



WALKERTON DRINKING WATER SYSTEM
2024 SUMMARY REPORT

PREPARED IN ACCORDANCE WITH SCHEDULE 22
ONTARIO REGULATION 170/03, AS AMENDED

PREPARED BY VEOLIA WATER CANADA
FOR THE MUNICIPALITY OF BROCKTON
FEBRUARY 18, 2025

DWS NAME : WALKERTON WELL SUPPLY

DWS # : 220002690

CATEGORY: LARGE MUNICIPAL RESIDENTIAL

REPORTING PERIOD: JANUARY 1, 2024 TO DECEMBER 31, 2024

Summary of Reporting Requirements

Section 11 O. Reg. 170/03 Annual Report

1. Brief description of the system.
2. Summary of reports to MECP (including corrective actions).
3. Summary of Analysis.
4. Major Expenses.
5. Location where report can be inspected.
6. Please note: the Municipality is responsible for effective steps to advise users the reports are available and the obligation to supply the report to "Designated Facilities".

This report is to be sent to the Municipality of Brockton by **February 28th of the current year.**

Schedule 22 O. Reg. 170/03 Summary Report

1. Include any orders the system failed to meet and the duration and corrective actions.
2. Summary of flows.
3. A comparison to the rated capacity.

This report is to be sent to the Municipality of Brockton by **March 30th of the current year.**

Infrastructure Review – As part of the Drinking Water Quality Management System (DWQMS) an Infrastructure Review is required on an Annual Basis. The Brockton Director of Operations and the Veolia Water Project Manager review Infrastructure on a regular basis. In the DWQMS Operational Plan it States: *The procedure will be for the Project Manager / Overall Responsible Operator to compile information received from the Maintenance Lead and Operators throughout the year based on work orders and observations relating to the infrastructure of the water treatment system. This information will be summarized in an Infrastructure section of the annual summary report and presented to the Owner on an annual basis. The Annual Summary is required to be submitted to the Owner by March 30th of each year.*

Water Taking Data has been submitted to the MECP (WTRS) for annual water taking for the Permit to Take Water.

SUMMARY

This report is a summary of the water quality and quantity information submitted in accordance with Schedule 22 of Ontario Regulation 170/03, as amended for the reporting period between **January 1, 2024 and December 31, 2024**.

Description

The Walkerton Water System consists of two wells referred to as Well 7 and 9. Well 9 is a 79.3m drilled well with a submersible pump rated at 56.8 l/s at 66 m of head. Well 7 is a 76.2m drilled artesian well fitted with a line shaft pump rated at 56.8 l/s at 66 m head. Water flows through a UV unit for primary disinfection, followed by chlorination. Water storage and pressure is maintained by two standpipes. The system has a standby diesel generator for emergency situations. There are also three pressure zones, two equipped with booster stations to maintain adequate pressure. Both booster stations also have standby diesel generators to maintain pressure in these low-pressure areas during emergency situations.

Water Treatment Chemicals

Water Treatment chemical used is NSF Certified Chlorine gas.

Location of Report

This report is available upon request to the Municipality of Brockton at the Office of Veolia Water (Operating Authority) at 130 Wallace St., Walkerton, Ontario, or The Municipality of Brockton Office at 100 Scott St., Walkerton, Ontario.

TREATMENT CAPACITY ASSESSMENT**Well #7 Raw Water Flow**

| Month | Raw Water Flow | | |
|-----------------------|----------------|---------|---------|
| | Average | Maximum | Monthly |
| | Daily | Daily | Total |
| | m3 | m3 | m3 |
| Jan '24 | 756 | 1,950 | 23,441 |
| Feb '24 | 735 | 1,609 | 21,309 |
| Mar '24 | 759 | 1,727 | 23,532 |
| Apr '24 | 729 | 1,814 | 21,859 |
| May '24 | 707 | 2,468 | 21,914 |
| Jun '24 | 800 | 2,605 | 24,014 |
| Jul '24 | 912 | 2,336 | 28,286 |
| Aug '24 | 992 | 2,282 | 30,741 |
| Sep '24 | 919 | 2,305 | 27,568 |
| Oct '24 | 695 | 1,877 | 21,559 |
| Nov '24 | 638 | 1,673 | 19,155 |
| Dec '24 | 678 | 1,768 | 21,027 |
| Annual Summary | | | |
| Total | | | 284,405 |
| Average | 777 | | |
| Maximum | | 2,605 | |

Well #9 Raw Water Flow

| Month | Raw Water Flow | | |
|-----------------------|----------------|---------|---------|
| | Average | Maximum | Monthly |
| | Daily | Daily | Total |
| | m3 | m3 | m3 |
| Jan '24 | 676 | 1,810 | 20,960 |
| Feb '24 | 682 | 1,681 | 19,777 |
| Mar '24 | 629 | 1,685 | 19,495 |
| Apr '24 | 712 | 1,742 | 21,345 |
| May '24 | 831 | 1,990 | 25,766 |
| Jun '24 | 904 | 2,222 | 27,116 |
| Jul '24 | 895 | 2,160 | 27,741 |
| Aug '24 | 805 | 2,267 | 24,945 |
| Sep '24 | 812 | 2,084 | 24,350 |
| Oct '24 | 863 | 1,984 | 26,759 |
| Nov '24 | 717 | 1,759 | 21,509 |
| Dec '24 | 729 | 1,819 | 22,612 |
| Annual Summary | | | |
| Total | | | 282,375 |
| Average | 772 | | |
| Maximum | | 2,267 | |

| Well 7&9 Combined Raw Water Flow | | | | |
|---|----------------|---------|---------|---------|
| Month | Raw Water Flow | | | |
| | Average | Maximum | Minimum | Monthly |
| | Daily | Daily | Daily | Total |
| | m3 | m3 | m3 | m3 |
| Jan '24 | 1,432 | 1,950 | 1,073 | 44,401 |
| Feb '24 | 1,417 | 1,681 | 1,054 | 41,086 |
| Mar '24 | 1,388 | 1,727 | 950 | 43,027 |
| Apr '24 | 1,440 | 1,814 | 1,100 | 43,204 |
| May '24 | 1,538 | 2,498 | 987 | 47,680 |
| Jun '24 | 1,704 | 2,605 | 1,125 | 51,130 |
| Jul '24 | 1,807 | 2,336 | 1,127 | 56,027 |
| Aug '24 | 1,796 | 2,282 | 1,150 | 55,686 |
| Sep '24 | 1,731 | 2,305 | 1,282 | 51,918 |
| Oct '24 | 1,559 | 1,984 | 1,083 | 48,318 |
| Nov '24 | 1,355 | 1,759 | 1,012 | 40,664 |
| Dec '24 | 1,408 | 1,819 | 990 | 43,639 |
| Annual Summary | | | | |
| Total | | | | 566,780 |
| Average | 1,549 | | | |
| Minimum | | | 950 | |
| Maximum | | 2,605 | | |

The above tables outline the average daily, maximum daily and total monthly flows for the raw water conveyed through treatment at the Walkerton WTP. The maximum allowable flow in the Permit to Take Water is 82.6L/s (**7136 m3/day**). In 2024, the average daily flow was at **21.71%** and peak flow was at **36.51%** of Permit to Take Water Capacity.

Identified Peak Flow Outliers between January 1, 2024 - December 31, 2024

There were no major peak flow outliers this year.

ISSUES OF NON-COMPLIANCE

The following table lists the requirements of the Act, Regulation, Order or System Approval(s) that the system failed to meet during the reporting period and includes a summary of action taken to correct each failure.

| Requirement Type | Requirement the System Failed to Meet | Duration | Corrective Action | Status |
|------------------|---------------------------------------|----------|-------------------|--------|
| N/A | | | | |

There were no Non-Compliance issues within the reporting period.

Precautionary Boil Water/Adverse Notices

| Date | Reason | Duration | Resolution |
|------|--------|----------|------------|
| NA | | | |

Issues from February 8, 2024 Ministry of the Environment, Conservation and Parks Inspection**Non Compliance Items:**

There were no Non-Compliance issues within the reporting period.

Operational Issues (For further details see monthly reports)

January 8 - Repaired 1" PVC line in the chlorine room of Well #7/#9

January 10 - Completed curb stop repair at 40 Valleyside Dr.

January 16 - Repaired a 12 inch water main break on Ridout St.

January 29 - H2Flow onsite to complete semi annual UV service.

February 22 - Fixed curb stop at 5 Mullen Dr.

March 5 - Completed flow test with Miller Fire Prevention on Shortt St

April 2 - Repaired curb stop at 405 Yonge St.

April 9 - AMS performed flow meter calibrations

May 27 - Waker Hill tie-in

July 26 - Observed two watermain tie-ins on Eastridge Road. The first watermain tie-in was at Eastridge Rd & Zettler Rd. The second watermain tie-in was at Creighton St & Zettler Rd.

June 12 - Observed watermain tie-in on Eastridge Road.

September 10 - Sommers onsite to complete biennial generator servicing for the South Tower Booster Station and the Walkerwest Booster Station

November 20 - Replaced curb stop at 113 Peter St

Best Management Practices – Performed by Veolia Water

- Annual flushing complete with valves in the system being exercised, painted and noted if requiring further action. All valves are targeted to be exercised over a two year plan.
- We will continue to identify and repair leaks in the distribution system.
- Historical data is tracked and included with the annual report.

Drinking Water Quality Management System (DWQMS)

- March 22, 2024 – A complete on-site Audit of the DWQMS was conducted by SAI. There was no Non-Conformance listed in the audit report.
- December 5, 2024 – Completed Annual Emergency Response Training
- September 25, 2024 – An Internal Audit of the DWQMS was conducted, no Non-Conformances were identified
- January 25, 2023 – 36 Month Risk Assessment was conducted
- October 2, 2025 - An Annual Risk Assessment was conducted
- October 21, 2024 – The Annual Management Review was completed by Veolia and the Municipality

Walkerton Infrastructure Review

The following items have been identified as potential improvements for the Walkerton Drinking Water System, as discussed at the Infrastructure Review conducted on October 21, 2024:

- Walker West Subdivision (working through deficiencies)
- East Ridge Development, water infrastructure done.
- Walker Hill subdivision
- Eastridge Rd. Hydrant needs to be fixed as shavings from the live-tap were preventing the hydrant from turning off.

Information Included in Appendices

- Appendix 1** **Well #7 & #9 Chlorine Usage, Turbidity and Disinfection Data**
- Appendix 2** **Bacteriological Samples: Distribution & Well #7 & #9**
- Appendix 3** **Additional Samples**

WALKERTON WTP
2024 SUMMARY REPORT
PREPARED IN ACCORDANCE WITH SCHEDULE 22 OF
ONTARIO REGULATION 170/03, AS AMENDED

Appendix 1

Distribution Chlorine Residual Results

| Month | No. of Dist.Samp. Collected | No. of Samples < 0.05 | Average Free Residual (mg/l) |
|-----------------------|-----------------------------------|-----------------------------|------------------------------------|
| Jan '24 | 43 | 0 | 1.10 |
| Feb '24 | 39 | 0 | 1.11 |
| Mar '24 | 41 | 0 | 1.10 |
| Apr '24 | 42 | 0 | 1.10 |
| May '24 | 39 | 0 | 1.11 |
| Jun '24 | 40 | 0 | 1.10 |
| Jul '24 | 43 | 0 | 1.14 |
| Aug '24 | 41 | 0 | 1.10 |
| Sep '24 | 40 | 0 | 1.15 |
| Oct '24 | 43 | 0 | 1.09 |
| Nov '24 | 40 | 0 | 1.12 |
| Dec '24 | 43 | 0 | 1.13 |
| Annual Summary | | | |
| Total | 494 | 0 | |
| Max | | | 1.49 |
| Min | | | 0.76 |
| Average | | | 1.11 |

Chlorine Usage and Dosage

| Month | Chlorine (gas) | |
|-----------------------|----------------|----------------|
| | Usage Kg. | Dosage mg/L |
| Jan '24 | 68.4 | 1.55 |
| Feb '24 | 64.3 | 1.57 |
| Mar '24 | 69.0 | 1.61 |
| Apr '24 | 65.4 | 1.52 |
| May '24 | 75.6 | 1.59 |
| Jun '24 | 78.7 | 1.54 |
| Jul '24 | 90.5 | 1.62 |
| Aug '24 | 90.8 | 1.65 |
| Sep '24 | 83.9 | 1.62 |
| Oct '24 | 76.1 | 1.58 |
| Nov '24 | 66.4 | 1.63 |
| Dec '24 | 69.2 | 1.59 |
| Annual Summary | | |
| Total | 898.3 | |
| Average | | 1.59 |
| Minimum | | 1.21 |
| Maximum | | 2.63 |

Treated Water Chlorine Residuals

| Month | Chlorine Analyzer Reading (mg/l) | | |
|-----------------------|----------------------------------|---------------------|---------------------|
| | Minimum Residual | Maximum Residual | Average Residual |
| Jan '24 | 1.34 | 1.47 | 1.40 |
| Feb '24 | 1.38 | 1.48 | 1.43 |
| Mar '24 | 1.28 | 1.44 | 1.39 |
| Apr '24 | 1.37 | 1.46 | 1.41 |
| May '24 | 1.37 | 1.54 | 1.46 |
| Jun '24 | 1.38 | 1.57 | 1.46 |
| Jul '24 | 1.21 | 1.50 | 1.45 |
| Aug '24 | 1.42 | 1.55 | 1.48 |
| Sep '24 | 1.39 | 1.52 | 1.44 |
| Oct '24 | 1.38 | 1.54 | 1.45 |
| Nov '24 | 1.40 | 1.50 | 1.45 |
| Dec '24 | 1.36 | 1.48 | 1.41 |
| Annual Summary | | | |
| # of Samples | | | 366 |
| Minimum | 1.21 | | |
| Maximum | | 1.57 | |
| Average | | | 1.44 |

| Grab Raw Turbidity Results - Well #7 | | | | | Grab Raw Turbidity Results - Well #9 | | | | |
|--------------------------------------|-----------|-----------|-----------|-----------|--------------------------------------|-----------|-----------|-----------|-----------|
| Month | Average | Minimum | Maximum | Number of | Month | Average | Minimum | Maximum | Number of |
| | Turbidity | Turbidity | Turbidity | Samples | | Turbidity | Turbidity | Turbidity | Samples |
| | NTU | NTU | NTU | | | NTU | NTU | NTU | |
| Jan '24 | 0.11 | 0.10 | 0.11 | 2 | Jan '24 | 0.10 | 0.09 | 0.13 | 3 |
| Feb '24 | 0.11 | 0.10 | 0.12 | 2 | Feb '24 | 0.14 | 0.08 | 0.19 | 2 |
| Mar '24 | 0.09 | 0.09 | 0.09 | 2 | Mar '24 | 0.11 | 0.10 | 0.11 | 2 |
| Apr '24 | 0.11 | 0.10 | 0.11 | 3 | Apr '24 | 0.13 | 0.09 | 0.16 | 2 |
| May '24 | 0.11 | 0.10 | 0.12 | 2 | May '24 | 0.09 | 0.09 | 0.09 | 2 |
| Jun '24 | 0.10 | 0.09 | 0.10 | 2 | Jun '24 | 0.14 | 0.10 | 0.18 | 2 |
| Jul '24 | 0.11 | 0.10 | 0.12 | 2 | Jul '24 | 0.09 | 0.08 | 0.11 | 3 |
| Aug '24 | 0.14 | 0.06 | 0.21 | 2 | Aug '24 | 0.13 | 0.08 | 0.17 | 2 |
| Sep '24 | 0.10 | 0.08 | 0.12 | 3 | Sep '24 | 0.10 | 0.10 | 0.10 | 2 |
| Oct '24 | 0.11 | 0.10 | 0.11 | 2 | Oct '24 | 0.08 | 0.07 | 0.09 | 2 |
| Nov '24 | 0.11 | 0.10 | 0.11 | 2 | Nov '24 | 0.14 | 0.09 | 0.18 | 2 |
| Dec '24 | 0.13 | 0.09 | 0.16 | 2 | Dec '24 | 0.12 | 0.05 | 0.15 | 3 |
| Annual Summary | | | | | Annual Summary | | | | |
| Total | | | | 26 | Total | | | | 27 |
| Average | 0.11 | | | | Average | 0.11 | | | |
| Maximum | | | 0.21 | | Maximum | | | 0.19 | |
| Minimum | | 0.06 | | | Minimum | | 0.05 | | |

Raw Water Turbidity (Analyzer)

| Month | Average Grab NTU | Average Turbidity NTU | No. of Samples > 1NTU |
|-----------------------|------------------------|-----------------------------|-----------------------------|
| Jan '24 | 0.10 | 0.04 | 0 |
| Feb '24 | 0.12 | 0.04 | 0 |
| Mar '24 | 0.10 | 0.04 | 0 |
| Apr '24 | 0.11 | 0.03 | 0 |
| May '24 | 0.10 | 0.04 | 0 |
| Jun '24 | 0.12 | 0.04 | 0 |
| Jul '24 | 0.10 | 0.04 | 0 |
| Aug '24 | 0.13 | 0.04 | 0 |
| Sep '24 | 0.10 | 0.04 | 0 |
| Oct '24 | 0.09 | 0.04 | 0 |
| Nov '24 | 0.12 | 0.06 | 0 |
| Dec '24 | 0.12 | 0.08 | 0 |
| Annual Summary | | | |
| Total | | | 0 |
| Average | 0.11 | 0.04 | |
| Maximum | 0.21 | 0.39 | |
| Minimum | 0.05 | 0.00 | |
| #of Samples | 53 | 366 | |

U.V Disinfection Results

| Month | Treated Water UV | |
|-----------------------|--------------------------|-------------------|
| | UV | UV Dosage |
| | Average Transmittance | Average MJ/CM2 |
| Jan '24 | 98.23 | 64.23 |
| Feb '24 | 98.21 | 62.52 |
| Mar '24 | 96.48 | 56.75 |
| Apr '24 | 99.55 | 72.55 |
| May '24 | 99.88 | 77.35 |
| Jun '24 | 99.89 | 62.32 |
| Jul '24 | 99.60 | 71.65 |
| Aug '24 | 98.85 | 64.13 |
| Sep '24 | 98.91 | 64.20 |
| Oct '24 | 98.74 | 74.84 |
| Nov '24 | 98.64 | 59.95 |
| Dec '24 | 98.62 | 84.32 |
| Annual Summary | | |
| Average | 98.80 | 67.97 |
| Maximum | 99.90 | 210.20 |
| Minimum | 90.00 | 45.70 |

WALKERTON WTP
2024 SUMMARY REPORT
PREPARED IN ACCORDANCE WITH SCHEDULE 22 OF
ONTARIO REGULATION 170/03, AS AMENDED

Appendix 2

Distribution Water Bacteriological Results

| <u>DW - E. Coli</u> | | | | <u>DW - Total Coliform</u> | | | |
|---------------------|--------------------|--------------------|----------------------|----------------------------|--------------------|--------------------|----------------------|
| Month | Monthly Minimum | Monthly Maximum | Monthly # Samples | Month | Monthly Minimum | Monthly Maximum | Monthly # Samples |
| Jan '24 | 0 | 0 | 17 | Jan '24 | 0 | 0 | 17 |
| Feb '24 | 0 | 0 | 14 | Feb '24 | 0 | 0 | 14 |
| Mar '24 | 0 | 0 | 14 | Mar '24 | 0 | 0 | 14 |
| Apr '24 | 0 | 0 | 17 | Apr '24 | 0 | 0 | 17 |
| May '24 | 0 | 0 | 12 | May '24 | 0 | 0 | 12 |
| Jun '24 | 0 | 0 | 14 | Jun '24 | 0 | 0 | 14 |
| Jul '24 | 0 | 0 | 17 | Jul '24 | 0 | 0 | 17 |
| Aug '24 | 0 | 0 | 14 | Aug '24 | 0 | 0 | 14 |
| Sep '24 | 0 | 0 | 14 | Sep '24 | 0 | 0 | 14 |
| Oct '24 | 0 | 0 | 17 | Oct '24 | 0 | 0 | 17 |
| Nov '24 | 0 | 0 | 14 | Nov '24 | 0 | 0 | 14 |
| Dec '24 | 0 | 0 | 17 | Dec '24 | 0 | 0 | 17 |
| Annual Summary | | | | Annual Summary | | | |
| Min | 0 | | | Min | 0 | | |
| Max | | 0 | | Max | | 0 | |
| Avg | | | | Avg | | | |
| Total | | | 181 | Total | | | 181 |

| DW - HPC | | | | |
|----------------|--------------------|--------------------|----------------------|------------------|
| Month | Monthly Minimum | Monthly Maximum | Monthly # Samples | # Samples >10 |
| Jan '24 | <10 | <10 | 10 | 0 |
| Feb '24 | <10 | <10 | 8 | 0 |
| Mar '24 | <10 | <10 | 8 | 0 |
| Apr '24 | <10 | <10 | 10 | 0 |
| May '24 | <10 | 20 | 8 | 1 |
| Jun '24 | <10 | 20 | 8 | 1 |
| Jul '24 | <10 | <10 | 10 | 0 |
| Aug '24 | <10 | 20 | 8 | 1 |
| Sep '24 | <10 | <10 | 8 | 0 |
| Oct '24 | <10 | 20 | 10 | 1 |
| Nov '24 | <10 | >2,000 | 8 | 1 |
| Dec '24 | <10 | <10 | 10 | 0 |
| Annual Summary | | | | |
| Min | <10 | | | |
| Max | | >2,000 | | |
| Avg | | | | |
| Total | | | 106 | 5 |

Raw Water E.Coli Results

| <u>Well #7</u> | | | | <u>Well #9</u> | | | |
|----------------|-----------------|-----------------|-------------------|----------------|-----------------|-----------------|-------------------|
| Month | Monthly Minimum | Monthly Maximum | Monthly # Samples | Month | Monthly Minimum | Monthly Maximum | Monthly # Samples |
| Jan '24 | 0 | 0 | 5 | Jan '24 | 0 | 0 | 5 |
| Feb '24 | 0 | 0 | 4 | Feb '24 | 0 | 0 | 4 |
| Mar '24 | 0 | 0 | 4 | Mar '24 | 0 | 0 | 4 |
| Apr '24 | 0 | 0 | 5 | Apr '24 | 0 | 0 | 5 |
| May '24 | 0 | 0 | 4 | May '24 | 0 | 0 | 4 |
| Jun '24 | 0 | 0 | 4 | Jun '24 | 0 | 0 | 4 |
| Jul '24 | 0 | 0 | 5 | Jul '24 | 0 | 0 | 5 |
| Aug '24 | 0 | 0 | 4 | Aug '24 | 0 | 0 | 4 |
| Sep '24 | 0 | 0 | 4 | Sep '24 | 0 | 0 | 4 |
| Oct '24 | 0 | 0 | 5 | Oct '24 | 0 | 0 | 5 |
| Nov '24 | 0 | 0 | 4 | Nov '24 | 0 | 0 | 4 |
| Dec '24 | 0 | 0 | 5 | Dec '24 | 0 | 0 | 5 |
| Annual Summary | | | | Annual Summary | | | |
| Min | 0 | | | Min | 0 | | |
| Max | | 0 | | Max | | 0 | |
| Avg | | | | Avg | | | |
| Total | | | 53 | Total | | | 53 |

Raw Water - Total Coliform Results

| <u>Well #7</u> | | | | <u>Well #9</u> | | | |
|----------------|--------------------|--------------------|----------------------|----------------|--------------------|--------------------|----------------------|
| Month | Monthly Minimum | Monthly Maximum | Monthly # Samples | Month | Monthly Minimum | Monthly Maximum | Monthly # Samples |
| Jan '24 | 0 | 0 | 5 | Jan '24 | 0 | 0 | 5 |
| Feb '24 | 0 | 0 | 4 | Feb '24 | 0 | 0 | 4 |
| Mar '24 | 0 | 0 | 4 | Mar '24 | 0 | 0 | 4 |
| Apr '24 | 0 | 0 | 5 | Apr '24 | 0 | 0 | 5 |
| May '24 | 0 | 0 | 4 | May '24 | 0 | 0 | 4 |
| Jun '24 | 0 | 0 | 4 | Jun '24 | 0 | 0 | 4 |
| Jul '24 | 0 | 0 | 5 | Jul '24 | 0 | 0 | 5 |
| Aug '24 | 0 | 0 | 4 | Aug '24 | 0 | 0 | 4 |
| Sep '24 | 0 | 0 | 4 | Sep '24 | 0 | 0 | 4 |
| Oct '24 | 0 | 0 | 5 | Oct '24 | 0 | 0 | 5 |
| Nov '24 | 0 | 0 | 4 | Nov '24 | 0 | 0 | 4 |
| Dec '24 | 0 | 0 | 5 | Dec '24 | 0 | 0 | 5 |
| Annual Summary | | | | Annual Summary | | | |
| Min | 0 | | | Min | 0 | | |
| Max | | 0 | | Max | | 0 | |
| Avg | | | | Avg | | | |
| Total | | | 53 | Total | | | 53 |

Treated Water - Bacteriological Results

| <u>E. Coli</u> | | | |
|----------------|-----------------|-----------------|-------------------|
| Month | Monthly Minimum | Monthly Maximum | Monthly # Samples |
| Jan '24 | 0 | 0 | 5 |
| Feb '24 | 0 | 0 | 4 |
| Mar '24 | 0 | 0 | 4 |
| Apr '24 | 0 | 0 | 5 |
| May '24 | 0 | 0 | 4 |
| Jun '24 | 0 | 0 | 4 |
| Jul '24 | 0 | 0 | 5 |
| Aug '24 | 0 | 0 | 4 |
| Sep '24 | 0 | 0 | 4 |
| Oct '24 | 0 | 0 | 5 |
| Nov '24 | 0 | 0 | 4 |
| Dec '24 | 0 | 0 | 5 |
| Annual Summary | | | |
| Min | 0 | | |
| Max | | 0 | |
| Avg | | | |
| Total | | | 53 |

| <u>Total Coliform</u> | | | |
|-----------------------|-----------------|-----------------|-------------------|
| Month | Monthly Minimum | Monthly Maximum | Monthly # Samples |
| Jan '24 | 0 | 0 | 5 |
| Feb '24 | 0 | 0 | 4 |
| Mar '24 | 0 | 0 | 4 |
| Apr '24 | 0 | 0 | 5 |
| May '24 | 0 | 0 | 4 |
| Jun '24 | 0 | 0 | 4 |
| Jul '24 | 0 | 0 | 5 |
| Aug '24 | 0 | 0 | 4 |
| Sep '24 | 0 | 0 | 4 |
| Oct '24 | 0 | 0 | 5 |
| Nov '24 | 0 | 0 | 4 |
| Dec '24 | 0 | 0 | 5 |
| Annual Summary | | | |
| Min | 0 | | |
| Max | | 0 | |
| Avg | | | |
| Total | | | 53 |

| HPC | | | |
|----------------|-----------------|-----------------|-------------------|
| Month | Monthly Minimum | Monthly Maximum | Monthly # Samples |
| Jan '24 | <10 | <10 | 5 |
| Feb '24 | <10 | 20 | 4 |
| Mar '24 | <10 | <10 | 4 |
| Apr '24 | <10 | <10 | 5 |
| May '24 | <10 | <10 | 4 |
| Jun '24 | <10 | <10 | 4 |
| Jul '24 | <10 | <10 | 5 |
| Aug '24 | <10 | <10 | 4 |
| Sep '24 | <10 | <10 | 4 |
| Oct '24 | <10 | 10 | 5 |
| Nov '24 | <10 | <10 | 4 |
| Dec '24 | <10 | <10 | 5 |
| Annual Summary | | | |
| Min | <10 | | |
| Max | | 20 | |
| Avg | | | |
| Total | | | 53 |

WALKERTON WTP
2024 SUMMARY REPORT
PREPARED IN ACCORDANCE WITH SCHEDULE 22 OF
ONTARIO REGULATION 170/03, AS AMENDED

Appendix 3

Nitrate**MAC: 10 mg/l****1/2 MAC: 5 mg/l****Well #7**

| Date | Nitrates mg/L | Excedences |
|--------------|---------------|------------|
| Jan 16, '24 | 1.84 | 0 |
| Apr 16, '24 | 1.21 | 0 |
| Jul 16, '24 | 1.36 | 0 |
| Oct 22, '24 | 1.76 | 0 |
| | | |
| | | |
| Min | 1.21 | |
| Max | 1.84 | |
| Avg | 1.54 | |
| Total | | 0 |

Well #9

| Date | Nitrates mg/L | Excedences |
|--------------|---------------|------------|
| Jan 16, '24 | 1.48 | 0 |
| Apr 16, '24 | 0.57 | 0 |
| Jul 16, '24 | 1.48 | 0 |
| Oct 22, '24 | 1.48 | 0 |
| | | |
| | | |
| Min | 0.57 | |
| Max | 1.48 | |
| Avg | 1.25 | |
| Total | | 0 |

Nitrite**MAC: 1 mg/l****1/2 MAC: 0.5 mg/l****Well #7**

| Date | Nitrites mg/L | Excedences |
|--------------|------------------|------------|
| Jan 16, '24 | <0.003 | 0 |
| Apr 16, '24 | <0.003 | 0 |
| Jul 16, '24 | <0.003 | 0 |
| Oct 22, '24 | <0.003 | 0 |
| | | |
| | | |
| Min | <0.003 | |
| Max | <0.003 | |
| Avg | <0.003 | |
| Total | | 0 |

Well #9

| Date | Nitrites mg/L | Excedences |
|--------------|------------------|------------|
| Jan 16, '24 | <0.003 | 0 |
| Apr 16, '24 | <0.003 | 0 |
| Jul 16, '24 | <0.003 | 0 |
| Oct 22, '24 | <0.003 | 0 |
| | | |
| | | |
| Min | <0.003 | |
| Max | <0.003 | |
| Avg | <0.003 | |
| Total | | 0 |

Selenium

MAC: 50 ug/l

1/2 MAC: 25 ug/l

Well #7

| Date | Selenium ug/L | Excedences |
|--------------|---------------|------------|
| Jan 16, '24 | 12 | 0 |
| Apr 16, '24 | 11 | 0 |
| Jul 16, '24 | 9 | 0 |
| Oct 22, '24 | 9 | 0 |
| | | |
| | | |
| Min | 9 | |
| Max | 12 | |
| Avg | 10 | |
| Total | | 0 |

Well #9

| Date | Selenium ug/L | Excedences |
|--------------|---------------|------------|
| Jan 16, '24 | 12 | 0 |
| Apr 16, '24 | 14 | 0 |
| Jul 16, '24 | 10 | 0 |
| Oct 22, '24 | 11 | 0 |
| | | |
| | | |
| Min | 10 | |
| Max | 14 | |
| Avg | 12 | |
| Total | | 0 |

Uranium

MAC: 20 ug/L

1/2 MAC: 10 ug/L

Well #7

| Date | Uranium ug/L | Excedences |
|--------------|--------------|------------|
| Jan 16, '24 | 12.20 | 0 |
| Apr 16, '24 | 13.60 | 0 |
| Jul 16, '24 | 11.80 | 0 |
| Oct 22, '24 | 11.70 | 0 |
| | | |
| | | |
| Min | 11.70 | |
| Max | 13.60 | |
| Avg | 12.33 | |
| Total | | 0 |

Well #9

| Date | Uranium ug/L | Excedences |
|--------------|--------------|------------|
| Jan 16, '24 | 14.90 | 0 |
| Apr 16, '24 | 18.00 | 0 |
| Jul 16, '24 | 14.90 | 0 |
| Oct 22, '24 | 15.00 | 0 |
| | | |
| | | |
| Min | 15.70 | |
| Max | 18.00 | |
| Avg | 15.70 | |
| Total | | 0 |

Fluoride

MAC: 1.5 mg/L
1/2 MAC: 0.75 mg/L

Well #7

| Date | Fluoride mg/L | Excedences |
|-------|---------------|------------|
| | | 0 |
| Min | | |
| Max | | |
| Avg | | |
| Total | | 0 |

Well #9

| Date | Fluoride mg/L | Excedences |
|-------|---------------|------------|
| | | 0 |
| Min | | |
| Max | | |
| Avg | | |
| Total | | 0 |

THM's

MAC: 100 ug/L
1/2 MAC: 50 ug/L

Distribution

| Date | THM's ug/L | Excedences |
|-------------|------------|------------|
| Jan 16, '24 | 6.20 | 0 |
| Apr 16, '24 | 7.00 | 0 |
| Jul 16, '24 | 11.00 | 0 |
| Oct 22, '24 | 12.00 | 0 |
| Min | 6.20 | |
| Max | 12.00 | |
| Avg | 9.05 | |
| Total | | 0 |

Lead

MAC: 10 ug/L
1/2 MAC: 5 ug/L

Distribution

| Date | Lead ug/L | Excedences |
|-------------|-----------|------------|
| Oct 22, '24 | 0.1500 | 0 |
| | | 0 |
| | | 0 |
| | | 0 |
| Min | 0.1500 | |
| Max | 0.1500 | |
| Avg | 0.1500 | |
| Total | | 0 |

HAA's

MAC: 80 ug/L
1/2 MAC: 40 ug/L

Distribution

| Date | HAA's ug/L | Excedences |
|-------------|------------|------------|
| Jan 16, '24 | <5.30 | 0.00 |
| Apr 16, '24 | <5.30 | 0.00 |
| Jul 16, '24 | <5.30 | 0.00 |
| Oct 22, '24 | <5.30 | 0.00 |
| Min | 5.30 | |
| Max | 5.30 | |
| Avg | 5.30 | |
| Total | | 0.00 |