

Part III Form 2
Section 11. ANNUAL REPORT.

Drinking-Water System Number:	260011687
Drinking-Water System Name:	Whitchurch Highlands PS
Drinking-Water System Owner:	York Region District School Board
Drinking-Water System Category:	Small Non-Municipal Non-Residential
Period being reported:	01/04/2023 to 31/03/2024

<p><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [] No [x]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [x] No []</p> <p>Location where Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; height: 100px; width: 100%;"></div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served:</p> <div style="border: 1px solid black; display: inline-block; padding: 2px 10px;">1</div> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [x] No [..]</p> <p>Number of Interested Authorities you report to:</p> <div style="border: 1px solid black; display: inline-block; padding: 2px 10px;">1</div> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [x] No [..]</p>
---	---

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
Whitchurch Highlands PS	260011687

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

Whitchurch Highlands PS is served by an onsite well water supply located on the southeast side of the school. The well is drilled August 18, 2023 is a depth of 47.9 meters below ground surface. The well is constructed through 7.6 meters of hard clay overlying varying sandy material. The water treatment system consists of iron removal via an iron filter, water softener to address hardness and iron, 5 micron cartridge filter, chlorination and UV irradiation. The UV irradiation is the primary disinfection, and as an extra precaution, chlorine feed equipment and turbidity meter were installed even though not required by the regulation. A UPS power back up unit was installed for the turbidity meter, chlorine analyzer, chessell recorder and UV system to provide power for up to three hours in case of a power failure. Automatic shut off valves were installed which stops water flow in the event the UV disinfection system alarms due to loss of intensity. This prevents untreated water from being distributed to the drinking system when the UV cannot provide adequate disinfection. New UV units were installed and an updated Engineering Evaluation Report was completed August 12, 2019. In March 2023, significant issues with the well were discovered. The previous well was abandoned (tag #A035565) on August 18, 2023 and a new well drilled August 18, 2023 (well tag #A381208). An updated Engineering Evaluation Report was completed November 2, 2023.

List all water treatment chemicals used over this reporting period

Sodium Hypochlorite (12% Chlorine Solution)

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

The cost to install, repair and replace required equipment, as well as the contractor to service the equipment and test the water is approximately \$28,741.00. The turbidity meter was replaced at a cost of \$17,641.00 (included in the total). The well was replaced at a cost of \$85,159.28 (not included in the total).

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

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
16/10/2023	Sodium	302	mg/L	Sodium level in the 60 month sampling of the new well was 302 mg/L. Users of drinking water have been notified of the sodium level by posting of letter and fact sheet from York Region Public Health Services.	16/10/2023

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	14	0 - 0	0 - 4		
Treated	27	0 - 0	0 - 0	27	0 - 4
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 #)
Turbidity	n/a	n/a
Chlorine	n/a	n/a
Fluoride (If the DWS provides fluoridation)	n/a	n/a

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

*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	16/10/2023	.0006	mg/L	No
Arsenic	16/10/2023	.0002	mg/L	No

Barium	16/10/2023	.00228	mg/L	No
Boron	16/10/2023	.013	mg/L	No
Cadmium	16/10/2023	.000003	mg/L	No
Chromium	16/10/2023	.00048	mg/L	No
Fluoride	16/10/2023	.1	mg/L	No
Mercury	16/10/2023	.00001	mg/L	No
Nitrate	02/01/2024	3.27	mg/L	No
Nitrate	24/04/2023	.713	mg/L	No
Nitrate	17/07/2023	.473	mg/L	No
Nitrate	10/10/2023	2.95	mg/L	No
Nitrate	25/03/2024	3.26	mg/L	No
Nitrite	02/01/2024	.003	mg/L	No
Nitrite	25/03/2024	.003	mg/L	No
Nitrite	10/10/2023	.003	mg/L	No
Nitrite	17/07/2023	.003	mg/L	No
Nitrite	24/04/2023	.003	mg/L	No
Selenium	16/10/2023	.00012	mg/L	No
Sodium	16/10/2023	302	mg/L	Yes
Uranium	16/10/2023	.000812	mg/L	No

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
1,1-Dichloroethylene	16/10/2023	.00033	mg/L	No
1,2-Dichlorobenzene	16/10/2023	.00041	mg/L	No
1,2-Dichloroethane	16/10/2023	.00035	mg/L	No
1,4-Dichlorobenzene	16/10/2023	.00036	mg/L	No
2,3,4,6-Tetrachlorophenol	16/10/2023	.0002	mg/L	No
2,4,6-Trichlorophenol	16/10/2023	.00025	mg/L	No
2,4-D	16/10/2023	.00019	mg/L	No
2,4-Dichlorophenol	16/10/2023	.00015	mg/L	No
2-methyl-4-chlorophenoxyacetic acid (MCPA)	16/10/2023	.00012	mg/L	No
Alachlor	16/10/2023	.00002	mg/L	No
Atrazine + N-dealkylated metabolites	16/10/2023	.00001	mg/L	No
Azinphos-methyl	16/10/2023	.00005	mg/L	No
Benzene	16/10/2023	.00032	mg/L	No
Benzo(a)pyrene	16/10/2023	.000004	mg/L	No
Bromoxynil	16/10/2023	.00033	mg/L	No
Carbaryl	16/10/2023	.00005	mg/L	No
Carbofuran	16/10/2023	.00001	mg/L	No
Carbon Tetrachloride	16/10/2023	.00017	mg/L	No
Chlorpyrifos	16/10/2023	.00002	mg/L	No
Diazinon	16/10/2023	.00002	mg/L	No
Dicamba	16/10/2023	.0002	mg/L	No
Dichloromethane	16/10/2023	.00035	mg/L	No
Diclofop-methyl	16/10/2023	.0004	mg/L	No
Dimethoate	16/10/2023	.00006	mg/L	No
Diquat	16/10/2023	.001	mg/L	No
Diuron	16/10/2023	.00003	mg/L	No
Glyphosate	16/10/2023	.001	mg/L	No

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

Malathion	16/10/2023	.00002	mg/L	No
Metolachlor	16/10/2023	.00001	mg/L	No
Metribuzin	16/10/2023	.00002	mg/L	No
Monochlorobenzene	16/10/2023	.0003	mg/L	No
Paraquat	16/10/2023	.001	mg/L	No
PCB	16/10/2023	.00004	mg/L	No
Pentachlorophenol	16/10/2023	.00015	mg/L	No
Phorate	16/10/2023	.00001	mg/L	No
Picloram	16/10/2023	.001	mg/L	No
Prometryne	16/10/2023	.00003	mg/L	No
Simazine	16/10/2023	.00001	mg/L	No
Terbufos	16/10/2023	.00001	mg/L	No
Tetrachloroethylene	16/10/2023	.00035	mg/L	No
Triallate	16/10/2023	.00001	mg/L	No
Trichloroethylene	16/10/2023	.00044	mg/L	No
Trifluralin	16/10/2023	.00002	mg/L	No
Vinyl Chloride	16/10/2023	.00017	mg/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	n/a	n/a	n/a

(Only if DWS category is large municipal residential, small municipal residential, large municipal non residential, non municipal year round residential, large non municipal non residential)