2023 Annual Drinking Water System Quality Report for Ansnorveldt DWS

Prepared by The Regional Municipality of York pursuant to Section 11 of O. Reg. 170/03.

Drinking Water System Number: 260002213
Drinking Water System Name: Ansnorveldt DWS
Drinking Water System Owner: The Regional Municipality of York
Drinking Water System Category: Large Municipal Residential
Drinking Water System Classification: Water Distribution and Supply II
Reporting period: Jan 1, 2023 - Dec 31, 2023

The Ansnorveldt DWS serves approximately 120 people.
(Population is the most recent available estimate based on Statistics Canada census data and building permits)

List all Drinking Water Systems which receive their drinking water from the Ansnorveldt DWS:
Ansnorveldt Distribution System (260034372)

This annual report is available to the public at no charge on York Region's website (york.ca/drinkingwater) and upon request. Accessible formats or communication supports are also available upon request. Please contact AccessYork@york.ca or call 1-877-464-9675.

A copy of York Region's annual report was provided to all Drinking Water System owners that are connected to and receive drinking water from York Region.

System users were notified that York Region's annual report is available free of charge by public access and notice through:

- Media (internet, social media)
- Public requests at any time

Summary report required under O. Reg. 170/03 Schedule 22 will be available for inspection at:

The Regional Municipality of York
Administrative Centre
Public Works Department
17250 Yonge Street, Newmarket ON L3Y 6Z1

Description of the Ansnorveldt DWS

Introduction:
Ansnorveldt is located in King Township. The residential community served by the Ansnorveldt Drinking Water System is centred on Dufferin Street, north of Highway 9. Local groundwater is naturally high in minerals. York Region operates the water supply, while the Township of King maintains water quality and distributes it to users. The Province governs York Region's operations with Acts and Regulations, a Permit to Take Water, a Municipal Drinking Water License and an operating Permit.

Raw water source:
Groundwater

Profile of water in distribution system:
Groundwater

Water treatment description:
Two wells share one pumphouse. Water is disinfected with chlorine. No other treatment chemicals are used. Raw water test results show the good health of the aquifer and help staff confirm optimal treatment. Water is stored and kept fresh on site for high demand times. Operators test the water and inspect the process regularly. Online analyzers continuously monitor treatment and water flow. When analyzers detect an issue, the system pauses operation until an operator takes action.

List of water treatment chemicals used in this system:
Chlorine (Sodium Hypochlorite)

Brief description and breakdown of monetary expenses incurred:
$128,500 for general maintenance and repairs.

Notices submitted under Section 18(1) of the *Safe Drinking Water Act* or Section 16-4 of Schedule 16 of O. Reg. 170/03 and reported to MECP Spills Action Centre

Not Applicable

Intentionally blank. No notices were submitted for this report period.

Microbiological testing completed under Schedule 10 of O. Reg. 170/03

For additional distribution samples collected under Schedule 10, refer to the local municipality.

Raw Samples

Test Parameter	Count of Samples	Count of Presence
E. Coli	104	0
Total Coliforms	104	0

Treated Samples

Test Parameter	Count of Samples	Count of Presence
E. Coli	52	0
Heterotrophic Plate Count	52	10
Total Coliforms	52	0

Operational testing completed under Schedule 7 of O. Reg. 170/03 during this reporting period

Test Parameter	Test Unit	No. of Samples [1]	Average	Minimum	Maximum
Free Chlorine	mg/L	8,760	1.56	0.89	2.51
Turbidity (Treated)	NTU	8,760	0.20	0.12	5.00

[1] 8,760 is used as the number of samples for continuous analyzers.

Summary of testing pursuant to Schedule 13 of O. Reg. 170/03 and sampling carried out in accordance with the requirement of an approval, order or other legal instrument

Values with a less than sign ("<") indicate that the test result is below the method detection limit from the accredited laboratory (i.e. non-detect). Average results include values which were returned as non-detect (i.e. the "<" is omitted) and are rounded to three decimals. For a complete set of results, see the open dataset available at york.ca/drinkingwater.

Test Parameter [2] [3]	Test Unit	No. of Samples [1]	Average	Minimum	Maximum
Fluoride	mg/L	4	0.260	0.25	0.27
Haloacetic Acids (Treated)	ug/L	4	10.950	9.80	14
Nitrate (Treated)	mg/L	4	0.500	<0.5	<0.5
Nitrite (Treated)	mg/L	4	0.050	<0.05	<0.05
Sodium	mg/L	1	41.700	41.7	41.7
Trihalomethanes (Treated)	ug/L	4	43.800	36.30	48

*Lead testing under Schedule 15.1 is conducted by the local municipality - refer to local municipality reports for results. York Region occasionally collects samples tested for lead for non-regulatory research purposes.

[1] 8,760 is used as the number of samples for continuous analyzers.

[2] The Average for Haloacetic Acids and Trihalomethanes is calculated as the running annual average of quarterly results in accordance with O. Reg 170/03. The Minimum and Maximum values reflect individual test results.

[3] Where sampling for 'N-Nitrosodimethylamine (NDMA)' is required, locations were selected to represent the farthest points in the distribution system. For York DWS and sub-systems, representative sample locations were selected from across the interconnected sub-systems and include at least one facility from every subsystem.

Organic and inorganic parameter(s), from Schedule 23 and 24, that exceeded half the standard prescribed in Schedule 2 of O. Reg. 169/03 Ontario Drinking Water Quality Standards

Not Applicable
Intentionally blank. There were no applicable test results.

Summary of inorganic parameters tested pursuant to Schedule 23 of O. Reg. 170/03

Values with a less than sign ("<") indicate that the test result is below the method detection limit from the accredited laboratory (i.e. non-detect). Average results include values which were returned as non-detect and are rounded to four decimals. For a complete set of results, see the open dataset available at york.ca/drinkingwater.

Test Parameter	Test Unit	No. of Samples	Average	Minimum	Maximum	ODWS Limit
Antimony	mg/L	1	0.0005	<0.0005	<0.0005	0.0060
Arsenic	mg/L	1	0.0005	<0.0005	<0.0005	0.01
Barium	mg/L	1	0.1180	0.118	0.118	1
Boron	mg/L	1	0.1700	0.17	0.17	5
Cadmium	mg/L	1	0.0005	<0.0005	<0.0005	0.0050
Chromium	mg/L	1	0.0005	<0.0005	<0.0005	0.05
Mercury	ug/L	1	0.0500	<0.05	<0.05	1
Selenium	mg/L	1	0.0005	<0.0005	<0.0005	0.05
Uranium	mg/L	1	0.0005	<0.0005	<0.0005	0.02

Summary of organic parameters tested pursuant to Schedule 24 of O. Reg. 170/03

Values with a less than sign ("<") indicate that the test result is below the method detection limit from the accredited laboratory (i.e. non-detect). Average results include values which were returned as non-detect and are rounded to three decimals. For a complete set of results, see the open dataset available at york.ca/drinkingwater.

Test Parameter	Test Unit	No. of Samples	Average	Minimum	Maximum	ODWS Limit
1,1-dichloroethylene (vinylidene chloride)	ug/L	1	0.300	<0.3	<0.3	14
1,2-(o-dcb) Dichlorobenzene	ug/L	1	0.100	<0.1	<0.1	200
1,2-Dichloroethane	ug/L	1	0.100	<0.1	<0.1	5
1,4-(p-dcb) Dichlorobenzene	ug/L	1	0.100	<0.1	<0.1	5
2,3,4,6-Tetrachlorophenol	ug/L	1	0.500	<0.5	<0.5	100
2,4,6-Trichlorophenol	ug/L	1	0.500	<0.5	<0.5	5
2,4-Dichlorophenol	ug/L	1	0.700	<0.7	<0.7	900
2,4-dichlorophenoxyacetic acid (2,4-D)	ug/L	1	0.800	<0.8	<0.8	100
2-methyl-4-chlorophenoxyacetic acid	ug/L	1	5.000	<5	<5	100
Alachlor	ug/L	1	0.400	<0.4	<0.4	5
Atrazine + N-dealkylated metabolites	ug/L	1	0.200	<0.2	<0.2	5
Azinphos-methyl	ug/L	1	0.300	<0.3	<0.3	20
Benzene	ug/L	1	0.100	<0.1	<0.1	1
Benzo(a)pyrene	ug/L	1	0.010	<0.01	<0.01	0.01
Bromoxynil	ug/L	1	0.400	<0.4	<0.4	5
Carbaryl	ug/L	1	3.000	<3	<3	90
Carbofuran	ug/L	1	3.000	<3	<3	90
Carbon Tetrachloride	ug/L	1	0.200	<0.2	<0.2	2
Chlorpyrifos	ug/L	1	0.200	<0.2	<0.2	90
Diazinon	ug/L	1	0.200	<0.2	<0.2	20
Dicamba	ug/L	1	0.400	<0.4	<0.4	120
Dichloromethane	ug/L	1	4.000	<4	<4	50
Diclofop-methyl	ug/L	1	0.400	<0.4	<0.4	9
Dimethoate	ug/L	1	0.300	<0.3	<0.3	20
Diquat	ug/L	1	1.000	<1	<1	70
Diuron	ug/L	1	3.000	<3	<3	150
Glyphosate	ug/L	1	25.000	<25	<25	280
Malathion	ug/L	1	0.200	<0.2	<0.2	190
Metolachlor	ug/L	1	0.200	<0.2	<0.2	50
Metribuzin	ug/L	1	0.300	<0.3	<0.3	80
Monochlorobenzene	ug/L	1	0.100	<0.1	<0.1	80
Paraquat	ug/L	1	1.000	<1	<1	10
Pentachlorophenol	ug/L	1	0.400	<0.4	<0.4	60
Phorate	ug/L	1	0.200	<0.2	<0.2	2
Picloram	ug/L	1	0.700	<0.7	<0.7	190
Polychlorinated Biphenyls (PCBs)	ug/L	1	0.100	<0.1	<0.1	3
Prometryne	ug/L	1	0.200	<0.2	<0.2	1
Simazine	ug/L	1	0.200	<0.2	<0.2	10
Terbufos	ug/L	1	0.200	<0.2	<0.2	1
Tetrachloroethylene (perchloroethylene)	ug/L	1	0.300	<0.3	<0.3	10
Triallate	ug/L	1	4.000	<4	<4	230
Trichloroethylene	ug/L	1	0.100	<0.1	<0.1	5
Trifluralin	ug/L	1	0.006	<0.006	<0.006	45
Vinyl Chloride	ug/L	1	0.200	<0.2	<0.2	1