OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	**220005688**
Drinking-Water System Name:	Clarke Crescent Well Water Treatment System
Drinking-Water System Owner:	District Municipality of Muskoka
Drinking-Water System Category:	Small Municipal Residential
Period being reported:	January 01 to December 31, 2024

Complete if your Category is Large Municipal Residential or Small Municipal Residential

Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [X]

Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No [ ]

Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.

District Municipality of Muskoka
70 Pine Street
Bracebridge, Ontario
P1L 1N3
(705) 645-6764
www.muskoka.on.ca

Complete for all other Categories.

Number of Designated Facilities served:

N/A

Did you provide a copy of your annual report to all Designated Facilities you serve?
Yes [ ] No [x]

Number of Interested Authorities you report to: N/A

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
N/A	

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 [ ] No [ ]

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

[X] Public access/notice via the web
[X] Public access/notice via Government Office
[ ] Public access/notice via a newspaper
[X] Public access/notice via Public Request
[ ] Public access/notice via a Public Library
[ ] Public access/notice via other method _____

Describe your Drinking-Water System

The Clarke well system services one subdivision consisting of 34 homes. The system was constructed in 1984. The system had significant upgrades in 2004/2005. The treatment process consists of disinfection by UV, chlorination and filtration. The rated water production capacity of this facility is 90 cubic meters per day. The water is obtained from a drilled well located at 46 Clarke Crescent.

List all water treatment chemicals used over this reporting period

Sodium Hypochlorite

Were any significant expenses incurred to?

[ ] Install required equipment
[ ] Repair required equipment
[x] Replace required equipment

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

The programmable Logic Controller (PLC) and Supervisory Control and Data Acquisition System (SCADA) were replaced in 2024 in alignment with the District's updated PLC/SCADA standards.

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
N/A					

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	53	0 - 0	0 - 0	N/A	N/A
Treated	53	0 - 0	0 - 0	53	0 – 28
Distribution	53	0 - 0	0 – 0	53	0 – 42

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 #)	Geomean
Turbidity	8760	0.02 – 0.27 NTU	0.07 NTU
Chlorine	8760	1.27 – 2.17 mg/L	1.66 mg/L
Fluoride (If the DWS provides fluoridation)	N/A	N/A	N/A

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

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
N/A	N/A	N/A	N/A	N/A

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	May 14, 2024	0.6<MDL	µg/L	No
Arsenic	May 14, 2024	0.2<MDL	µg/L	No
Barium	May 14, 2024	17.4	µg/L	No
Boron	May 14, 2024	8	µg/L	No
Cadmium	May 14, 2024	0.005	µg/L	No
Chromium	May 14, 2024	0.20	µg/L	No
***Lead**	May 14, 2024			
Mercury	May 14, 2024	0.01<MDL	µg/L	No
Selenium	May 14, 2024	0.11	µg/L	No
Sodium	May 14, 2024	25.8	mg/L	No
Uranium	May 14, 2024	0.053	µg/L	No
Fluoride	May 14, 2024	0.06<MDL	mg/L	No
Nitrite	Feb 05, 2024	0.003<MDL	mg/L	No
Nitrate	Feb 05, 2024	1.12	mg/L	No
Nitrite	May 14, 2024	0.003<MDL	mg/L	No
Nitrate	May 14, 2024	1.12	mg/L	No
Nitrite	Aug 26, 2024	0.003<MDL	mg/L	No
Nitrate	Aug 26, 2024	1.14	mg/L	No

Nitrite	Nov 04, 2024	0.003<MDL	mg/L	No
Nitrate	Nov 04, 2024	1.19	mg/L	No

*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	Number of Samples	Range of Lead Results (min#) – (max #)	Unit of Measure	Number of Exceedances
Plumbing	N/A	N/A	N/A	N/A
Distribution	2	0.18 – 0.31	µg/L	0

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	May 14, 2024	0.02<MDL	µg/L	No
Atrazine + N-dealkylated metabolites	May 14, 2024	0.01<MDL	µg/L	No
Azinphos-methyl	May 14, 2024	0.05<MDL	µg/L	No
Benzene	May 14, 2024	0.32<MDL	µg/L	No
Benzo(a)pyrene	May 14, 2024	0.004<MDL	µg/L	No
Bromoxynil	May 14, 2024	0.33<MDL	µg/L	No
Carbaryl	May 14, 2024	0.05<MDL	µg/L	No
Carbofuran	May 14, 2024	0.01<MDL	µg/L	No
Carbon Tetrachloride	May 14, 2024	0.17<MDL	µg/L	No
Chlorpyrifos	May 14, 2024	0.02<MDL	µg/L	No
Diazinon	May 14, 2024	0.02<MDL	µg/L	No
Dicamba	May 14, 2024	0.20<MDL	µg/L	No
1,2-Dichlorobenzene	May 14, 2024	0.41<MDL	µg/L	No
1,4-Dichlorobenzene	May 14, 2024	0.36<MDL	µg/L	No
1,2-Dichloroethane	May 14, 2024	0.35<MDL	µg/L	No
1,1-Dichloroethylene (vinylidene chloride)	May 14, 2024	0.33<MDL	µg/L	No
Dichloromethane	May 14, 2024	0.35<MDL	µg/L	No
2-4 Dichlorophenol	May 14, 2024	0.15<MDL	µg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	May 14, 2024	0.19<MDL	µg/L	No
Diclofop-methyl	May 14, 2024	0.40<MDL	µg/L	No
Dimethoate	May 14, 2024	0.06<MDL	µg/L	No
Diquat	May 14, 2024	1<MDL	µg/L	No
Diuron	May 14, 2024	0.03<MDL	µg/L	No
Glyphosate	May 14, 2024	1<MDL	µg/L	No
Malathion	May 14, 2024	0.02<MDL	µg/L	No
MCPA	May 14, 2024	0.00012<MDL	µg/L	No
Metolachlor	May 14, 2024	0.01<MDL	µg/L	No

Metribuzin	May 14, 2024	0.02<MDL	µg/L	No
Monochlorobenzene	May 14, 2024	0.30<MDL	µg/L	No
Paraquat	May 14, 2024	1<MDL	µg/L	No
Pentachlorophenol	May 14, 2024	0.15<MDL	µg/L	No
Phorate	May 14, 2024	0.01<MDL	µg/L	No
Picloram	May 14, 2024	1<MDL	µg/L	No
Polychlorinated Biphenyls(PCB)	May 14, 2024	0.04<MDL	µg/L	No
Prometryne	May 14, 2024	0.03<MDL	µg/L	No
Simazine	May 14, 2024	0.01<MDL	µg/L	No
THM (NOTE: annual average from Distribution – 4 samples)	RAA	3.5	µg/L	No
Terbufos	May 14, 2024	0.01<MDL	µg/L	No
Tetrachloroethylene	May 14, 2024	0.35<MDL	µg/L	No
2,3,4,6-Tetrachlorophenol	May 14, 2024	0.20<MDL	µg/L	No
Triallate	May 14, 2024	0.01<MDL	µg/L	No
Trichloroethylene	May 14, 2024	0.44<MDL	µg/L	No
2,4,6-Trichlorophenol	May 14, 2024	0.25<MDL	µg/L	No
Trifluralin	May 14, 2024	0.02<MDL	µg/L	No
Vinyl Chloride	May 14, 2024	0.17<MDL	µg/L	No
HAA5 (NOTE: annual average from Treated water discharge – 4 samples)	RAA	5.3<MDL	µg/L	No

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

Parameter	Result Value	Unit of Measure	Date of Sample
N/A			