



2022 Annual Performance & Summary Report Melrose Drinking Water System

Date: January 23, 2023

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

Contents	ii
Introduction	1
Table 1 – Plant Information	1
Section A – System Description	1
Section B – Significant Modifications & Replacements	2
Section C – Microbiological Testing	2
(I) E. coli & Total Coliform	2
Table 2 – E. Coli & Total Coliform Samples	2
(II) Heterotrophic Plate Count (HPC)	2
Table 3 – Heterotrophic Plate Count (HPC) Samples	2
Section D – Chemical Testing	3
Nitrate and Nitrite	3
Table 4 – Quarterly Nitrate & Nitrite	3
Trihalomethanes (THM) and total Haloacetic Acids (HAA)	3
Table 5 – Quarterly Trihalomethane & Haloacetic Acid	3
Sodium & Fluoride	4
Table 6 – Sodium & Fluoride	4
Lead	4
Table 7 – Lead Sampling	5
Schedules 23 & 24	5
Table 8 – Schedule 23 & 24	5
Section E – Operational Monitoring	7
(I) Chlorine Residual	7
Table 9 – Chlorine Residuals	7
(II) Turbidity	7
Table 10 – Turbidity	8
Section F – Water Quantity	8
Table 11 – Rated Capacity	8
Table 12 – Monthly Raw Water Flows (m ³ /day)	8
Graph 1 – Monthly Flows (m ³ /day)	9
Table 13 – Treated Water Monthly Flow Summary	9
Table 14 – Treated Water Flow	9
Graph 2 – Monthly Treated Flows (m ³ /day)	10
(I) Rated Capacity Assessment	10
Section G – Non-Compliance Findings & Adverse Results	11
(I) Non-Compliance Findings	11
(III) SUMMARY OR REPORTING TEST RESULTS AND OTHER PROBLEMS (SCHEDULE 16)	11
Appendix A	1
Appendix B	2

Appendix C3

Introduction

The Municipality of Middlesex Centre has prepared a report summarizing system operation and water quality for every municipal drinking water system annually. The reports detail the latest water quality testing results, water quantity statistics and any adverse conditions that may have occurred for the previous 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	Melrose Well Supply System
Drinking Water System Number	260002915
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, 2022 to December 31, 2022

Section A – System Description

The Melrose Drinking Water System, owned and operated by the Municipality of Middlesex Centre, is a ground water supply system servicing 64 lots with an estimated population of approximately 200 residents. The system consists of two deep-drilled groundwater production wells operating under Permit to Take Water # P-300-8072386149. Raw water is pumped through 12% sodium hypochlorite pre-disinfection system into an aerator, for iron oxidization, and to an aeration reservoir. From this reservoir, the water is pumped to three multimedia pressure filters for final iron removal. The filtered water is then stored in a triple-chambered clear well for disinfection contact time. A chlorine analyzer samples the disinfection residual in from the clear well and if needed chemical pumps are available to boost the disinfection to the filtered water prior to the clear well. Water is pumped from the clear well to the distribution system through one of three vertical distribution pumps based on the pressure of the system. A fourth fire pump is available if a greater quantity of water is required to meet the pressure needs of the system. The system is controlled by on-site programming logic with an operator interface program (SCADA) to allow for operational changes as required. The system is operated under Municipal Drinking Water License Number 052-103 and Drinking Water Works Permit Number 052-203.

MECP licensed 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

Modifications & Replacements		
Wells 2 and 3 flow meter grounding wires replaced	Feb 2	\$334.80
UPS unit replaced	Aug 30	\$2,274.89
New sodium hypochlorite dosing tank installed	Nov 22	\$300.00

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 and treated water from the distribution system. Raw water is collected once per month on each well, and the distribution water is collected on a bi-weekly schedule. 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 2022 sampling program are shown on the table below. There were no adverse test results in this reporting period as shown in Table 2.

Table 2 – E. Coli & Total Coliform Samples

	Number of Samples	Range of E. coli Results Min – Max	Range of Total Coliform Results Min – Max
Raw	12	0 - 0	0 - 3
Distribution	26	0 - 0	0 - 0

(II) Heterotrophic Plate Count (HPC)

HPC analyses are required from the distribution water 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 2022 results are shown in Table 3.

Table 3 – Heterotrophic Plate Count (HPC) Samples

Parameters	Number of Samples	Range of HPC Results Min-Max
Distribution	26	<10 - 10

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. An increased testing frequency of once every three months is required by the Regulation where the concentration of a parameter is above half of the Maximum Allowable Concentration (MAC) under the Ontario Drinking Water Quality Standards. 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 for the year can be seen in Table 4.

Table 4 – Quarterly Nitrate & Nitrite

Parameter & Sample Date	Result (mg/l)	MAC (mg/l)	Exceedance
Nitrate			
1st Quarter	0.010	10.0	No
2nd Quarter	0.008	10.0	No
3rd Quarter	0.009	10.0	No
4th Quarter	0.006	10.0	No
Nitrite			
1st Quarter	<0.003 MDL	1.0	No
2nd Quarter	<0.003 MDL	1.0	No
3rd Quarter	<0.003 MDL	1.0	No
4th Quarter	<0.003 MDL	1.0	No

*MDL- Minimum Detection Limit

Trihalomethanes (THM) and total 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 – Quarterly Trihalomethane & Haloacetic Acid

Parameter & Sample Date	Result (mg/l)	Annual Running Average (mg/l)	MAC (mg/l)	Exceedance
Trihalomethane				
1st Quarter	0.014	0.016	0.100	No
2nd Quarter	0.014	0.015	0.100	No
3rd Quarter	0.011	0.014	0.100	No

Parameter & Sample Date	Result (mg/l)	Annual Running Average (mg/l)	MAC (mg/l)	Exceedance
4th Quarter	0.014	0.013	0.100	No
Haloacetic Acid (HAA)				
1st Quarter	<MDL*	<MDL*	0.080	No
2nd Quarter	<MDL*	<MDL*	0.080	No
3rd Quarter	<MDL*	<MDL*	0.080	No
4th Quarter	<MDL*	<MDL*	0.080	No

*MDL- Minimum Detection Limit

Sodium & 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 levels in 2022 were above 20 mg/L and notices were delivered to consumers as provided and directed by the MLHU. Report can be found in Appendix B.

Fluoride can occur in the natural environment with levels ranging from 1.5 to 2.4 mg/L. Levels greater than 1.5 are to be reported.

Table 6 – Sodium & Fluoride

Parameter	Sample Date	Result Value (mg/L)	MAC (mg/L)
Sodium	January 17, 2022	24.8	20
Sodium	February 1, 2022	27.3	20
Fluoride	January 2, 2022	1.00	1.5

Lead

Lead sampling occurs twice a year in winter and summer months. As per Schedule D of the Melrose Municipal Drinking Water Licence (MDWL) # 052-103, Issue 7 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 2022. There were no exceedances.

Table 7 – Lead Sampling

Parameter	Result Value	MAC	Exceedance
Winter Sample (Dec. 15 – April 15)			
Lead (µg/l)	0.06	10	No
Distribution Alkalinity (mg/l)	236	*30 - 500	No
Distribution pH	8.00	-	No
Summer Sample (June 15 – Oct. 15)			
Lead (µg/l)	0.10	10	No
Distribution Alkalinity	228	*30 – 500	No
Distribution pH	7.10	-	No

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

Schedules 23 & 24

Schedules 23 and 24 are regulated chemical testing that is to be conducted every five (5) years on secure groundwater wells. Table 8 has the results of that testing with no exceedance reported.

Table 8 – Schedule 23 & 24

Parameter	Sample Date	Treated Water Value	Exceedance
Antimony [ug/L]	17-Jan-22	0.6 <MDL	No
Arsenic [ug/L]	17-Jan-22	0.2	No
Barium [ug/L]	17-Jan-22	155	No
Boron [ug/L]	17-Jan-22	164	No
Cadmium [ug/L]	17-Jan-22	0.003 <MDL	No
Chromium [ug/L]	17-Jan-22	0.08 <MDL	No
Mercury [ug/L]	17-Jan-22	0.01 <MDL	No
Selenium [ug/L]	17-Jan-22	0.04 <MDL	No
Uranium [ug/L]	17-Jan-22	0.108	No
Benzene [ug/L]	17-Jan-22	0.32 <MDL	No
Carbon tetrachloride [ug/L]	17-Jan-22	0.17 <MDL	No
1,2-Dichlorobenzene [ug/L]	17-Jan-22	0.41 <MDL	No
1,4-Dichlorobenzene [ug/L]	17-Jan-22	0.36 <MDL	No
1,1-Dichloroethylene (vinylidene chloride) [ug/L]	17-Jan-22	0.33 <MDL	No

Parameter	Sample Date	Treated Water Value	Exceedance
1,2-Dichloroethane [ug/L]	17-Jan-22	0.35 <MDL	No
Dichloromethane [ug/L]	17-Jan-22	0.35 <MDL	No
Monochlorobenzene [ug/L]	17-Jan-22	0.3 <MDL	No
Tetrachloroethylene (perchloroethylene) [ug/L]	17-Jan-22	0.35 <MDL	No
Trichloroethylene [ug/L]	17-Jan-22	0.44 <MDL	No
Vinyl Chloride [ug/L]	17-Jan-22	0.17 <MDL	No
Diquat [ug/L]	17-Jan-22	1 <MDL	No
Paraquat [ug/L]	17-Jan-22	1 <MDL	No
Glyphosate [ug/L]	17-Jan-22	1 <MDL	No
Polychlorinated Biphenyls (PCBs) - Total [ug/L]	17-Jan-22	0.04 <MDL	No
Benzo(a)pyrene [ug/L]	17-Jan-22	0.004 <MDL	No
Alachlor [ug/L]	17-Jan-22	0.02 <MDL	No
Atrazine + N-dealkylated metabolites [ug/L]	17-Jan-22	0.01 <MDL	No
Atrazine [ug/L]	17-Jan-22	0.01 <MDL	No
Desethyl atrazine [ug/L]	17-Jan-22	0.01 <MDL	No
Azinphos-methyl [ug/L]	17-Jan-22	0.05 <MDL	No
Carbaryl [ug/L]	17-Jan-22	0.05 <MDL	No
Carbofuran [ug/L]	17-Jan-22	0.01 <MDL	No
Chlorpyrifos [ug/L]	17-Jan-22	0.02 <MDL	No
Diazinon [ug/L]	17-Jan-22	0.02 <MDL	No
Dimethoate [ug/L]	17-Jan-22	0.06 <MDL	No
Diuron [ug/L]	17-Jan-22	0.03 <MDL	No
Malathion [ug/L]	17-Jan-22	0.02 <MDL	No
Metolachlor [ug/L]	17-Jan-22	0.01 <MDL	No
Metribuzin [ug/L]	17-Jan-22	0.02 <MDL	No
Phorate [ug/L]	17-Jan-22	0.01 <MDL	No
Prometryne [ug/L]	17-Jan-22	0.03 <MDL	No
Simazine [ug/L]	17-Jan-22	0.01 <MDL	No
Terbufos [ug/L]	17-Jan-22	0.01 <MDL	No
Triallate [ug/L]	17-Jan-22	0.01 <MDL	No
Trifluralin [ug/L]	17-Jan-22	0.02 <MDL	No
2,4-dichlorophenoxyacetic acid (2,4-D) [ug/L]	17-Jan-22	0.19 <MDL	No
Bromoxynil [ug/L]	17-Jan-22	0.33 <MDL	No

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

*MDL- Minimum Detection Limit

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 reportable incidents in 2022. A summary of the chlorine residual readings is provided in the table below.

Table 9 – Chlorine Residuals

Parameter	Number of Tests or Monitoring Frequency	Range of Results (Min – Max)
Chlorine residual in distribution (mg/l)	103	1.01 – 1.40
Chlorine residual after treatment (mg/L)	Continuous	0.62- 1.41

(II) Turbidity

Treated water turbidity, measured in units of NTU, is monitored continuously. Though turbidity of groundwater is not regulated under the Safe Drinking Water Act (SDWA) it is a tool that is used to signal a problem with plant operations. As a standard rule turbidity should be < 1 NTU at the treatment plant and < 5 NTU in the distribution system. As per the Permit to Take Water the turbidity of the raw well water is checked monthly. A summary of the monitoring results for 2022 is provided in the table below.

Table 10 – Turbidity

Parameter	Number of Tests or Monitoring Frequency	Range of Results (Min – Max)
Turbidity after treatment (NTU)	Continuous	0.03 – 6.79

Section F – Water Quantity

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. A summary of the 2022 flows is provided below.

Table 11 – Rated Capacity

Flow Summary	Quantity
Permit to Take Water Limit	277 m ³ /d

Table 12 – Monthly Raw Water Flows (m³/day)

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg.
Rated Flow	m ³	277	277	277	277	277	277	277	277	277	277	277	277	-
Raw Average	m ³ /d	34.5	33.3	34.7	50.4	46.0	57.7	74.5	48.5	50.5	37.8	30.8	35.9	44.5
Raw Max	m ³ /d	68.8	64.9	56.8	31.5	97.7	102.1	143.0	107.6	91.2	57.1	53.2	79.6	80.9

Graph 1 – Monthly Flows (m³/day)

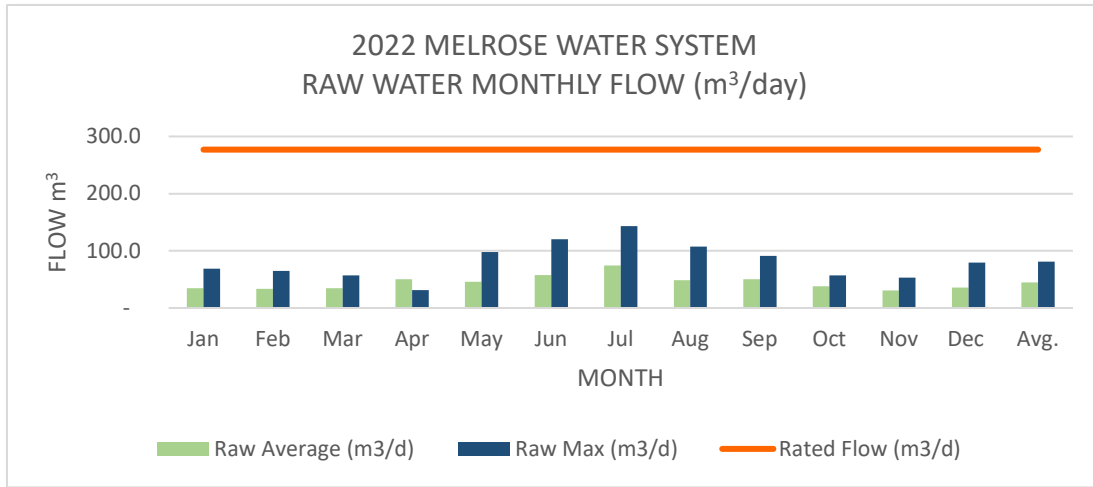


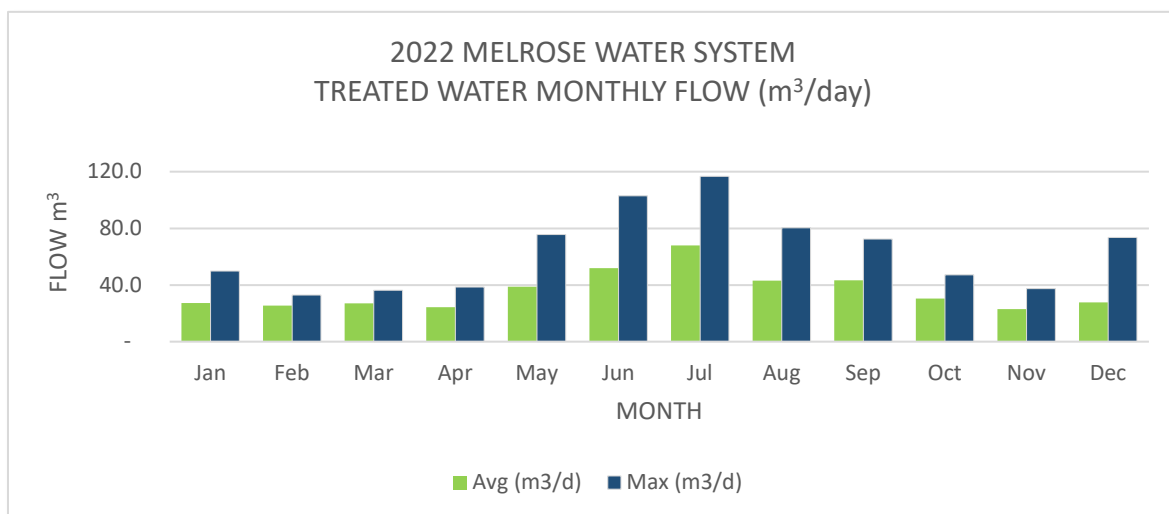
Table 13 – Treated Water Monthly Flow Summary

2022 Average Daily Treated Water Flow	35.6 m ³ /day
2022 Maximum Daily Treated Water Flow	116.6 m ³ /day
2022 Average Monthly Treated Water Flow	1,084 m ³
2022 Total Amount of Treated Water Supplied	13,009 m ³

Table 14 – Treated Water Flow

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Avg (m³/d)	27.3	25.5	27.0	24.3	38.8	52.0	68.0	43.0	43.2	30.5	23.0	27.7
Max (m³/d)	49.8	32.9	36.3	38.6	75.5	102.8	116.6	80.4	72.4	47.1	37.5	73.6

Graph 2 – Monthly Treated Flows (m³/day)



(I) Rated Capacity Assessment

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

System Capability Assessment Comparison of Treated Water Rates: Melrose Well Supply System				
Month	Total Flow (m ³ /month)	Monthly Raw Average Flow (m ³ /day)	Max Raw Flow (m ³ /day)	Avg Flow / Rated Capacity
January	1,070	34.5	68.75	12%
February	932	33.3	64.89	12%
March	1,076	34.7	56.83	13%
April	944	50.4	31.48	18%
May	1,425	46.0	97.71	17%
June	1,731	57.7	120.09	21%
July	2,308	74.5	142.97	27%
August	1,503	48.5	107.62	18%
September	1,516	50.5	91.15	18%
October	1,170	37.8	57.09	14%
November	925	30.8	53.16	11%
December	1,112	35.9	79.62	13%
Average Flow	1,310	44.5	31.48	16%
Maximum Flow	2,308	74.5	97.71	27%
Rated Capacity	277 (m³/day)			

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. The MECP inspector identified one (1) non-compliance with regulatory requirements in 2022.

(I) Non-Compliance Findings

Ontario Regulation 128/48 requires operators to record information, collected during operation of the subsystem, in chronological order.

It was found that November distribution residuals were not written in chronological order.

(III) SUMMARY OR REPORTING TEST RESULTS AND OTHER PROBLEMS (SCHEDULE 16)

AWQI # 157676 - Sodium exceedance event

Five-year sodium samples collected on January 17 were found to have sodium greater than 20 mg/L. The MLHU and MECP were contacted and a second set of samples were collected as required. The second set of samples also had sodium greater than 20 mg/L. The municipality delivered an informational handout, provided by the MLHU, to all consumers attached to the water system of the results and posted the same to the municipality's web site as instructed.

Appendix A
Analytical Data

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

07-January-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 04 January 2022
LR Report: CA20032-JAN22

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-Jan-22	04-Jan-22
2: Analysis Start Time		---	16:45	16:45
3: Analysis Completed Date		---	06-Jan-22	06-Jan-22
4: Analysis Completed Time		---	15:09	15:09
5: MAC		---	0	0
6: 1A0FC RW Well #2	03-Jan-22 09:34	7.9	0	0
7: 1A0FD RW Well #3	03-Jan-22 09:28	7.9	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.

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

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

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

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

Works #: 260002915

11-January-2022

Date Rec. : 04 January 2022
LR Report: CA30014-JAN22

Copy: #1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: MAC	8: MDL	9: 1A106 DW Me-10	10: 1A102 TW Water Treatment Facility
Sample Date & Time							03-Jan-22 10:27	03-Jan-22 09:38
Temperature Upon Receipt [at London Lab °C]	---	---	---	---	---	---	7.9	7.9
Field Free Chlorine [mg/L]	---	---	---	---	---	---	1.19	---
Nitrite (as N) [mg/L]	05-Jan-22	17:55	10-Jan-22	13:28	1.0	0.003	---	0.003 <MDL
Nitrate (as N) [mg/L]	05-Jan-22	17:55	10-Jan-22	13:28	10	0.006	---	0.010
Nitrate + Nitrite (as N) [mg/L]	05-Jan-22	17:55	10-Jan-22	13:28	---	0.006	---	0.010
Trihalomethanes (total) [ug/L]	06-Jan-22	17:05	10-Jan-22	13:42	100 (RAA)	0.37	14	---
Bromodichloromethane [ug/L]	06-Jan-22	17:05	10-Jan-22	13:42	--	0.26	4.4	---
Bromoform [ug/L]	06-Jan-22	17:05	10-Jan-22	13:42	--	0.34	0.34 <MDL	---
Chloroform [ug/L]	06-Jan-22	17:05	10-Jan-22	13:42	--	0.29	6.8	---
Dibromochloromethane [ug/L]	06-Jan-22	17:05	10-Jan-22	13:42	--	0.37	2.6	---
Total Haloacetic Acids (HAA5) [ug/L]	06-Jan-22	08:04	10-Jan-22	13:36	80 (RAA)	5.3	5.3 <MDL	---
Chloroacetic Acid [ug/L]	06-Jan-22	08:04	10-Jan-22	13:36	---	4.7	4.7 <MDL	---
Bromoacetic Acid [ug/L]	06-Jan-22	08:04	10-Jan-22	13:36	---	2.9	2.9 <MDL	---
Dichloroacetic Acid [ug/L]	06-Jan-22	08:04	10-Jan-22	13:36	---	2.6	3.3	---
Dibromoacetic Acid [ug/L]	06-Jan-22	08:04	10-Jan-22	13:36	---	2.0	2.0 <MDL	---
Trichloroacetic Acid [ug/L]	06-Jan-22	08:04	10-Jan-22	13:36	---	5.3	5.3 <MDL	---

Online LIMS

000267788

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

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

SGS Canada Inc.

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

14-January-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 11 January 2022
 LR Report: CA30200-JAN22

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 at London Lab °C	Temperature Upon Receipt at Lakefield Lab °C	Bicarbonate mg/L as CaCO3	Carbonate mg/L as CaCO3	Total Suspended Solids mg/L	Sulphide ug/L	Iron ug/L	Manganese ug/L
1: Analysis Start Date		---	---	12-Jan-22	12-Jan-22	12-Jan-22	12-Jan-22	13-Jan-22	13-Jan-22
2: Analysis Start Time		---	---	15:27	15:27	13:32	13:26	12:06	12:06
3: Analysis Completed Date		---	---	13-Jan-22	13-Jan-22	13-Jan-22	13-Jan-22	13-Jan-22	13-Jan-22
4: Analysis Completed Time		---	---	14:40	14:40	11:49	10:29	15:25	15:25
5: AO/OG		---	---	---	---	---	50	300	50
6: MDL		---	---	2	2	2	6	0	0.00
7: 1A0FC RW Well #2	10-Jan-22 10:15	1.9	5.0	237	2 <MDL	3	6 <MDL	848	12.5
8: 1A0FD RW Well #3	10-Jan-22 10:20	1.9	5.0	240	2 <MDL	4	6 <MDL	794	15.0

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

Method Descriptions

Parameter	Description	SGS Method Code
Bicarbonate	Bicarbonate by Titration	ME-CA-[ENV]EWL-LAK-AN-006
Carbonate	Carbonate by Titration	ME-CA-[ENV]EWL-LAK-AN-006
Iron	Iron by ICP-MS drinking water	ME-CA-[ENV]SPE-LAK-AN-006
Manganese	Manganese by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Sulphide	Sulphide by Skalar	ME-CA-[ENV]SFA-LAK-AN-008
Total Suspended Solids	Total Suspended Solids	ME-CA-[ENV]EWL-LAK-AN-004

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

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

13-January-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 11 January 2022
 LR Report: CA20355-JAN22

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-Jan-22	11-Jan-22	11-Jan-22	11-Jan-22
2: Analysis Start Time		---	---	13:35	13:35	13:35	12:10
3: Analysis Completed Date		---	---	13-Jan-22	13-Jan-22	13-Jan-22	13-Jan-22
4: Analysis Completed Time		---	---	11:38	11:38	11:38	11:38
5: MAC		---	---	0	0	---	---
6: 1A106 DW Me - 9	10-Jan-22 10:33	1.6	1.33	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



SGS Canada Inc.

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

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

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

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

Works #: 260002915

28-January-2022

Date Rec. : 18 January 2022
LR Report: CA30333-JAN22

Copy: #1

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: Half MAC	7: AO/OG	8: MDL	9: 1A102 TW Water Treatment Facility
Sample Date & Time									17-Jan-22 10:40
Temperature Upon Receipt [at London Lab °C]	---	---	---	---	---	---	---	---	7.4
Temperature Upon Receipt [at Lakefield Lab °C]	---	---	---	---	---	---	---	---	6.0
Fluoride [mg/L]	20-Jan-22	12:32	21-Jan-22	08:24	1.5	---	---	0.06	1.00
Antimony [ug/L]	21-Jan-22	12:26	24-Jan-22	10:07	6	3	---	0.6	0.6 <MDL
Arsenic [ug/L]	21-Jan-22	12:26	24-Jan-22	10:07	10	5	---	0.2	0.2
Barium [ug/L]	21-Jan-22	12:26	24-Jan-22	10:07	1000	500	---	0.02	155
Boron [ug/L]	21-Jan-22	12:26	24-Jan-22	10:07	5000	2500	---	2	164
Cadmium [ug/L]	21-Jan-22	12:26	24-Jan-22	10:07	5	2.5	---	0.003	0.003 <MDL
Chromium [ug/L]	21-Jan-22	12:26	24-Jan-22	10:07	50	25	---	0.08	0.08 <MDL
Mercury [ug/L]	20-Jan-22	12:50	21-Jan-22	14:33	1	0.5	---	0.01	0.01 <MDL
Sodium [mg/L]	21-Jan-22	12:26	24-Jan-22	10:08	20	---	200	0.01	24.8 MAC
Selenium [ug/L]	21-Jan-22	12:26	24-Jan-22	10:08	50	25	---	0.04	0.04 <MDL
Uranium [ug/L]	21-Jan-22	12:26	24-Jan-22	10:08	20	10	---	0.002	0.108
Benzene [ug/L]	21-Jan-22	09:05	24-Jan-22	16:49	1	0.5	---	0.32	0.32 <MDL
Carbon tetrachloride [ug/L]	21-Jan-22	09:05	24-Jan-22	16:49	2	1	---	0.17	0.17 <MDL
1,2-Dichlorobenzene [ug/L]	21-Jan-22	09:05	24-Jan-22	16:49	200	100	3	0.41	0.41 <MDL
1,4-Dichlorobenzene [ug/L]	21-Jan-22	09:05	24-Jan-22	16:49	5	2.5	1	0.36	0.36 <MDL
1,1-Dichloroethylene (vinylidene chloride) [ug/L]	21-Jan-22	09:05	24-Jan-22	16:49	14	7	---	0.33	0.33 <MDL
1,2-Dichloroethane [ug/L]	21-Jan-22	09:05	24-Jan-22	16:49	5	2.5	---	0.35	0.35 <MDL
Dichloromethane [ug/L]	21-Jan-22	09:05	24-Jan-22	16:49	50	25	---	0.35	0.35 <MDL
Monochlorobenzene [ug/L]	21-Jan-22	09:05	24-Jan-22	16:49	80	40	30	0.30	0.3 <MDL



SGS Canada Inc.

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

Works #: 260002915

LR Report : CA30333-JAN22

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: MAC	6: Half MAC	7: AO/OG	8: MDL	9: 1A102 TW Water Treatment Facility
Tetrachloroethylene (perchloroethylene) [ug/L]	21-Jan-22	09:05	24-Jan-22	16:49	10	5	---	0.35	0.35 <MDL
Trichloroethylene [ug/L]	21-Jan-22	09:05	24-Jan-22	16:49	5	2.5	---	0.44	0.44 <MDL
Vinyl Chloride [ug/L]	21-Jan-22	09:05	24-Jan-22	16:49	1	0.5	---	0.17	0.17 <MDL
Diquat [ug/L]	25-Jan-22	10:19	27-Jan-22	16:47	70	35	---	1	1 <MDL
Paraquat [ug/L]	25-Jan-22	10:19	27-Jan-22	16:47	10	5	---	1	1 <MDL
Glyphosate [ug/L]	27-Jan-22	13:06	28-Jan-22	10:18	280	140	---	1	1 <MDL
Polychlorinated Biphenyls (PCBs) - Total [ug/L]	22-Jan-22	09:22	24-Jan-22	16:39	3	1.5	---	0.04	0.04 <MDL
Benzo(a)pyrene [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	0.01	0.005	---	0.004	0.004 <MDL
Alachlor [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	5	2.5	---	0.02	0.02 <MDL
Atrazine + N-dealkylated metabolites [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	5	2.5	---	0.01	0.01 <MDL
Atrazine [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	---	---	---	0.01	0.01 <MDL
Desethyl atrazine [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	---	---	---	0.01	0.01 <MDL
Azinphos-methyl [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	20	10	---	0.05	0.05 <MDL
Carbaryl [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	90	45	---	0.05	0.05 <MDL
Carbofuran [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	90	45	---	0.01	0.01 <MDL
Chlorpyrifos [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	90	45	---	0.02	0.02 <MDL
Diazinon [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	20	10	---	0.02	0.02 <MDL
Dimethoate [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	20	10	---	0.06	0.06 <MDL
Diuron [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	150	75	---	0.03	0.03 <MDL
Malathion [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	190	95	---	0.02	0.02 <MDL
Metolachlor [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	50	25	---	0.01	0.01 <MDL
Metribuzin [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	80	40	---	0.02	0.02 <MDL
Phorate [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	2	1	---	0.01	0.01 <MDL
Prometryne [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	1	0.5	---	0.03	0.03 <MDL
Simazine [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	10	5	---	0.01	0.01 <MDL
Terbufos [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	1	0.5	---	0.01	0.01 <MDL
Triallate [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	230	115	---	0.01	0.01 <MDL
Trifluralin [ug/L]	22-Jan-22	06:19	26-Jan-22	16:15	45	22.5	---	0.02	0.02 <MDL
2,4-dichlorophenoxyacetic acid (2,4-D) [ug/L]	26-Jan-22	08:15	27-Jan-22	16:01	100	50	---	0.19	0.19 <MDL
Bromoxynil [ug/L]	26-Jan-22	08:15	27-Jan-22	16:01	5	2.5	---	0.33	0.33 <MDL
Dicamba [ug/L]	26-Jan-22	08:15	27-Jan-22	16:01	120	60	---	0.20	0.20 <MDL
Diclofop-methyl [ug/L]	26-Jan-22	08:15	27-Jan-22	16:01	9	4.5	---	0.40	0.40 <MDL
MCPA [mg/L]	26-Jan-22	08:15	27-Jan-22	16:01	0.1	0.05	---	0.00012	0.00012 <MDL
Picloram [ug/L]	26-Jan-22	08:15	27-Jan-22	16:01	190	95	---	1	1 <MDL
2,4-dichlorophenol [ug/L]	26-Jan-22	08:15	27-Jan-22	16:01	900	450	0.3	0.15	0.15 <MDL
2,4,6-trichlorophenol [ug/L]	26-Jan-22	08:15	27-Jan-22	16:01	5	2.5	2	0.25	0.25 <MDL

OnLine LIMS

000278544



SGS Canada Inc.

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

Works #: 260002915

LR Report : CA30333-JAN22

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: MAC	6: Half MAC	7: AO/OG	8: MDL	9: 1A102 TW Water Treatment Facility
2,3,4,6-tetrachlorophenol [ug/L]	26-Jan-22	08:15	27-Jan-22	16:01	100	50	1	0.2	0.20 <MDL
Pentachlorophenol [ug/L]	26-Jan-22	08:15	27-Jan-22	16:01	60	30	30	0.15	0.15 <MDL

MAC - Maximum Acceptable Concentration
 Half MAC - Half of the Maximum Acceptable Concentration
 AO/OG - Aesthetic Objective / Operational Guideline
 MDL - SGS Method Detection Limit

MAC - (ADVERSE) Above Maximum Acceptable Concentration
 The AWQI # assigned by the MOECP for the adverse sodium result is: 157676

Method Descriptions

Units	Description	SGS Method Code
ug/L	VOC wtr	ME-CA-[ENV]GC-LAK-AN-004
ug/L	VOC wtr	ME-CA-[ENV]GC-LAK-AN-004
ug/L	VOC wtr	ME-CA-[ENV]GC-LAK-AN-004
ug/L	VOC wtr	ME-CA-[ENV]GC-LAK-AN-004
ug/L	PACP wtr	ME-CA-[ENV]GC-LAK-AN-003
ug/L	PACP wtr	ME-CA-[ENV]GC-LAK-AN-003
ug/L	PACP wtr	ME-CA-[ENV]GC-LAK-AN-003
ug/L	PACP wtr	ME-CA-[ENV]GC-LAK-AN-003
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
ug/L	Antimony by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
ug/L	Arsenic by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
ug/L	Barium by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
ug/L	VOC wtr - BTEX	ME-CA-[ENV]GC-LAK-AN-004
ug/L	Pest wtr - B(a)P	ME-CA-[ENV]GC-LAK-AN-005
ug/L	Boron by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
ug/L	PACP wtr	ME-CA-[ENV]GC-LAK-AN-003
ug/L	Cadmium by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
ug/L	VOC wtr	ME-CA-[ENV]GC-LAK-AN-004
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
ug/L	Chromium by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018

OnLine LIMS

0002785444



SGS Canada Inc.

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

Works #: 260002915

LR Report : CA30333-JAN22

Units	Description	SGS Method Code
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
ug/L	PACP wtr	ME-CA-[ENV]GC-LAK-AN-003
ug/L	VOC wtr	ME-CA-[ENV]GC-LAK-AN-004
ug/L	PACP wtr	ME-CA-[ENV]GC-LAK-AN-003
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
ug/L	Diquat by Dionex	ME-CA-[ENV]IC-LAK-AN-005
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
mg/L	Fluoride by specific ion electrode	ME-CA-[ENV]EWL-LAK-AN-014
ug/L	Glyphosate by Dionex	ME-CA-[ENV]IC-LAK-AN-003
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
mg/L	PACP wtr	ME-CA-[ENV]GC-LAK-AN-003
ug/L	Hg drinking water by CVAAS	ME-CA-[ENV]SPE-LAK-AN-004
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
ug/L	VOC wtr	ME-CA-[ENV]GC-LAK-AN-004
ug/L	Paraquat by Dionex	ME-CA-[ENV]IC-LAK-AN-005
ug/L	PACP wtr	ME-CA-[ENV]GC-LAK-AN-003
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
ug/L	PACP wtr	ME-CA-[ENV]GC-LAK-AN-003
ug/L	PCB wtr	ME-CA-[ENV]GC-LAK-AN-001
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
ug/L	Selenium by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
mg/L	Sodium by ICP-MS drinking water	ME-CA-[ENV]SPE-LAK-AN-006
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
ug/L	VOC wtr	ME-CA-[ENV]GC-LAK-AN-004
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
ug/L	VOC wtr	ME-CA-[ENV]GC-LAK-AN-004
ug/L	Pest wtr	ME-CA-[ENV]GC-LAK-AN-018
ug/L	Uranium by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
ug/L	VOC wtr	ME-CA-[ENV]GC-LAK-AN-004

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

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

27-January-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 25 January 2022
LR Report: CA20937-JAN22

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		---	---	25-Jan-22	25-Jan-22	25-Jan-22	25-Jan-22
2: Analysis Start Time		---	---	13:00	13:00	13:00	12:10
3: Analysis Completed Date		---	---	27-Jan-22	27-Jan-22	27-Jan-22	27-Jan-22
4: Analysis Completed Time		---	---	16:05	16:05	16:05	16:05
5: MAC		---	---	0	0	---	---
6: 1A106 DW ME. 9	24-Jan-22 10:45	5.0	1.25	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

SGS Canada Inc.

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

02-February-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 25 January 2022
 LR Report: CA30463-JAN22

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 at London Lab °C	Temperature Upon Receipt at Lakefield Lab °C	Sodium mg/L
1: Analysis Start Date		---	---	01-Feb-22
2: Analysis Start Time		---	---	08:01
3: Analysis Completed Date		---	---	02-Feb-22
4: Analysis Completed Time		---	---	09:39
5: MAC		---	---	20
7: AO/OG		---	---	200
8: MDL		---	---	0.01
9: 1A102 TW Water Treatment Facility	24-Jan-22 14:35	5.0	3.0	27.3 MAC

MAC - Maximum Acceptable Concentration
 AO/OG - Aesthetic Objective / Operational Guideline
 MDL - SGS Method Detection Limit

MAC - (ADVERSE) Above Maximum Acceptable Concentration - Sodium exceedence previously reported January 24th, 2022 - AWQI# 157676

Method Descriptions

Parameter	Description	SGS Method Code
Sodium	Sodium by ICP-MS drinking water	ME-CA-[ENV]SPE-LAK-AN-006

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

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

10-February-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 08 February 2022
LR Report: CA20296-FEB22

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		---	---	08-Feb-22	08-Feb-22	08-Feb-22	08-Feb-22
2: Analysis Start Time		---	---	12:30	12:30	12:30	11:50
3: Analysis Completed Date		---	---	10-Feb-22	10-Feb-22	10-Feb-22	10-Feb-22
4: Analysis Completed Time		---	---	13:38	13:38	13:38	13:38
5: MAC		---	---	0	0	---	---
6: 1A0FC RW Well #2	07-Feb-22 11:30	3.1	---	0	0	---	---
7: 1A0FD RW Well #3	07-Feb-22 11:35	3.1	---	0	0	---	---
8: 1A106 DW Sample Station	07-Feb-22 11:43	3.1	1.33	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

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

25-February-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 22 February 2022
 LR Report: CA20885-FEB22

10227 Ilderton Rd., Ilderton
 Canada, N0M 2A0
 Phone: 519-666-0190 ext 255, Fax:519-666-0271

Copy: #1

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-Feb-22	22-Feb-22	22-Feb-22	22-Feb-22
2: Analysis Start Time		---	---	15:15	15:15	15:15	14:40
3: Analysis Completed Date		---	---	25-Feb-22	25-Feb-22	25-Feb-22	25-Feb-22
4: Analysis Completed Time		---	---	06:59	06:59	06:59	06:59
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	21-Feb-22 13:04	3.3	1.22	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

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

10-March-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 08 March 2022
 LR Report: CA20343-MAR22

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		---	---	08-Mar-22	08-Mar-22	08-Mar-22	08-Mar-22
2: Analysis Start Time		---	---	13:20	13:20	13:20	12:45
3: Analysis Completed Date		---	---	10-Mar-22	10-Mar-22	10-Mar-22	10-Mar-22
4: Analysis Completed Time		---	---	15:00	15:00	15:00	15:00
5: MAC		---	---	0	0	---	---
6: 1A0FC RW Well #2	07-Mar-22 13:20	4.4	---	0	0	---	---
7: 1A0FD RW Well #3	07-Mar-22 13:23	4.4	---	0	0	---	---
8: 1A106 DW Sample Station	07-Mar-22 13:33	4.4	1.21	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

SGS Canada Inc.

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

22-March-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 15 March 2022
 LR Report: CA14331-MAR22

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 at London Lab °C	Temperature Upon Receipt at Lakefield Lab °C	Field pH no unit	Alkalinity mg/L as CaCO3	Lead ug/L
1: Analysis Start Date		---	---	---	16-Mar-22	22-Mar-22
2: Analysis Start Time		---	---	---	15:41	06:55
3: Analysis Completed Date		---	---	---	17-Mar-22	22-Mar-22
4: Analysis Completed Time		---	---	---	14:00	10:13
5: MAC		---	---	---	---	10
6: AO/OG		---	---	6.5-8.5	30-500	---
7: MDL		---	---	---	2	0.01
8: DW Sample Station- Wynfield 1st	14-Mar-22 13:23	5.7	6.0	8.0	---	0.06
9: DW Sample Station- Wynfield 2nd	14-Mar-22 13:23	5.7	6.0	8.0	236	---

MAC - Maximum Acceptable Concentration
 AO/OG - Aesthetic Objective / Operational Guideline
 MDL - SGS Method Detection Limit

Method Descriptions

Parameter	Description	SGS Method Code
Alkalinity	Alkalinity by Titration	ME-CA-[ENV]EWL-LAK-AN-006
Lead	Lead by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006


 Carrie Greenlaw
 Project Specialist,
 Environment, Health & Safety

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

25-March-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 22 March 2022
 LR Report: CA20975-MAR22

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-Mar-22	22-Mar-22	22-Mar-22	22-Mar-22
2: Analysis Start Time		---	---	17:45	17:45	17:45	17:05
3: Analysis Completed Date		---	---	24-Mar-22	24-Mar-22	24-Mar-22	24-Mar-22
4: Analysis Completed Time		---	---	16:23	16:23	16:23	16:23
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	21-Mar-22 11:19	3.8	1.20	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

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

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

11-April-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 05 April 2022
 LR Report: CA20100-APR22

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		---	---	05-Apr-22	05-Apr-22	05-Apr-22	05-Apr-22
2: Analysis Start Time		---	---	16:15	16:15	16:15	15:45
3: Analysis Completed Date		---	---	08-Apr-22	08-Apr-22	08-Apr-22	08-Apr-22
4: Analysis Completed Time		---	---	10:56	10:56	10:56	10:56
5: MAC		---	---	0	0	---	---
6: 1A0FC RW Well #2	04-Apr-22 08:56	6.6	---	0	0	---	---
7: 1A0FD RW Well #3	04-Apr-22 08:59	6.6	---	0	0	---	---
8: 1A106 DW Sample Station	04-Apr-22 08:51	6.6	1.28	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

Angela Stott, B.Sc.
 Branch Manager-London
 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

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

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

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

Works #: 260002915

19-April-2022

Date Rec. : 05 April 2022
LR Report: CA30049-APR22

Copy: #1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: MAC	8: MDL	9: 1A106 DW Sample Station	10: 1A102 TW Water Treatment Facility
Sample Date & Time							04-Apr-22 08:51	04-Apr-22 08:43
Temperature Upon Receipt [at London Lab °C]	---	---	---	---	---	---	6.6	6.6
Field Free Chlorine [mg/L]	---	---	---	---	---	---	1.28	---
Nitrite (as N) [mg/L]	06-Apr-22	18:09	08-Apr-22	10:29	1.0	0.003	---	0.003 <MDL
Nitrate (as N) [mg/L]	06-Apr-22	18:09	08-Apr-22	10:29	10	0.006	---	0.008
Nitrate + Nitrite (as N) [mg/L]	06-Apr-22	18:09	08-Apr-22	10:29	---	0.006	---	0.008
Trihalomethanes (total) [ug/L]	14-Apr-22	19:57	18-Apr-22	17:20	100 (RAA)	0.37	14	---
Bromodichloromethane [ug/L]	14-Apr-22	19:57	18-Apr-22	17:20	--	0.26	4.3	---
Bromoform [ug/L]	14-Apr-22	19:57	18-Apr-22	17:20	--	0.34	0.34 <MDL	---
Chloroform [ug/L]	14-Apr-22	19:57	18-Apr-22	17:20	--	0.29	7.2	---
Dibromochloromethane [ug/L]	14-Apr-22	19:57	18-Apr-22	17:20	--	0.37	2.8	---
Total Haloacetic Acids (HAA5) [ug/L]	13-Apr-22	14:38	18-Apr-22	17:34	80 (RAA)	5.3	5.3 <MDL	---
Chloroacetic Acid [ug/L]	13-Apr-22	14:38	18-Apr-22	17:34	---	4.7	4.7 <MDL	---
Bromoacetic Acid [ug/L]	13-Apr-22	14:38	18-Apr-22	17:34	---	2.9	2.9 <MDL	---
Dichloroacetic Acid [ug/L]	13-Apr-22	14:38	18-Apr-22	17:34	---	2.6	4.2	---
Dibromoacetic Acid [ug/L]	13-Apr-22	14:38	18-Apr-22	17:34	---	2.0	2.0 <MDL	---
Trichloroacetic Acid [ug/L]	13-Apr-22	14:38	18-Apr-22	17:34	---	5.3	5.3 <MDL	---

OnLine LIMS

0002869268

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 Chromatography	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

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

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

21-April-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 19 April 2022
 LR Report: CA20674-APR22

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		---	---	19-Apr-22	19-Apr-22	19-Apr-22	19-Apr-22
2: Analysis Start Time		---	---	13:30	13:30	13:30	12:50
3: Analysis Completed Date		---	---	21-Apr-22	21-Apr-22	21-Apr-22	21-Apr-22
4: Analysis Completed Time		---	---	11:56	11:56	11:56	11:56
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	18-Apr-22 09:53	3.7	1.16	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

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

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

05-May-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 03 May 2022
 LR Report: CA20091-MAY22

10227 Ilderton Rd., Ilderton
 Canada, N0M 2A0
 Phone: 519-666-0190 ext 255, Fax:519-666-0271

Copy: #1

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		---	---	03-May-22	03-May-22	03-May-22	03-May-22
2: Analysis Start Time		---	---	15:35	15:35	15:35	14:30
3: Analysis Completed Date		---	---	05-May-22	05-May-22	05-May-22	05-May-22
4: Analysis Completed Time		---	---	15:23	15:23	15:23	15:23
5: MAC		---	---	0	0	---	---
6: 1A0FC RW Well #2	02-May-22 11:50	4.9	---	0	0	---	---
7: 1A0FD RW Well #3	02-May-22 11:52	4.9	---	0	0	---	---
8: 1A106 DW Sample Station	02-May-22 11:59	4.9	1.20	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

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

20-May-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 17 May 2022
 LR Report: CA20810-MAY22

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		---	---	17-May-22	17-May-22	17-May-22	17-May-22
2: Analysis Start Time		---	---	13:00	13:00	13:00	12:35
3: Analysis Completed Date		---	---	20-May-22	20-May-22	20-May-22	20-May-22
4: Analysis Completed Time		---	---	08:12	08:12	08:12	08:12
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	16-May-22 09:08	3.9	1.26	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

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

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

03-June-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 31 May 2022
 LR Report: CA21517-MAY22

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		---	---	31-May-22	31-May-22	31-May-22	31-May-22
2: Analysis Start Time		---	---	14:25	14:25	14:25	13:55
3: Analysis Completed Date		---	---	03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22
4: Analysis Completed Time		---	---	10:00	10:00	10:00	10:00
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	30-May-22 14:45	8.3	1.13	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

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

SGS Canada Inc.

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

13-June-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 07 June 2022
 LR Report: CA30090-JUN22

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 at London Lab °C	Temperature Upon Receipt at Lakefield Lab °C	Field pH	Alkalinity mg/L as CaCO3	Lead ug/L
1: Analysis Start Date		---	---	---	09-Jun-22	13-Jun-22
2: Analysis Start Time		---	---	---	15:00	07:00
3: Analysis Completed Date		---	---	---	10-Jun-22	13-Jun-22
4: Analysis Completed Time		---	---	---	11:58	11:42
5: MAC		---	---	---	---	10
6: AO/OG		---	---	6.5-8.5	30-500	---
7: MDL		---	---	---	2	0.01
8: DW Sample Station - Wynfield 1st	06-Jun-22 13:31	9.5	14.0	8.0	---	0.06
9: DW Sample Station - Wynfield 2nd	06-Jun-22 13:31	9.5	14.0	8.0	237	---

MAC - Maximum Acceptable Concentration
 AO/OG - Aesthetic Objective / Operational Guideline
 MDL - SGS Method Detection Limit

Method Descriptions

Parameter	Description	SGS Method Code	Reference Method Code
Alkalinity	Alkalinity by Titration	ME-CA-[ENV]EWL-LAK-AN-006	SM 2320
Lead	Lead by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006	SM 3030/EPA 200.8

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

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

10-June-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 07 June 2022
 LR Report: CA20293-JUN22

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		---	08-Jun-22	08-Jun-22
2: Analysis Start Time		---	11:00	11:00
3: Analysis Completed Date		---	10-Jun-22	10-Jun-22
4: Analysis Completed Time		---	13:42	13:42
5: MAC		---	0	0
6: 1A0FC RW Well #2	06-Jun-22 13:11	8.9	0	0
7: 1A0FD RW Well #3	06-Jun-22 13:15	7.3	3	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

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

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

17-June-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 14 June 2022
 LR Report: CA20715-JUN22

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		---	---	14-Jun-22	14-Jun-22	14-Jun-22	14-Jun-22
2: Analysis Start Time		---	---	18:30	18:30	18:30	18:25
3: Analysis Completed Date		---	---	17-Jun-22	17-Jun-22	17-Jun-22	17-Jun-22
4: Analysis Completed Time		---	---	11:54	11:54	11:54	11:54
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	13-Jun-22 09:16	6.9	1.09	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

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

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

30-June-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 28 June 2022
 LR Report: CA21495-JUN22

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		---	---	28-Jun-22	28-Jun-22	28-Jun-22	28-Jun-22
2: Analysis Start Time		---	---	12:20	12:20	12:20	11:40
3: Analysis Completed Date		---	---	30-Jun-22	30-Jun-22	30-Jun-22	30-Jun-22
4: Analysis Completed Time		---	---	11:54	11:54	11:54	11:54
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	27-Jun-22 15:49	6.4	1.21	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



SGS Canada Inc.

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

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

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

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

Works #: 260002915

22-July-2022

Date Rec. : 05 July 2022
LR Report: CA30049-JUL22

Copy: #1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: MAC	8: MDL	9: 1A106 DW Sample Station	10: 1A102 TW Water Treatment Facility
Sample Date & Time							04-Jul-22 12:28	04-Jul-22 12:14
Temperature Upon Receipt [at London Lab °C]	---	---	---	---	---	---	9.3	9.3
Temperature Upon Receipt [at Lakefield Lab °C]	---	---	---	---	---	---	19.0	19.0
Nitrite (as N) [mg/L]	07-Jul-22	19:56	14-Jul-22	12:00	1.0	0.003	---	0.003 <MDL
Nitrate (as N) [mg/L]	07-Jul-22	19:56	14-Jul-22	12:00	10	0.006	---	0.009
Nitrate + Nitrite (as N) [mg/L]	07-Jul-22	19:56	14-Jul-22	12:00	---	0.006	---	0.009
Trihalomethanes (total) [ug/L]	08-Jul-22	08:33	12-Jul-22	16:22	100 (RAA)	0.37	11	---
Bromodichloromethane [ug/L]	08-Jul-22	08:33	12-Jul-22	16:22	--	0.26	3.4	---
Bromoform [ug/L]	08-Jul-22	08:33	12-Jul-22	16:22	--	0.34	0.34 <MDL	---
Chloroform [ug/L]	08-Jul-22	08:33	12-Jul-22	16:22	--	0.29	6.2	---
Dibromochloromethane [ug/L]	08-Jul-22	08:33	12-Jul-22	16:22	--	0.37	1.8	---
Total Haloacetic Acids (HAA5) [ug/L]	15-Jul-22	09:02	22-Jul-22	13:11	80 (RAA)	5.3	5.3 <MDL	---
Chloroacetic Acid [ug/L]	15-Jul-22	09:02	22-Jul-22	13:11	---	4.7	4.7 <MDL	---
Bromoacetic Acid [ug/L]	15-Jul-22	09:02	22-Jul-22	13:11	---	2.9	2.9 <MDL	---
Dichloroacetic Acid [ug/L]	15-Jul-22	09:02	22-Jul-22	13:11	---	2.6	2.6 <MDL	---
Dibromoacetic Acid [ug/L]	15-Jul-22	09:02	22-Jul-22	13:11	---	2.0	2.0 <MDL	---
Trichloroacetic Acid [ug/L]	15-Jul-22	09:02	22-Jul-22	13:11	---	5.3	5.3 <MDL	---

OnLine LIMS

0002985336

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 Chromatography	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

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

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

08-July-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 05 July 2022
 LR Report: CA20104-JUL22

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		---	05-Jul-22	05-Jul-22
2: Analysis Start Time		---	14:30	14:30
3: Analysis Completed Date		---	07-Jul-22	07-Jul-22
4: Analysis Completed Time		---	17:42	17:42
5: MAC		---	0	0
6: 1A0FC RW Well #2	04-Jul-22 12:10	9.3	0	0
7: 1A0FD RW Well #3	04-Jul-22 12:12	9.3	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

15-July-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 12 July 2022
 LR Report: CA20538-JUL22

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		---	---	12-Jul-22	12-Jul-22	12-Jul-22	12-Jul-22
2: Analysis Start Time		---	---	17:35	17:35	17:35	16:25
3: Analysis Completed Date		---	---	14-Jul-22	14-Jul-22	14-Jul-22	14-Jul-22
4: Analysis Completed Time		---	---	17:36	17:36	17:36	17:36
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	11-Jul-22 12:04	4.9	1.16	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

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

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

02-August-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 26 July 2022
 LR Report: CA21358-JUL22

10227 Ilderton Rd., Ilderton
 Canada, N0M 2A0
 Phone: 519-666-0190 ext 255, Fax:519-666-0271

Copy: #1

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		---	---	27-Jul-22	27-Jul-22	27-Jul-22	27-Jul-22
2: Analysis Start Time		---	---	09:50	09:50	09:50	09:30
3: Analysis Completed Date		---	---	29-Jul-22	29-Jul-22	29-Jul-22	29-Jul-22
4: Analysis Completed Time		---	---	12:30	12:30	12:30	12:30
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	25-Jul-22 10:25	11.4	1.13	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

SGS Canada Inc.

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

22-August-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 16 August 2022
 LR Report: CA30311-AUG22

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

Copy: #1

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

CERTIFICATE OF ANALYSIS

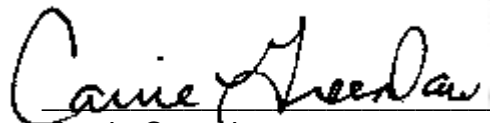
Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt at London Lab °C	Temperature Upon Receipt at Lakefield Lab °C	Field pH no unit	Alkalinity mg/L as CaCO3	Lead ug/L
1: Analysis Start Date		---	---	---	17-Aug-22	20-Aug-22
2: Analysis Start Time		---	---	---	15:51	11:01
3: Analysis Completed Date		---	---	---	18-Aug-22	22-Aug-22
4: Analysis Completed Time		---	---	---	11:33	10:02
5: MAC		---	---	---	---	10
6: AO/OG		---	---	6.5-8.5	30-500	---
7: MDL		---	---	---	2	0.01
8: DW Sample Station - Wynfield 1st	15-Aug-22 12:15	7.6	13.0	7.1	---	0.10
9: DW Sample Station - Wynfield 2nd	15-Aug-22 12:15	7.6	13.0	7.1	228	---

MAC - Maximum Acceptable Concentration
 AO/OG - Aesthetic Objective / Operational Guideline
 MDL - SGS Method Detection Limit

Method Descriptions

Units	Description	SGS Method Code
mg/L as CaCO3	Alkalinity by Titration	ME-CA-[ENV]EWL-LAK-AN-006
ug/L	Lead by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006



Carrie Greenlaw
 Project Specialist,
 Environment, Health & Safety

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

05-August-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 02 August 2022
LR Report: CA20004-AUG22

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		---	02-Aug-22	02-Aug-22
2: Analysis Start Time		---	14:10	14:10
3: Analysis Completed Date		---	04-Aug-22	04-Aug-22
4: Analysis Completed Time		---	15:12	15:12
5: MAC		---	0	0
6: 1A0FC RW Well #2	01-Aug-22 10:22	6.8	0	0
7: 1A0FD RW Well #3	01-Aug-22 10:18	6.8	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



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

12-August-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 09 August 2022
 LR Report: CA20409-AUG22

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

Copy: #1

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

CERTIFICATE OF ANALYSIS

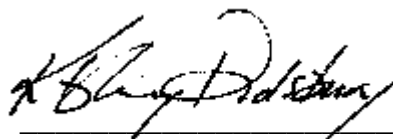
Final Report

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		---	---	09-Aug-22	09-Aug-22	09-Aug-22	09-Aug-22
2: Analysis Start Time		---	---	12:35	12:35	12:35	12:05
3: Analysis Completed Date		---	---	12-Aug-22	12-Aug-22	12-Aug-22	12-Aug-22
4: Analysis Completed Time		---	---	08:19	08:19	08:19	08:19
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	08-Aug-22 10:00	7.4	1.16	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



Kimberley Didsbury
 Project Specialist,
 Environment, Health & Safety

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

29-August-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 23 August 2022
LR Report: CA21287-AUG22

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		---	---	24-Aug-22	24-Aug-22	24-Aug-22	24-Aug-22
2: Analysis Start Time		---	---	09:55	09:55	09:55	09:20
3: Analysis Completed Date		---	---	26-Aug-22	26-Aug-22	26-Aug-22	26-Aug-22
4: Analysis Completed Time		---	---	16:44	16:44	16:44	16:44
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	22-Aug-22 15:13	14.4	1.02	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

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

09-September-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 06 September 2022
 LR Report: CA20085-SEP22

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	Sampled By	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			---	---	06-Sep-22	06-Sep-22	06-Sep-22	06-Sep-22
2: Analysis Start Time			---	---	15:00	15:00	15:00	14:30
3: Analysis Completed Date			---	---	08-Sep-22	08-Sep-22	08-Sep-22	08-Sep-22
4: Analysis Completed Time			---	---	17:12	17:12	17:12	17:12
5: MAC			---	---	0	0	---	---
6: 1A0FC RW Well #2	05-Sep-22 12:03	Jocelyn Tyler	6.8	---	0	0	---	---
7: 1A0FD RW Well #3	05-Sep-22 12:03	Jocelyn Tyler	6.8	---	0	0	---	---
8: 1A106 DW Sample Station	05-Sep-22 11:45	Jocelyn Tyler	6.8	1.20	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

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

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

26-September-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 20 September 2022
LR Report: CA20910-SEP22

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		---	---	20-Sep-22	20-Sep-22	20-Sep-22	20-Sep-22
2: Analysis Start Time		---	---	15:00	15:00	15:00	14:35
3: Analysis Completed Date		---	---	22-Sep-22	22-Sep-22	22-Sep-22	22-Sep-22
4: Analysis Completed Time		---	---	16:50	16:50	16:50	16:50
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	19-Sep-22 09:18	10.2	1.40	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

SGS Canada Inc.

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

19-October-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 04 October 2022
 LR Report: CA30053-OCT22

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	8: MDL	9: 1A106 DW Sample Station
Sample Date & Time							03-Oct-22 10:44
Temperature Upon Receipt [at London Lab °C]	---	---	---	---	---	---	7.1
Temperature Upon Receipt [at Lakefield Lab °C]	---	---	---	---	---	---	9.0
Field Free Chlorine [mg/L]	---	---	---	---	---	---	1.06
Trihalomethanes (total) [ug/L]	06-Oct-22	12:52	07-Oct-22	10:44	100 (RAA)	0.37	14
Bromodichloromethane [ug/L]	06-Oct-22	12:52	07-Oct-22	10:44	--	0.26	4.6
Bromoform [ug/L]	06-Oct-22	12:52	07-Oct-22	10:44	--	0.34	0.34 <MDL
Chloroform [ug/L]	06-Oct-22	12:52	07-Oct-22	10:44	--	0.29	7.2
Dibromochloromethane [ug/L]	06-Oct-22	12:52	07-Oct-22	10:44	--	0.37	2.7
Total Haloacetic Acids (HAA5) [ug/L]	06-Oct-22	16:01	07-Oct-22	10:14	80 (RAA)	5.3	5.3 <MDL
Chloroacetic Acid [ug/L]	06-Oct-22	16:01	07-Oct-22	10:14	---	4.7	4.7 <MDL
Bromoacetic Acid [ug/L]	06-Oct-22	16:01	07-Oct-22	10:14	---	2.9	2.9 <MDL
Dichloroacetic Acid [ug/L]	06-Oct-22	16:01	07-Oct-22	10:14	---	2.6	2.7
Dibromoacetic Acid [ug/L]	06-Oct-22	16:01	07-Oct-22	10:14	---	2.0	2.0 <MDL
Trichloroacetic Acid [ug/L]	06-Oct-22	16:01	07-Oct-22	10:14	---	5.3	5.3 <MDL

MAC - Maximum Acceptable Concentration
 MDL - SGS Method Detection Limit

*Nitrite, Nitrate, Nitrates was received in an inappropriate sample container and could not be processed. Client was notified.

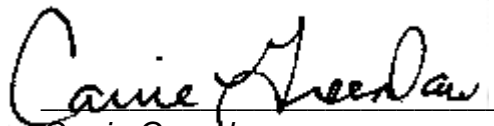
Method Descriptions

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
ug/L	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
ug/L	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
ug/L	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004

SGS Canada Inc.

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

LR Report : CA30053-OCT22



Carrie Greenlaw
Carrie Greenlaw
Project Specialist,
Environment, Health & Safety

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

06-October-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 04 October 2022
LR Report: CA20103-OCT22

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		---	---	04-Oct-22	04-Oct-22	04-Oct-22	04-Oct-22
2: Analysis Start Time		---	---	16:10	16:10	16:10	15:45
3: Analysis Completed Date		---	---	06-Oct-22	06-Oct-22	06-Oct-22	06-Oct-22
4: Analysis Completed Time		---	---	15:17	15:17	15:17	15:17
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	03-Oct-22 10:44	7.1	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



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

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

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

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

Works #: 260002915

07-October-2022

Date Rec. : 04 October 2022
LR Report: CA20100-OCT22

Copy: #1

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-Oct-22	05-Oct-22
2: Analysis Start Time		---	14:10	14:10
3: Analysis Completed Date		---	07-Oct-22	07-Oct-22
4: Analysis Completed Time		---	16:22	16:22
5: MAC		---	0	0
6: 1A0FC RW Well #2	04-Oct-22 08:32	7.0	0	0
7: 1A0FD RW Well #3	04-Oct-22 08:38	7.1	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



SGS Canada Inc.

657 Consortium Court

London - Ontario - N6E 2S8

Phone: 519-672-4500 FAX: 519-672-0361

Works #: 260002915

LR Report : CA20100-OCT22

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

SGS Canada Inc.

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

01-November-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 18 October 2022
 LR Report: CA30333-OCT22

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 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		---	---	21-Oct-22	21-Oct-22	21-Oct-22
2: Analysis Start Time		---	---	16:48	16:48	16:48
3: Analysis Completed Date		---	---	01-Nov-22	01-Nov-22	01-Nov-22
4: Analysis Completed Time		---	---	10:51	10:51	10:51
5: MAC		---	---	1	10	---
6: MDL		---	---	0.003	0.006	0.006
7: 1A102 TW Water Treatment Facility	17-Oct-22 11:50	15.1	13.0	0.003 <MDL	0.007	0.007

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 Chromatography	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.

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

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

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

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

Works #: 260002915

20-October-2022

Date Rec. : 18 October 2022
LR Report: CA20858-OCT22

Copy: #1

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		---	---	18-Oct-22	18-Oct-22	18-Oct-22	18-Oct-22
2: Analysis Start Time		---	---	16:40	16:40	16:40	15:55
3: Analysis Completed Date		---	---	20-Oct-22	20-Oct-22	20-Oct-22	20-Oct-22
4: Analysis Completed Time		---	---	16:30	16:30	16:30	16:30
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	17-Oct-22 12:22	14.6	1.18	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



SGS Canada Inc.

657 Consortium Court

London - Ontario - N6E 2S8

Phone: 519-672-4500 FAX: 519-672-0361

Works #: 260002915

LR Report : CA20858-OCT22

*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

11-November-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 08 November 2022
LR Report: CA20370-NOV22

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		---	08-Nov-22	08-Nov-22
2: Analysis Start Time		---	13:45	13:45
3: Analysis Completed Date		---	10-Nov-22	10-Nov-22
4: Analysis Completed Time		---	15:49	15:49
5: MAC		---	0	0
6: 1A0FC RW Well #2	07-Nov-22 12:54	9.1	0	0
7: 1A0FD RW Well #3	07-Nov-22 12:55	9.3	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

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

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

18-November-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 15 November 2022
LR Report: CA20628-NOV22

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		---	---	15-Nov-22	15-Nov-22	15-Nov-22	15-Nov-22
2: Analysis Start Time		---	---	12:25	12:25	12:25	11:45
3: Analysis Completed Date		---	---	17-Nov-22	17-Nov-22	17-Nov-22	17-Nov-22
4: Analysis Completed Time		---	---	12:47	12:47	12:47	12:47
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	14-Nov-22 10:18	7.8	1.11	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

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

05-December-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 29 November 2022
LR Report: CA21270-NOV22

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		---	---	29-Nov-22	29-Nov-22	29-Nov-22	29-Nov-22
2: Analysis Start Time		---	---	19:05	19:05	19:05	18:35
3: Analysis Completed Date		---	---	01-Dec-22	01-Dec-22	01-Dec-22	01-Dec-22
4: Analysis Completed Time		---	---	16:55	16:55	16:55	16:55
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	28-Nov-22 10:00	7.3	1.19	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

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

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

08-December-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 06 December 2022
LR Report: CA20095-DEC22

10227 Ilderton Rd., Ilderton
 Canada, N0M 2A0
 Phone: 519-666-0190 ext 255, Fax:519-666-0271

Copy: #1

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-Dec-22	06-Dec-22
2: Analysis Start Time		---	12:40	12:40
3: Analysis Completed Date		---	08-Dec-22	08-Dec-22
4: Analysis Completed Time		---	13:06	13:06
5: MAC		---	0	0
6: 1A0FC RW Well #2	05-Dec-22 13:05	8.5	0	0
7: 1A0FD RW Well #3	05-Dec-22 13:08	8.5	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

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

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

16-December-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 13 December 2022
 LR Report: CA20473-DEC22

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		---	---	13-Dec-22	13-Dec-22	13-Dec-22	13-Dec-22
2: Analysis Start Time		---	---	14:00	14:00	14:00	13:35
3: Analysis Completed Date		---	---	15-Dec-22	15-Dec-22	15-Dec-22	15-Dec-22
4: Analysis Completed Time		---	---	13:57	13:57	13:57	13:57
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	12-Dec-22 09:08	10.6	1.39	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

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

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

30-December-2022

Mun of Middlesex Centre (Melrose)

Attn : Brian Watson

Date Rec. : 28 December 2022
LR Report: CA21045-DEC22

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		---	---	28-Dec-22	28-Dec-22	28-Dec-22	28-Dec-22
2: Analysis Start Time		---	---	15:25	15:25	15:25	14:40
3: Analysis Completed Date		---	---	30-Dec-22	30-Dec-22	30-Dec-22	30-Dec-22
4: Analysis Completed Time		---	---	11:00	11:00	11:00	13:06
5: MAC		---	---	0	0	---	---
6: 1A106 DW Sample Station	27-Dec-22 13:55	9.6	1.26	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

Appendix B

Notice Of Adverse Test Results and Other Problems and Notice of Issue Resolution

**Notices of Adverse Test Results and
 Issue Resolution (Schedule 16)**

Drinking Water Systems Regulation (O. Reg. 170/03)

Fields marked with an asterisk (*) are mandatory.

Section 1 – Written Notice By Licensed Laboratory (For THM reporting see Section 2C) CA30333-Jun22
Indicators of Adverse Water Quality

AWQI Number *	157676	Is this a re-sample? *	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, then provide initial AWQI number
<input type="checkbox"/> Microbiological *	<input checked="" type="checkbox"/> Physical/Chemical *	<input type="checkbox"/> Radiological *	<input type="checkbox"/> Licence/Order/Certificate Requirement *

Licensed Laboratory Information

Licensed Laboratory Name *		MECP Laboratory License Number *	
SGS Canada Inc.		2206	
Unit/Suite Number	Street Number	Street Name	
	185	Concession St	
City/Town		Province	Telephone Number (including area code) *
Lakefield		Ontario	705-652-2000 ext.
Email Address			Fax Number (including area code)
			705-652-6365

Licensed Laboratory Emergency Contact

Last Name *		Telephone Number (including area code) *	
Greenlaw		705-652-2000 ext. 2116	
First Name *		Telephone Number (including area code) *	
Carrie		705-652-2000 ext. 2116	

Drinking Water System (DWS) Information

DWS Name *	DWS Number *	Telephone Number (including area code) *	
Mun of Middlesex Centre (Melrose)	260002915	519-435-6364 ext.	
Location *		Email Address	
7 Wynfield Gate Melrose, ON.			

DWS Emergency Contact Name

Last Name *		Telephone Number (including area code) *	
Watson		519-854-7618 ext.	
First Name *		Telephone Number (including area code) *	
Brian		519-854-7618 ext.	

Oral Notification to DWS Owner - Person Contacted

Last Name *		First Name *	
Watson		Brian	
Position of Person Contacted *			
Compliance Officer			
Telephone Number (including area code) *	Fax Number (including area code)	Date (yyyy/mm/dd) *	Time (hh:mm) *
519-854-7618 ext.		2022/01/24	10:20 / 10:32
Email Address			
Watson@middlesexcentre.on.ca			

Oral Notification to Health Unit - Person Contacted

Health Unit Name *	
Middlesex-London Health Unit	
Last Name *	First Name *
Hovenaars	Tamara

Fields marked with an asterisk (*) are mandatory.

Section 1 continued

Position of Person Contacted *

Program Assistant

Telephone Number (including area code) *	Fax Number (including area code)	Date (yyyy/mm/dd) *	Time (hh:mm) *
519-663-5317 ext. 2596	519-663-9276	2022/01/24	10:21 AM

Email Address

inspections@mlhu.on.ca

Oral Notification To Spills Action Centre (SAC) - Person Contacted

Last Name *

Jabeen

First Name *

Fatima

Position of Person Contacted *

Environmental Officer

Person Notifying *

Hawley Anderson

Date (yyyy/mm/dd) *

2022/01/24

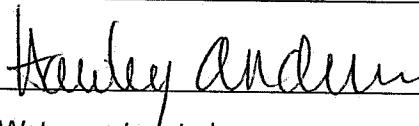
Time (hh:mm) *

10:25 / 10:36

Name *

Hawley Anderson

Signature



Date (yyyy/mm/dd) *

2022/01/24

Comments

10:20 - Drinking Water system to have someone call back

10:32 - Reported adverse to Brian Watson with drinking water system

10:25 - Adverse reported to SAC (Fatima Jabeen)

10:36 - Updated AWQI, notified SAC that drinking water system had now been notified (Elaine Gold)

Note: Use Section 3 to attach laboratory report.



Notices of Adverse Test Results and Issue Resolution (Schedule 16)

Drinking Water Systems Regulation (O. Reg. 170/03)

Fields marked with an asterisk (*) are mandatory.

Section 2A – Written Notice By Drinking Water System (DWS) Owner (For THM reporting see Section 2C)

Indicators of Adverse Water Quality

AWQI Number *	Is this a re-sample? *
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, then provide initial AWQI number

Indicator of Adverse Results

Microbiological * Chemical * Radiological * Operational * Licence/Order/Certificate Authority *

Observations of Improperly disinfected water directed to water users

Low Distribution Chlorine _____ mg/L

High Turbidity _____ NTU

Other _____

Details of Adverse Result *

DWS Information

DWS Name *		DWS Number *
Last Name *	First Name *	
Watson	Brian	
Position *		
Email Address		Telephone Number (including area code) ext.
Additional Comments		

Oral Notification To Local Medical Officer Of Health - Person Contacted

Public Health Unit Name *			
Last Name *	First Name *		
Position *			
Telephone Number (including area code) * ext.	Fax Number (including area code)	Date (yyyy/mm/dd) *	Time (hh:mm) *
DWS Person Providing Oral Notification *		Email Address	

Fields marked with an asterisk (*) are mandatory.

Corrective Actions to be Taken by Owner/Operator

Corrective Actions	Required *	Completed	Comments
Resample and Test (including upstream, downstream and at AWQI location)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Disinfection Restored / Increased	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Mains / Pipes Flushed	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Signs Posted (Do Not Drink Water)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Users Advised to Boil Water / Seek Alternate Source	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

Other (Include any other Health Unit Directions and any additional attachments)

Other:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
--------	--	---	--

Oral Notification To Spills Action Centre (SAC) - Person Contacted

Last Name *	First Name *
-------------	--------------

Position *

DWS Person Providing Oral Notifying *	Date (yyyy/mm/dd) *	Time (hh:mm)*
---------------------------------------	---------------------	---------------

Initial DWS Notification Prepared by *

Signature	Date (yyyy/mm/dd) *
-----------	---------------------

Additional Comments

Do you have another adverse to report? * Yes No

Notices of Adverse Test Results and Issue Resolution (Schedule 16)

Drinking Water Systems Regulation (O. Reg. 170/03)

Fields marked with an asterisk (*) are mandatory.

Section 2B – Notice Of Issue Resolution – Section 16-9 (O. Reg. 170/03)
DWS Information

DWS Name *	DWS Number *
------------	--------------

DWS Contact Name	
Last Name *	First Name *
Watson	Brian

Telephone Number (including area code) *	Fax Number (including area code)	Email Address
519-854-7618		

Initial AWQI Number ¹ *	Date Resolved (yyyy/mm/dd) *	Date Resolution Notice Provided (yyyy/mm/dd) *

Are there previous re-sample AWQI Numbers? *

Yes No

If known, please provide All Other Resample AWQI Numbers²

Summary of Action Taken and Results Achieved (include test results showing water quality is no longer adverse) *

Was an Advisory Issued by the Health Unit? *	Advisory Type	Date Issued (yyyy/mm/dd)
<input type="checkbox"/> Yes		
<input type="checkbox"/> No <input type="checkbox"/> Self Imposed Advisory		

If Rescinded, please select date the advisory was rescinded

Date Rescinded (yyyy/mm/dd)

Other (Include Health Unit Directions and any additional attachments)

Attached File Name	Created	Modified	Size (MB)	Remove Selected File
				<input type="checkbox"/>
			Number of attachments	0

Notification/Report Provided By

Fields marked with an asterisk (*) are mandatory.

Section 2B continued

Last Name *		First Name *	
Position *			
Signature			Date (yyyy/mm/dd) *
Additional Comments			

Do you have another adverse to report? Yes No

¹ The original adverse test result.

² When resolving an AWQI state all resample AWQI number's associated with the initial AWQI. For example, if there is an adverse test result of Total Coliform one of the corrective actions is to resample. If the resample came back adverse then you resample again. You need to continue to resample until the test results for two consecutive sets of samples taken 24 to 48 hours apart are clear or as directed by the Health Unit. At this point, the incident is resolved. Submit the AWQI form and include all related AWQI number's (Initial AWQI number and any Resample AWQI number) on the same Section 2B. This eliminates the requirement to submit a Section 2B form for every adverse test result associated with one incident. If the first resample test result is clear then this section does not apply. For THM's, drinking water system owners/operators are not required to take resamples as part of the prescribed corrective actions; unless directed by the Health Unit.



Notices of Adverse Test Results and Issue Resolution (Schedule 16)

Drinking Water Systems Regulation (O. Reg. 170/03)

Fields marked with an asterisk (*) are mandatory.

Section 3 – Adverse Analytical Results

AWQI Number * 157676 Is this a re-sample? *
 Yes No Unknown If Yes, then provide initial AWQI number
 Licensed Laboratory Name * SGS Canada Inc MECP Laboratory License Number * 2206

Select the applicable test results you are reporting *

Microbiological Test Physical/Chemical/Radiological Test

Microbiological Testing

Laboratory Submission ID *	Laboratory Sample ID *	Date/Time – Sample Collected (yyyy/mm/dd / hh:mm)		Sample Type and Sample Location * U: Untreated T: Treated** D: Distribution	Count / 100 mL		P-A / 100mL Confirmed	Date Data Approved (yyyy/mm/dd) *	Chlorine Residual (mg/l)*** / F- Free / C-Combined
		Date	Time		Total Coliforms (TC)	E. coli (EC)			
				<input type="checkbox"/> U <input type="checkbox"/> T <input type="checkbox"/> D			TC <input type="checkbox"/> EC <input type="checkbox"/>		F <input type="checkbox"/> C <input type="checkbox"/> mg/L
				<input type="checkbox"/> U <input type="checkbox"/> T <input type="checkbox"/> D			TC <input type="checkbox"/> EC <input type="checkbox"/>		F <input type="checkbox"/> C <input type="checkbox"/> mg/L

Physical or Chemical or Radiological Testing

Laboratory Submission ID *	Laboratory Sample ID *	Date/Time – Sample Collected (yyyy/mm/dd)		Sample Type and Sample Location * U: Untreated T: Treated** D: Distribution	Parameter *	Result(s)**** *	Units of Measure/ Standard	Date Data Approved (yyyy/mm/dd) *
		Date	Time					
CA30333-JAN22	#9	2022/01/17	10:40 AM	1A102 TW Water Treatment Facility <input type="checkbox"/> U <input checked="" type="checkbox"/> T <input type="checkbox"/> D	Sodium	24.8	mg/L / 20mg/L	2022/01/24
				<input type="checkbox"/> U <input type="checkbox"/> T <input type="checkbox"/> D				

Fields marked with an asterisk (*) are mandatory.

Section 3 continued

Has Health Unit been notified? *
 Yes No
 Health Unit Name *
 Middlesex-London Health Unit

Users Advised to Boil/Seek Alternate Water
 Yes No Unknown

Other Information Attached Yes No

Attached File Name	Created	Modified	Size (MB)	Remove Selected File
				<input type="checkbox"/>
		Number of attachments	0	

Please describe any other direction prescribed by Health Unit or additional actions taken/results achieved

Notification/Report Provided By

Last Name *	Anderson	First Name *	Hawley	Position *	Project Specialist
Signature			Date (yyyy/mm/dd) *	2022/01/24	

* Only for Drinking Water Systems that obtained exemptions from treatment requirements under O. Reg. 170/03.

** Refers to treated water samples collected downstream of treatment equipment.

*** Indicate Free or Combined Chlorine Residual in mg/l for treated drinking water. Enter N/A if no chlorination is provided.

**** When reporting Trihalomethanes, please include the latest quarterly average result and the calculated running annual average value.

Instructions

These Notice forms apply to drinking water system owners and operators (Owners/Operators) and Ministry of the Environment, Conservation and Parks (MECP) licensed laboratories (Licensed Laboratories) regulated by Drinking Water Systems Regulation, Ontario Regulation 170/03 (O. Reg. 170/03).

Immediate Report of Adverse Results

Section 16-3(3) of Schedule 16 of O. Reg. 170/03 sets out the requirements for Owners/Operators and Licensed Laboratories to make an immediate report of adverse test results under O. Reg. 170/03 by speaking in person or by telephone to the MECP's Spills Action Centre (SAC), at 1-800-268-6060 or 416-325-3000, the local Medical Officer of Health/Health Unit (Health Unit) and the Owner/Operator (Immediate Report).

[Adverse test results for trihalomethanes (THMs) or haloacetic acids (HAAs) do not require an Immediate Report; see section below.]

Written Notice within 24 hours of the Immediate Report

Within 24 hours of an Immediate Report, Section 16-7(3) of Schedule 16 requires that Owners/Operators and Licensed Laboratories also provide written notice to the MECP and the Health Unit, by fax or e-mail. Licensed Laboratories must complete and submit Sections 1 and 3 of this Notice. Owners/Operators must complete and submit Section 2A of this Notice. **Note:** Section 3 is not required to be completed for operational parameter incidents which have no correlating adverse results.

Notice Within 7 Days of Issue Resolution

Within 7 days after the issue has been resolved, Section 16-9(1) of Schedule 16 requires that Owners/Operators must provide a written notice, Section 2B of this Notice, to SAC and the Health Unit, summarizing the actions taken and the results achieved. This written notice must also be sent to the interested authority for any designated facility (if applicable) within 30 days.

Owners and Operators must follow any additional corrective actions required by the Health Unit.

Total Trihalomethanes (THMs) and Haloacetic Acids (HAAs)

As of January 2016 for THMs and January 2020 for HAAs, Sections 16-6 and 16-7 of Schedule 16 require that Owners/Operators and Licensed Laboratories calculate the running annual average (RAA) for THMs and HAAs and report any adverse test result in writing to the MECP and the Health Unit within 7 calendar days of the end of the calendar quarter that produced the adverse test result. The written notice is to be submitted using Section 2C of this Notice. RAA calculation is outlined in Schedule 13-6 of O. Reg. 170/03.

Immediate oral notification is no longer required for these parameters.

Licensed Laboratories that upload all the THM and HAA test results into the ministry's data system and provide the results to Owners/Operators within 48 hours of the test result being authorized at the laboratory, may be exempt from the RAA reporting requirements noted above.

Note: Small municipal residential systems and non-municipal year-round residential systems that serve designated facilities also must notify the operator of each designated facility served by their system.

The 'Trihalomethane and Haloacetic Acid Sampling and Reporting Requirements Technical Bulletin' provides full details on the changes to the reporting requirements and provides examples for calculating quarterly and running annual averages. The Technical Bulletin is available on the ministry's web page via the following link:

<https://www.ontario.ca/page/total-trihalomethane-thm-reporting-requirements-technical-bulletin>

Fields marked with an asterisk (*) are mandatory.

SAC fax: 1-800-268-6061 or 416-325-3011

SAC e-mail: AWQI.Reporting@ontario.ca

Provincial standards for water quality are set out in:

Safe Drinking Water Act, 2002

Ontario Regulation 169/03 (Water Quality Standards)

Ontario Regulation 170/03 (Drinking Water Systems)

Failure to notify these parties in accordance with the Regulation constitutes an offence under the *Safe Drinking Water Act*. A copy of this form may be acquired through the MECP public website (www.ontario.ca/drinkingwater) or by contacting any MECP office.

Collection of information on this form is done in accordance with the Safe Drinking Water Act, 2002 and its Regulations. Information gathered herein, including personal information, is governed by the *Freedom of Information and Protection of Privacy Act* (FIPPA) and may be disclosed to other government agencies (including municipal health unit employees) pursuant to 'Section 42' of the FIPPA for the consistent purpose of administering any Act or program that pertains to drinking water safety. For questions and concerns, please contact the MECP at 1-866-793-2588.

Are you a *

Licensed Laboratory DWS

Which Section(s) of the Form do you need today?

Section 1 - Written Notice By Licensed Laboratory

Section 2A - Written Notice By Drinking Water System

Section 2B - Notice Of Issues Resolution

Section 2C - Written Notice By Drinking Water System Owner - Reporting RAA for THMs and HAAs

Section 3 - Adverse Analytical Results

Notices of Adverse Test Results and Issue Resolution (Schedule 16)

Drinking Water Systems Regulation (O. Reg. 170/03)

Fields marked with an asterisk (*) are mandatory.

Section 2A – Written Notice By Drinking Water System (DWS) Owner (For THM and HAA reporting see Section 2C)

Indicators of Adverse Water Quality

AWQI Number *
157676

Is this a resample? *

Yes No Unknown If Yes, then provide initial AWQI number

Indicator of Adverse Results

- Microbiological *
 Chemical *
 Radiological *
 Operational *
 Licence/Order/Certificate Authority *
- Observations of Improperly disinfected water directed to water users
- Low Distribution Chlorine _____ mg/L
- High Turbidity _____ NTU
- Other _____

Details of Adverse Result *

Sodium testing result of 24.8 mg/L; exceeding 20 mg/L as per Schedule 18 section 16-3 (1) 8.

DWS Information

DWS Name *		DWS Number *	
Melrose Drinking Water System		260002915	
Last Name *	First Name *		
Joudrey	Eric		
Position *			
Water And Wastewater Operations Manager			
Email Address		Telephone Number (including area code)	
joudrey@middlesexcentre.on.ca		519-666-0190 ext. 255	
Additional Comments			

Oral Notification to Health Unit - Person Contacted

Public Health Unit Name *			
Middlesex-London Health Unit			
Last Name *	First Name *		
Walsh	Chris		
Position *			
Public Health Inspector			
Telephone Number (including area code) *	Fax Number (including area code)	Date (yyyy/mm/dd) *	Time (hh:mm) *
519-617-0518 ext.		2022/01/24	12:00 PM

Fields marked with an asterisk (*) are mandatory.


Section 2A continued

DWS Person Providing Oral Notification * Brian Watson	Email Address watson@middlesexcentre.on.ca
--	---

Corrective Actions to be Taken by Owner/Operator

Corrective Actions	Required *	Completed	Comments
Resample and Test (including upstream, downstream and at AWQI location)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	completed same day as notification; Jan 24 2022
Disinfection Restored / Increased	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Mains / Pipes Flushed	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Signs Posted (Do Not Drink Water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Users Advised to Boil Water / Seek Alternate Source	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Other (Include any other Health Unit directions and any additional attachments)			
Other: Health Notices	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Will deliver notices to houses effected when re-sample results are received.

Oral Notification to Spills Action Centre (SAC) - Person Contacted

Last Name * McDonald	First Name * Haiden	
Position * Environmental Officer		
DWS Person Providing Oral Notifying * Jocelyn Tyler	Date (yyyy/mm/dd) * 2022/01/24	Time (hh:mm)* 12:20 PM
Initial DWS Notification Prepared by * Jocelyn Tyler		
Signature 	Date (yyyy/mm/dd) * 2022/01/24	
Additional Comments		

Fields marked with an asterisk (*) are mandatory.

Section 2A continued

Do you have another adverse to report? * Yes No

Instructions

These Notice forms apply to drinking water system owners and operators (Owners/Operators) and Ministry of the Environment, Conservation and Parks (MECP) licensed laboratories (Licensed Laboratories) regulated by Drinking Water Systems Regulation, Ontario Regulation 170/03 (O. Reg. 170/03).

Immediate Report of Adverse Results

Section 16-3(3) of Schedule 16 of O. Reg. 170/03 sets out the requirements for Owners/Operators and Licensed Laboratories to make an immediate report of adverse test results under O. Reg. 170/03 by speaking in person or by telephone to the MECP's Spills Action Centre (SAC), at 1-800-268-6060 or 416-325-3000, the local Medical Officer of Health/Health Unit (Health Unit) and the Owner/Operator (Immediate Report).

[Adverse test results for trihalomethanes (THMs) or haloacetic acids (HAAs) do not require an Immediate Report; see section below.]

Written Notice within 24 hours of the Immediate Report

Within 24 hours of an Immediate Report, Section 16-7(3) of Schedule 16 requires that Owners/Operators and Licensed Laboratories also provide written notice to the MECP and the Health Unit, by fax or e-mail. Licensed Laboratories must complete and submit Sections 1 and 3 of this Notice. Owners/Operators must complete and submit Section 2A of this Notice. **Note:** Section 3 is not required to be completed for operational parameter incidents which have no correlating adverse results.

Notice Within 7 Days of Issue Resolution

Within 7 days after the issue has been resolved, Section 16-9(1) of Schedule 16 requires that Owners/Operators must provide a written notice, Section 2B of this Notice, to SAC and the Health Unit, summarizing the actions taken and the results achieved. This written notice must also be sent to the interested authority for any designated facility (if applicable) within 30 days.

Owners and Operators must follow any additional corrective actions required by the Health Unit.

Total Trihalomethanes (THMs) and Haloacetic Acids (HAAs)

As of January 2016 for THMs and January 2020 for HAAs, Sections 16-6 and 16-7 of Schedule 16 require that Owners/Operators and Licensed Laboratories calculate the running annual average (RAA) for THMs and HAAs and report any adverse test result in writing to the MECP and the Health Unit within 7 calendar days of the end of the calendar quarter that produced the adverse test result. The written notice is to be submitted using Section 2C of this Notice. RAA calculation is outlined in Schedule 13-6 of O. Reg. 170/03.

Immediate oral notification is no longer required for these parameters.

Licensed Laboratories that upload all the THM and HAA test results into the ministry's data system and provide the results to Owners/Operators within 48 hours of the test result being authorized at the laboratory, may be exempt from the RAA reporting requirements noted above.

Note: Small municipal residential systems and non-municipal year-round residential systems that serve designated facilities also must notify the operator of each designated facility served by their system.

The 'Trihalomethane and Haloacetic Acid Sampling and Reporting Requirements Technical Bulletin' provides full details on the changes to the reporting requirements and provides examples for calculating quarterly and running annual averages. The Technical Bulletin is available on the ministry's web page via the following link:

<https://www.ontario.ca/page/total-trihalomethane-thm-reporting-requirements-technical-bulletin>

Fields marked with an asterisk (*) are mandatory.

SAC fax: 1-800-268-6061 or 416-325-3011

SAC e-mail: AWQI.Reporting@ontario.ca

Provincial standards for water quality are set out in:

[Safe Drinking Water Act, 2002](#)

[Ontario Regulation 169/03 \(Water Quality Standards\)](#)

[Ontario Regulation 170/03 \(Drinking Water Systems\)](#)

Failure to notify these parties in accordance with the Regulation constitutes an offence under the *Safe Drinking Water Act*. A copy of this form may be acquired through the MECP public website (www.ontario.ca/drinkingwater) or by contacting any MECP office.

Collection of information on this form is done in accordance with the [Safe Drinking Water Act, 2002](#) and its Regulations. Information gathered herein, including personal information, is governed by the *Freedom of Information and Protection of Privacy Act* (FIPPA) and may be disclosed to other government agencies (including municipal health unit employees) pursuant to 'Section 42' of the FIPPA for the consistent purpose of administering any Act or program that pertains to drinking water safety. For questions and concerns, please contact the MECP at 1-866-793-2588.

Are you a *

Licensed Laboratory DWS

Which Section(s) of the Form do you need today?

Section 1 - Written Notice By Licensed Laboratory

Section 2A - Written Notice By Drinking Water System

Section 2B - Notice Of Issues Resolution

Section 2C - Written Notice By Drinking Water System Owner - Reporting RAA for THMs and HAAs

Section 3 - Adverse Analytical Results

Notices of Adverse Test Results and Issue Resolution (Schedule 16)

Drinking Water Systems Regulation (O. Reg. 170/03)

Fields marked with an asterisk (*) are mandatory.

Section 2B – Notice of Issue Resolution – Section 16-9 (O. Reg. 170/03)

DWS Information

DWS Name * [Melrose Drinking Water System](#) | DWS Number * [260002915](#)

DWS Contact Name

Last Name * [Joudrey](#) | First Name * [Eric](#)

Telephone Number (including area code) * [519-666-0190](#) ext. [255](#) | Fax Number (including area code) | Email Address joudrey@middlesexcentre.on.ca

Initial AWQI Number¹ * [157676](#) | Date Resolved (yyyy/mm/dd) * [2022/02/02](#) | Date Resolution Notice Provided (yyyy/mm/dd) * [2022/02/02](#)

Are there previous resample AWQI numbers? *

Yes No

If known, please provide All Other Resample AWQI numbers²

Summary of action taken and results achieved (include test results showing water quality is no longer adverse) *

[Sodium resampled with a result of 27.3 mg/L.](#)

[MLHU to provide a health notice to be delivered within effected area. Notice will be posted on website](#)

Was an advisory issued by the Health Unit? *	Advisory Type	Date Issued (yyyy/mm/dd)
<input type="checkbox"/> Yes		
<input checked="" type="checkbox"/> No <input type="checkbox"/> Self Imposed Advisory		

If rescinded, please select date the advisory was rescinded

Date Rescinded (yyyy/mm/dd)

Other (Include Health Unit directions and any additional attachments)

Attachments

[Melrose WT 17 Jan 22 60 month Report CA30333-JAN22 \(Initial sampling\)](#)

[Melrose WT 1 Feb 22 Sodium resample Report CA30463-JAN22](#)

Attached File Name	Created	Modified	Size (MB)	Remove Selected File
				<input type="checkbox"/>
			Number of attachments	0

Notification/Report Provided By

Last Name *	First Name *
Tyler	Jocelyn
Position *	
Water/Wastewater Operator / Compliance Co-ordinator	
Signature	Date (yyyy/mm/dd) *
	2022/02/02
Additional Comments	

Do you have another adverse to report? Yes No

¹ The original adverse test result.

² When resolving an AWQI state all resample AWQI numbers associated with the initial AWQI. For example, an adverse test result of total coliform requires the corrective action of resampling. If any of the resamples come back adverse, then you must continue resampling until the test results for two consecutive sets of samples taken 24 to 48 hours apart are clear or as directed by the Health Unit. Submit the AWQI form and include all related AWQI numbers (Initial AWQI number and any Resample AWQI number) on the same Section 2B. This eliminates the requirement to submit a Section 2B form for every adverse test result associated with one incident. If the first resample test result is clear then this section does not apply. For THMs and HAAs drinking water system owners/operators are not required to take resamples as part of the prescribed corrective actions; unless directed by the Health Unit.

Appendix C

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



Ministry of
the Environment

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)

052-203 Issue #1

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

Melrose Drinking Water System

Replaced existing Programmable Logic Controller (PLC) with new hardware and installed a new desktop SCADA system.

These components are not included in the System Description section of Permit number 052-203 Issue #1.

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	Maureen A. Looby, M.Eng., P.Eng.
Signature	Date (yyyy/mm/dd)
<i>Maureen A. Looby, M. Eng., P. Eng.</i>	2012/07/04



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)

052-203 Issue #1

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

Melrose Drinking Water System

Replaced existing sodium hypochlorite metering pump panel located prior to aeration tank for iron oxidation with new sodium hypochlorite metering pump panel.

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	Maureen A. Looby, M.Eng., P.Eng.
Signature	Date (yyyy/mm/dd)
<i>Maureen A. Looby, M. Eng., P. Eng.</i>	<i>2013/01/31</i>



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)

052-203 Issue#1

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

Melrose Drinking Water System

Replaced existing Distribution Cl2 analyzer Prominent DULCOMETER D1Cb (AIT-02) located post reservoir, with an updated ProMinent DULCOMETER DACb.

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.

Table with 2 columns: Name of Owner (Print) and Name of Owner Representative (Print). Row 1: Brian Lima, P.Eng. and Christine Brennan. Row 2: Signature and Date (yyyy/mm/dd) 2018/06/06.



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)

052-023 Issue#1

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

Melrose Drinking Water System

Replaced Filter #3 Backwash ball valve on Thursday August 2nd, 2018.

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.

Table with 2 columns: Name of Owner (Print), Name of Owner Representative (Print), Signature, Date (yyyy/mm/dd)



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)

052-023 Issue#1

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

Melrose Drinking Water System

On September 12th, 2018, replaced chemical lines on chlorine pumps #1 and #2 panel with new Chem Flare lines and fittings.

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.

Table with 2 columns: Name of Owner (Print), Name of Owner Representative (Print), Signature, Date (yyyy/mm/dd)



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)

052-203 Issue #2

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

Confirmation of two existing 60L chemical storage tanks to update Schedule A of DWWP.

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.

Table with 3 columns: Name of Owner (Print), Name of Owner Representative (Print), Date (yyyy/mm/dd). Row 1: Municipality of Middlesex Centre, Brian Watson, 2020/07/15. Row 2: Signature, [Handwritten Signature]

**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)

052-203 Issue #2

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

Replaced Raco Verbatim dialer with new Raco Verbatim dialer on July 14, 2020.

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)
<i>Brian Watson</i>	2020/08/14

**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)

052-203 Issue #2

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

- 1) Replaced Distribution Analyzer AIT-02 suction piping including new PRV and pressure gauge on April 21, 2021.
- 2) Replaced the Distribution Analyzer drain line going back to the Aeration Reservoir on April 21, 2021.
- 3) Replace Reservoir analyzer AIT-01 drain line going back to the Distribution Reservoir on April 21, 2021.

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)
<i>Brian Watson</i>	2021/04/29

**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)

052-203 Issue #2

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

1) Replaced Filter Pump #5 (FP5) discharge piping from pump flange to the isolation valve on 5-Nov-21.

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)

Municipality of Middlesex Centre

Name of Owner Representative (Print)

Brian Watson

Signature

Brian Watson

Date (yyyy/mm/dd)

2021/11/10

**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)

052-203 Issue #2

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

1) Installed new pump head on Raw Chemical Pump #2 (CP-02) on 10-Nov-21.

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)
<i>Brian Watson</i>	2021/11/10

**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)

052-203 Issue #2

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

1) Removed flow switch and installed repair clamp on the filter pump discharge line on 10-Nov-21.

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) Municipality of Middlesex Centre	Name of Owner Representative (Print) Brian Watson
Signature <i>Brian Watson</i>	Date (yyyy/mm/dd) 2021/11/10

**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)

052-203 Issue #2

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

1) Removal of old steel transducer mount and installation of new PVC mount for the aeration reservoir transducer (LIT-01).

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) Municipality of Middlesex Centre	Name of Owner Representative (Print) Brian Watson
Signature <i>Brian Watson</i>	Date (yyyy/mm/dd) 2021/12/03