTION RECORD

Contractors must complete this information when a connection, modification or replacement is made in the distribution system.

Contractor Information:

Company / Contact Name	FARMINGTON MECHANICAL INC.		
Address	P.O. Box 271 Appleton ON		
Telephone	519-571-8010	Email	

Equipment Name: 2" inhouse discharge pipe
 Reason for Work: Replacing Pipping. Discharge inhouse pipe upgrade
 Location of Equipment in Process Stream: Plant

Is disinfection required: YES NO (circle one)
 Is bacteriological sampling required: YES NO (circle one)
 Is dechlorination required: YES NO (circle one)

Applicable Disinfection Procedure reviewed and followed (select one):

- ☒ AWWA C653-13 (Disinfection of Water Treatment Plants)
☐ AWWA C651-14 (Disinfecting Water Mains)
☐ AWWA C652-19 (Disinfection of Water Storage Facilities)
☒ Ontario Watermain Disinfection Procedure

NOTE: Disinfection is required for all portions of the facility that are downstream from the filter influent or that are downstream from the first point of disinfectant application in the treatment process when the water is disinfected prior to filtration. That part of the treatment facility handling raw water need not be disinfected but should be thoroughly cleaned. (AWWA C653)

Contractor Signature: [Signature] (performing required disinfection)

Date: 11/21/24

Describe Disinfection Process Followed:

AWWA C653-13 (Disinfection of Water Treatment plant)
~~AWWA~~ Ontario Watermain disinfection procedure

Describe Chemical, Product and Materials Used:

12% Cl₂ Anchor

Describe Dechlorination Process and Materials Used:

NA

Internal Use Section:

Required Documentation Attached:

- ☒ Corresponding current MSDS
☒ Disinfection Plan

Check and Complete:

- ☒ Work recorded in log book. _____
☐ Work order submitted (if applicable). _____
☒ Sample results and chain of custody attached (if applicable). _____

1.0 Reference Documents**1.1 Equipment Manuals****1.2 AWWA C653-13 (Disinfection of Water Treatment Plants)****1.3 AWWA C652-11 (Disinfection of Water Storage Facilities)****1.4 AWWA C651-14 (Disinfecting Water Mains)****1.5 Ontario Watermain Disinfection Procedure**