



**Ministry of the Environment and Climate Change  
Drinking Water System Inspection Report**

**Golden Lake United Church Camp-Assembly Hall**

**2023**

**Annual Report**



## ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	260034892
Drinking-Water System Name:	Golden Lake United Church Camp-Assembly Hall
Drinking-Water System Category:	Small Non-Municipal Non-Residential System
Period being reported:	01/01/2023-12/31/2023

<b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b>	<b><u>Complete for all other Categories.</u></b>
Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [X]	Number of Designated Facilities served: <div>1</div>
Is your annual report available to the public at no charge on a web site on the Internet? Yes [ x ] No [ ]	Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ X ] No [ ]
Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection. <div>On file in the Assembly Hall office and at the following website: www.goldenlakecamp.ca</div>	Number of Interested Authorities you report to: <div>0</div> Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ ] No [X ]

**Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report**

**List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:**

Drinking Water System Name	Drinking Water System Number
GLUCC Assembly Hall	260034892

**Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?**  
Yes [ x ] No [ ]



Indicate how you notified system users that your annual report is available, and is free of charge.

- ☒ **Public access/notice via the web**
- ☐ **Public access/notice via Government Office**
- ☐ **Public access/notice via a newspaper**
- ☐ **Public access/notice via Public Request**
- ☐ **Public access/notice via a Public Library**
- ☐ **Public access/notice via other method** \_\_\_\_\_

**Describe your Drinking-Water System**

**Please see page 9**

**List all water treatment chemicals used over this reporting period**

**N/A**

**Were any significant expenses incurred to?**

- No** ☒ **Yes** ☐ **Install required equipment**
- No** ☐ **Yes** ☐ **Repair required equipment**
- No** ☐ **Yes** ☒ **Replace required equipment- Public Works Report No.2020-33**



# Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Please provide a brief description and a breakdown of monetary expenses incurred

Replaced filters and UV Lamps \$750

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
None					

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

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw					
Treated	PLEASE SEE PAGES 10-16				
Distribution					

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

	Number of Grab Samples	Range of Results (min #)-(max #)
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**NOTE:** For continuous monitors use 8760 as the number of samples.



<b>Turbidity</b>		
<b>Chlorine</b> <i>Tecumseh Water Tower</i>		
<b>Chlorine</b> <i>Distribution Free Chlorine Residuals</i>		
<b>Fluoride</b> (If the DWS provides fluoridation)		

**NOTE:** Record the unit of measure if it is **not** milligrams per litre.

**Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.**

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure

**Summary of Inorganic parameters tested during this reporting period or the most recent sample results**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony				
Arsenic				
Barium				
Boron				
Cadmium				
Chromium				
*Lead				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite				
Nitrate				

\*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

**Summary of lead testing under Schedule 15.1 during this reporting period**

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)



Location Type Distribution	Number of Samples	Alkalinity Result (range 30-500)	Lead Result (range 0-0.01)	Unit of Measure	Field pH (range 0-14)	Number of Exceedances
<b>Winter Session – Collection Date:</b>						

Location Type Distribution	Number of Samples	Alkalinity Result (range 30-500)	Lead Result (range 0-0.01)	Unit of Measure	Field pH (range 0-14)	Number of Exceedances
<b>Summer Session – Collection Date:</b>						

**Summary of Organic parameters sampled during this reporting period or the most recent sample results**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metabolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				



1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				
2-4 Dichlorophenol 2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				
Glyphosate				
Haloacetic Acids (HAAs)				
(NOTE: show latest running annual average)				
Heptachlor + Heptachlor Epoxide				
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
THM				
(NOTE: show latest running annual average)	quarter			
Temephos				
Terbufos				
Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				
2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				
Trifluralin				
Vinyl Chloride				

Summary table for Running Annual Averages of Organic Parameters sampled during this reporting period.

Parameter	Sample Date	Result	Running Annual Average	Unit of Measure	Number of Exceedances
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<b>HAA</b>				

<b>Parameter</b>	<b>Sample Date</b>	<b>Average Result</b>	<b>Running Annual Average</b>	<b>Unit of Measure</b>	<b>Number of Exceedances</b>
<b>THM</b>					

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

<b>Parameter</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Date of Sample</b>



## Drinking Water System Description:

Golden Lake Camp has two identical water treatment systems, one in the Staff House at 54 McNee Drive, Golden Lake, ON, and the other in the Dining(Assembly) Hall at 63 McNee Drive, Golden Lake, ON.

They were installed in June 2004 and certified as compliant with the requirements of Regulation 170/03 by Jp2g Consultants Inc, of Pembroke, ON, in July of the same year. Each system is classified as 'small, non-municipal non-residential', providing potable water for a children's camp, which is a 'designated facility'. Each of the two systems is fed from its own well, classified as GUDI (Ground Water Under the Influence of Surface Water). Therefore, a cartridge filtration system and UV disinfection system in compliance with 'Procedure for Disinfection of Drinking Water in Ontario' were specified for and installed on each system.

To provide the required disinfection, the installations employ a Point-of-Entry system in each building, consisting of cartridge filtration followed by UV disinfection. Each point of entry system has two parallel trains of cartridge filters, with each train consisting of a 5 micron nominal and a 1 micron absolute filter.

Each UV unit installed is a Hallet Model 13, rated to provide minimum of 65mJ/cm<sup>2</sup> at 13 USgpm and UVT of 75% at end of lamp life. The UV system has solenoid shut-off, so that on alarm or failure to disinfect, the solenoid closes, shutting off flow to the water system. Dual lamp sensors are used for UV and water quality, with flow shut off low UV or poor water quality. The UV equipment is NSF/ANSI 55 Class 55 A rated, and has flow limiter to limit maximum flow to maximum rated flow.

**OFFICIAL CERTIFICATE OF ANALYSIS : 3620646****WORK REQUEST : 100226769****Report Date : 2023-07-07****Golden Lake Camp**

RR #1

Golden Lake, ON

K0J 1X0

Attention : Alice Madigan

DWS : GOLDEN LAKE UNITED CHURCH CAMP ASSEMBLY  
HALL  
DWS # : 260034892  
Reception Date : 2023-07-05  
Project : Drinking Water System Sampling  
Sampler : NA  
PO Number : Not Applicable  
Temperature : 12 °C

Analysis	Quantity	External Method
E.Coli and Total Coliforms (DC Plate)	2	Modified from MECP E3407

**Criteria :****A :** Ontario Regulation 170/03**Sample status upon receipt :**

7049717 7049718

**Compliant****Notes :**

- All analysis is completed at Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) unless otherwise stated.
- Eurofins Environment Testing Canada Inc. is accredited by CALA, Canadian Association for Laboratory Accreditation to ISO/IEC 17025 for tests which appear on the scope of accreditation. The scope is available at <https://directory.cala.ca/>
- Please note: Field data, where presented on the report, has been provided by the client and is presented for informational purposes only. Guideline or regulatory limits listed on this report are provided for ease of use (informational purposes) only. Eurofins recommends consulting the official guideline or regulation as required. Unless otherwise stated, measurement uncertainty is not taken into account when determining guideline or regulatory exceedances.

**Legend :**

RL : Reporting limit

QC : Reference material (QC)

N/A : Not applicable

1 : Results in annex

\* : Analysis conducted by external subcontracting

^ : Analysis not accredited

## OFFICIAL CERTIFICATE OF ANALYSIS - RESULTS

Client : Golden Lake Camp  
Project : Drinking Water System Sampling  
DWS : 260034892 GOLDEN LAKE UNITED CHURCH CAMP ASSEMBLY HALL

Reception Date: 2023-07-05

Eurofins Sample No :				<b>7049717</b>	<b>7049718</b>			
Matrix :				Drinking water	Drinking water			
Sampling Date :				2023-07-04	2023-07-04			
Client Sample Identification :				Assembly Hall/4892 (RW)	Assembly Hall/4892 (DW)			
Microbiology (DC Plate)	RL	Unit	Criteria					
			A	B	C			
<b>E.Coli and Total Coliforms (DC Plate)</b>								
Escherichia coli (DC)	0	CFU/100mL	0			0	0	
Total Coliforms (DC)	0	CFU/100mL	0			0	0	

Approved by :

*R. Zafari*

Raheleh Zafari,  
Ottawa, Environmental Chemist, PhD

## OFFICIAL CERTIFICATE OF ANALYSIS - QUALITY CONTROL

Client : Golden Lake Camp  
Project : Drinking Water System Sampling  
DWS : 260034892 GOLDEN LAKE UNITED CHURCH CAMP ASSEMBLY HALL

Reception Date: 2023-07-05

Parameter	Unit	RL	Blank	QC		Matrix Spike		Duplicate	
				Recovery %	Range %	Recovery %	Range %	RPD %	Range %
E.Coli and Total Coliforms (DC Plate)									
Method : Total Coliforms and E.Coli by MF (Water, DC plate). Internal method: OTT-M-BAC-WI45296.									
Escherichia coli (DC)	CFU/100mL	0	0					0	0-30
Total Coliforms (DC)	CFU/100mL	0	0					0	0-30
Associated Samples : 7049717, 7049718								Prep Date: 2023-07-06 Analysis Date: 2023-07-07	

Where RPD % is reported as "-" the calculation is not available because one or both of the duplicates is within 5 times the RL.

**OFFICIAL CERTIFICATE OF ANALYSIS : 3670127****WORK REQUEST : 100236419****Report Date : 2023-08-21****Golden Lake Camp**

RR #1

Golden Lake, ON

K0J 1X0

Attention : Alice Madigan

DWS : GOLDEN LAKE UNITED CHURCH CAMP ASSEMBLY  
HALL  
DWS # : 260034892  
Reception Date : 2023-08-18  
Project : Drinking Water System Sampling  
Sampler : NA  
PO Number : Not Applicable  
Temperature : 14 °C

Analysis	Quantity	External Method
E.Coli and Total Coliforms (DC Plate)	2	Modified from MECP E3407

**Criteria :****A :** Ontario Regulation 170/03**Sample status upon receipt :**

7162662 7162664

**Compliant****Notes :**

- All analysis is completed at Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) unless otherwise stated.
- Eurofins Environment Testing Canada Inc. is accredited by CALA, Canadian Association for Laboratory Accreditation to ISO/IEC 17025 for tests which appear on the scope of accreditation. The scope is available at <https://directory.cala.ca/>
- Please note: Field data, where presented on the report, has been provided by the client and is presented for informational purposes only. Guideline or regulatory limits listed on this report are provided for ease of use (informational purposes) only. Eurofins recommends consulting the official guideline or regulation as required. Unless otherwise stated, measurement uncertainty is not taken into account when determining guideline or regulatory exceedances.

**Legend :**

RL : Reporting limit

QC : Reference material (QC)

N/A : Not applicable

1 : Results in annex

\* : Analysis conducted by external subcontracting

^ : Analysis not accredited

**OFFICIAL CERTIFICATE OF ANALYSIS - EXCEEDENCE SUMMARY**

Client : Golden Lake Camp  
Project : Drinking Water System Sampling  
DWS : 260034892 GOLDEN LAKE UNITED CHURCH CAMP ASSEMBLY HALL

Reception Date : 2023-08-18

Eurofins Sample No	Client Sample Identification	Analyte	Result	Units	Exceeded Criteria		
					A	B	C
E.Coli and Total Coliforms (DC Plate)							
7162662	Assembly Hall (RW)	Total Coliforms (DC)	30	CFU/100mL	0		

## OFFICIAL CERTIFICATE OF ANALYSIS - RESULTS

Client : Golden Lake Camp  
Project : Drinking Water System Sampling  
DWS : 260034892 GOLDEN LAKE UNITED CHURCH CAMP ASSEMBLY HALL

Reception Date: 2023-08-18

Eurofins Sample No :				7162662	7162664			
Matrix :				Drinking water	Drinking water			
Sampling Date :				2023-08-17	2023-08-17			
Client Sample Identification :				Assembly Hall (RW)	Assembly Hall (DW)			
Microbiology (DC Plate)	RL	Unit	Criteria					
			A	B	C			
<b>E.Coli and Total Coliforms (DC Plate)</b>								
Escherichia coli (DC)	0	CFU/100mL	0			0	0	
Total Coliforms (DC)	0	CFU/100mL	0			30	0	

Approved by :

*R. Zafari*

Raheleh Zafari,  
Ottawa, Environmental Chemist, PhD

## OFFICIAL CERTIFICATE OF ANALYSIS - QUALITY CONTROL

Client : Golden Lake Camp  
Project : Drinking Water System Sampling  
DWS : 260034892 GOLDEN LAKE UNITED CHURCH CAMP ASSEMBLY HALL

Reception Date: 2023-08-18

Parameter	Unit	RL	Blank	QC		Matrix Spike		Duplicate	
				Recovery %	Range %	Recovery %	Range %	RPD %	Range %
E.Coli and Total Coliforms (DC Plate)									
Method : Total Coliforms and E.Coli by MF (Water, DC plate). Internal method: OTT-M-BAC-WI45296.									
Escherichia coli (DC)	CFU/100mL	0	0						-
Total Coliforms (DC)	CFU/100mL	0	0						-
Associated Samples : 7162662, 7162664								Prep Date: 2023-08-18 Analysis Date: 2023-08-19	

Where RPD % is reported as "-" the calculation is not available because one or both of the duplicates is within 5 times the RL.