

Ontario Drinking-Water Systems Regulation O. Reg. 170/03 SAM Drinking Water System Annual Report 2023

| Drinking-Water System Number: | 260008284 |
|---------------------------------|--------------------------------|
| Drinking-Water System Name: | SAM Drinking Water System |
| Drinking-Water System Owner: | Municipality of Central Huron |
| Drinking-Water System Category: | Small Municipal Residential |
| Period being reported: | January 1 to December 31, 2023 |

| Complete if your Category is Large Municipal <u>Residential or Small Municipal Residential</u> | Complete for all other Categories. |
|---|--|
| Does your Drinking-Water System serve more than 10,000 people? Yes [] No [X] | Number of Designated Facilities served: |
| 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 annualreport to all Designated Facilities youserve?Yes [] No [] |
| Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection. | Number of Interested Authorities you report to: |
| Municipal Office | Did you provide a copy of |
| 23 Albert St. Clinton Ontario | your annual report to all Interested Authorities you report to for each Designated Facility? |
| Utilities Work Centre | Yes [] No [] |
| 17 Park Lane Clinton Ontario | |
| | |

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 | | |
|----------------------------|------------------------------|--|--|
| | | | |

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 []



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

- [X] Public access/notice via the web
- [] 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 SAM Drinking Water System is located at 77301 Forest Ridge Road. There is a single drilled groundwater well, approximately 159mm diameter by 59.44m deep, with a submersible well pump.

Treatment consists of sodium hypochlorite disinfection in a 33m of 300 mm contact water main. Sodium silicate is added for iron sequestering.

Storage is provided by 3 hydropneumatic pressure tanks. Standby power is provided by a natural gas powered generator with automatic power transfer.

The distribution system supplies approximately 14 year around residential connections.

List all water treatment chemicals used over this reporting period

Sodium hypochlorite

Sodium silicate

Were any significant expenses incurred to?

- [] Install required equipment
- [] Repair required equipment
- [] Replace required equipment

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

None to report

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 to report | | | | | |

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



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| | Number of | Range of E.Coli Or Fecal | Range of Total Coliform | Number of HPC | Range of HPC Results |
|--------------|--------------|-----------------------------|----------------------------|------------------|-------------------------|
| | Samples | Results (min #)-(max #) | Results (min #)-(max #) | Samples | (min #)-(max #) |
| Raw | 26 | 0 - 0 | 0 - 0 | 0 | |
| Treated | 26 | 0 - 0 | 0 - 0 | 26 | 0-2040 |
| Distribution | 26 | 0 - 0 | 0 - 0 | 26 | 0-30 |

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 #) | NOTE: For continuous |
|----------------------|------------------------------|-------------------------------------|--------------------------|
| Turbidity | | | monitors use 8760 as the |
| Raw Well | 18 | 0.08-1.77 NTU | number of samples. |
| Chlorine | | | i |
| Treated | 8760 | 0.61-1.67mg/L | |
| Distribution | 104 | 0.82-1.52mg/L | |
| Fluoride (If the DWS | | | |
| provides | N/A | | |
| fluoridation) | 1 1/2 | | |

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 |
|---------------------------------|-----------|--------------|--------|-----------------|
| None to Report | | | | |

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 | Mar 5, 2019 | ND | μg/L | no |
| Arsenic | Oct 24, 2023 | 9.6 | µg/L | no |
| Barium | Mar 5, 2019 | 47.3 | µg/L | no |
| Boron | Mar 5, 2019 | 119 | μg/L | no |
| Cadmium | Mar 5, 2019 | 0.007 | μg/L | no |
| Chromium | Mar 5, 2019 | 0.12 | µg/L | no |
| *Lead | See below | | | no |
| Mercury | Mar 5, 2019 | ND | µg/L | no |

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|----------|--------------|-------|------|----|
| Selenium | Mar 5, 2019 | ND | µg/L | no |
| Sodium | Mar 5, 2019 | 23.1 | mg/L | no |
| Uranium | Mar 5, 2019 | 0.591 | µg/L | no |
| Fluoride | Mar 5, 2019 | 1.51 | mg/L | no |
| Nitrite | Oct 24, 2023 | ND | mg/L | no |
| Nitrate | Oct 24, 2023 | ND | mg/L | no |

*only for drinking water systems testing under Schedule 15.2; this includes large municipal nonresidential 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 | Results | | |
|---------------|----------------------------------|----------|---|--|
| Plumbing | 0-reduced sampling now in effect | | | |
| Distribution | 1 | 0.10µg/L | 0 | |

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

| Parameter | Sample | Result | Unit of | Exceedance |
|--------------------------------------|-------------|--------|---------|------------|
| | Date | Value | Measure | |
| Alachlor | Mar 5, 2019 | ND | μg/L | no |
| Atrazine | Mar 5, 2019 | ND | μg/L | no |
| Atrazine + N-dealkylated metobolites | Mar 5, 2019 | ND | μg/L | no |
| Azinphos-methyl | Mar 5, 2019 | ND | μg/L | no |
| Benzene | Mar 5, 2019 | ND | μg/L | no |
| Benzo(a)pyrene | Mar 5, 2019 | ND | μg/L | no |
| Bromoxynil | Mar 5, 2019 | ND | μg/L | no |
| Carbaryl | Mar 5, 2019 | ND | μg/L | no |
| Carbofuran | Mar 5, 2019 | ND | μg/L | no |
| Carbon Tetrachloride | Mar 5, 2019 | ND | μg/L | no |
| Chlorpyrifos | Mar 5, 2019 | ND | μg/L | no |
| Desethyl atrazine | Mar 5, 2019 | ND | μg/L | no |
| Diazinon | Mar 5, 2019 | ND | μg/L | no |
| Dicamba | Mar 5, 2019 | ND | μg/L | no |
| 1,2-Dichlorobenzene | Mar 5, 2019 | ND | μg/L | no |
| 1,4-Dichlorobenzene | Mar 5, 2019 | ND | μg/L | no |

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|--|-------------|-----|------|----|--|
| 1,2-Dichloroethane | Mar 5, 2019 | ND | μg/L | no | |
| 1,1-Dichloroethylene | Mar 5, 2019 | ND | μg/L | no | |
| (vinylidene chloride) | | | | | |
| Dichloromethane | Mar 5, 2019 | ND | μg/L | no | |
| 2,4 Dichlorophenol | Mar 5, 2019 | ND | μg/L | no | |
| 2,4-Dichlorophenoxy acetic acid (2,4-D) | Mar 5, 2019 | ND | μg/L | no | |
| Diclofop-methyl | Mar 5, 2019 | ND | μg/L | no | |
| Dimethoate | Mar 5, 2019 | ND | μg/L | no | |
| Diquat | Mar 5, 2019 | ND | μg/L | no | |
| Diuron | Mar 5, 2019 | ND | μg/L | no | |
| Glyphosate | Mar 5, 2019 | ND | μg/L | no | |
| Malathion | Mar 5, 2019 | ND | μg/L | no | |
| Metolachlor | Mar 5, 2019 | ND | μg/L | no | |
| Metribuzin | Mar 5, 2019 | ND | μg/L | no | |
| Monochlorobenzene | Mar 5, 2019 | ND | μg/L | no | |
| Paraquat | Mar 5, 2019 | ND | μg/L | no | |
| Pentachlorophenol | Mar 5, 2019 | ND | μg/L | no | |
| Phorate | Mar 5, 2019 | ND | μg/L | no | |
| Picloram | Mar 5, 2019 | ND | μg/L | no | |
| Polychlorinated Biphenyls(PCB) | Mar 5, 2019 | ND | μg/L | no | |
| Prometryne | Mar 5, 2019 | ND | μg/L | no | |
| Simazine | Mar 5, 2019 | ND | μg/L | no | |
| ТНМ | 2021 | 7.7 | μg/L | no | |
| (annual average) | | | | | |
| Terbufos | Mar 5, 2019 | ND | μg/L | no | |
| Tetrachloroethylene | Mar 5, 2019 | ND | μg/L | no | |
| 2,3,4,6-Tetrachlorophenol | Mar 5, 2019 | ND | µg/L | no | |
| Triallate | Mar 5, 2019 | ND | μg/L | no | |
| Trichloroethylene | Mar 5, 2019 | ND | μg/L | no | |
| 2,4,6-Trichlorophenol | Mar 5, 2019 | ND | μg/L | no | |
| Trifluralin | Mar 5, 2019 | ND | μg/L | no | |
| Vinyl Chloride | Mar 5, 2019 | ND | 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 |
|-----------|--------------|-----------------|----------------|
| Flouride | 1.08 | mg/L | Mar 5, 2019 |
| | | | |

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| 8.3 | ug/L | Jan 17, 2023 |
|-----|------|---------------------|
| 7.8 | ug/L | Apr 18, 2023 |
| 8.2 | ug/L | July 25, 2023 |
| 9.6 | ug/L | Oct 24, 2023 |
| | 7.8 | 7.8 ug/L 8.2 ug/L |