Region of Peel Permit to Take Water Groundwater and Surface Water Monitoring Program

2025 – Caledon East Annual Water Level and Water Quality Report

February 2026

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1 Introduction

Watermark Environmental Ltd. (WEL) was retained by the Regional Municipality of Peel (the Region of Peel) to conduct the 2025 Groundwater Level and Groundwater Quality Monitoring Program (2022-222vPC13-1-021) for the Caledon East Municipal Wellfield. This report satisfies Condition 4.2 of the current Permit to Take Water (PTTW) No. P-300-2095321129 for the Caledon East municipal wells, which requires that an annual monitoring report interpreting the results of annual monitoring data from the Caledon East Municipal Wellfield. Three (3) municipal production wells Caledon East Well 3 (CE 3), Caledon East Well 4 (CE 4), Caledon East Well 4A (CE 4A) are currently commissioned to supply water, while a fourth well, Caledon East Well 6 (CE 6) is pending commissioning.

This report is organized to provide a hydrogeological background on the Caledon East municipal wellfield, and summaries of the groundwater and surface water monitoring work completed in 2025. The summaries of the groundwater and surface water monitoring work completed include an overview of the methodologies employed; the scope of the monitoring completed; and the results of the monitoring completed. Where relevant, observations of historical monitoring years are also included to provide further context to existing and/or emerging water level and water quality trends. Finally, conclusions of the monitoring program from 2025 are summarized together with any recommendations for the following annual groundwater and surface water level monitoring program in 2026.

1.1 Caledon East Municipal Wells

CE 3 is located at the Caledon East 3 Water Treatment Plant located at 20 Robert Carson Drive, Caledon East, Ontario. CE 4 and CE 4A are located at the CE 4 Water Treatment Plant located at 5612 The Grange Side Road, Caledon East, Ontario. While CE 4 is located within the water treatment plant building, CE 4A is located external to the water treatment plant building. CE 6 is located on a parcel of land north of Castlederg Road, approximately 600 m east of Airport Road.

CE 4 and CE 4A are the northernmost municipal wells in the wellfield, followed next by CE 3 approximately 2 km southeast of CE 4 and CE 4A, and finally CE 6 approximately 4.5 km southeast of CE 4 and CE 4A. CE 3 is understood to have been completed within an unconfined fine sand aquifer infilling a meltwater channel known locally as the Caledon East Meltwater Channel, while CE 4 and CE 4A are screened within a confined sand and gravel aquifer known as the Granite Stones Aquifer (Earthfx, 2019). CE 6 is understood to be screened in a confined aquifer as well, which is referred to locally as the Bolton Buried Bedrock Valley Aquifer Complex (Geo Kamp, 2020). Further discussion of regional hydrostratigraphy as it relates to the current study is provided in the next section. The locations of the Caledon East municipal wells and their networks are illustrated on **Figure 1** through **Figure 3**. The relevant well construction details for the municipal wells are summarized in **Table 1.1**.

Table 1.1 Caledon East Municipal Wells Construction Details
Source: WEL, 2024

Well ID	MOE Well Tag	Year of Well Construction	Well Depth (mbgs)	Screen Length (m)	Screen Interval (mbgs)	Aquifer Materials
CE 3	4905642	1979	49.1	8.4	40.7 – 49.1	CE Meltwater Channel (semi-confined/leaky)
CE 4	4907507	1990	56.7	8.2	47.6 – 55.8	Lower Sediments (TAC) (confined)
CE 4A	A152123	2014	60.3	9.73	48.4 – 58.1	Lower Sediments (TAC) (confined)
CE 6	A285973	2020	186	9.10	150 – 159.1	Bolton Buried Bedrock Valley Aquifer Complex (Confined)

According to the current PTTW P-300-2095321129, the Region of Peel is permitted to take water from the Caledon East Municipal Wells according to the allotments provided in **Table 1.2**. The current PTTW will expire on December 31, 2030.

Table 1.2 Caledon East Municipal Wells PTTW Summary
Source: Table A from PTTW P-300-2095321129

Well ID	Maximum Volume (L/min)	Maximum Volume (L/day)
CE 3	1,776	2,557,440
CE 4	2,520	3,628,800
CE 4A	4,500	6,480,000
CE 6	3,000	4,320,000
Maximum Combined Taking Permitted	7,500	10,800,000

Notes:
1. CE 6 was not commissioned for production in 2025.

1.2 Geological and Hydrogeological Setting

1.2.1 Physiography

The Caledon East municipal wells are located within three distinct physiographic regions, including CE 4 and CE 4A which are within the Oak Ridges Moraine (ORM) physiographic region; CE 3 which is within the Niagara Escarpment physiographic region; and CE 6 which is within the South Slope physiographic region. The ORM physiographic region is described as having rolling sand hills, hummocky topography and closed surface depressions supplying groundwater recharge. The Niagara Escarpment physiographic region is characterized by the topographic relief between upland and lowland areas as well as the varying thickness of overburden deposits to the north and south of the bedrock ridge. Finally, the South Slope physiographic region is characterized by shallow shale and till plains with a gentle slope south toward Lake Ontario (Chapman, 1984).

The distribution of physiographic regions in the surrounding area is presented on **Figure 4**.

1.2.2 Topography and Drainage

The Caledon East municipal wells differ in elevation between CE 4/4A in the north at approximately 325 metres above sea level (masl) to CE 6 in the south at approximately 300 masl. Each of the Caledon East municipal wells is situated in the Bolton Dam – Humber River subwatershed within the Humber River Watershed (MECP, 2023). Drainage of the lands surrounding CE 3 and CE 4/4A, per local topographic relief, is to the south toward a tributary of Centreville Creek which flow to Innis Lake. At CE 6, surface drainage is via land drains/ tributaries feeding into the West Branch of the Humber River.

A topographic map of the surrounding area is presented on **Figure 5**.

1.2.3 Surficial Geology

The understanding of regional geology and hydrogeology under which the current report has been prepared is based on the related information and mapping prepared by the Oak Ridges Moraine Groundwater Program (ORMGP) and the Ontario Geological Survey (OGS). The ORMGP, through their online mapping portal, provides the most accessible and up-to-date consensus on regional hydrogeological mapping and a comprehensive compilation of pertinent hydrogeological data relevant to the current investigation. The following units overlie the bedrock (from youngest to oldest) in the vicinity of the Caledon East municipal wells:

- Halton Till
- Oak Ridges Moraine
- Newmarket Till
- Lower Sediments (including: Thorncliffe Formation, Sunnybrook Drift, and Scarborough Formation)

CE 3 is screened to approximately 50 metres below ground surface (mbgs) in sand and gravel deposits of the Caledon East Meltwater Channel. The Caledon East Meltwater Channel is described as a network of buried bedrock valleys infilled by glaciofluvial outwash deposits. The glaciofluvial outwash sediments collectively make up the Oak Ridges Moraine Aquifer Complex (ORAC) and in the area of CE 3, they extend to approximately 42 mbgs to the bedrock surface. Hydraulically, the aquifer deposits of the Caledon East Meltwater Channel in the area of CE 3 are said to be semi-confined to unconfined due to a discontinuous fine clay and silt (Stantec, 2002). As a result of the lack of hydraulic connection between groundwater and surface water, as well as the differences between groundwater and surface water quality, CE 3 is considered not under the direct influence of surface water (“Non-GUDI”) (Stantec, 2002).

CE 4 and CE 4A are each screened approximately 45 mbgs in sand and gravel deposits of the Thorncliffe Aquifer Complex which are referred to locally as the Granite Stones Aquifer. The Thorncliffe Formation was deposited approximately 45,000 years ago and consists of glaciofluvial deposits of sand and silty sand in the north, and glaciolacustrine silt, sand, and clay in the south. In the area of CE 4 and CE 4A, there is a significant thickness of overlying aquitard

materials which confine the Granite Stones Aquifer. As a result of the significant aquitard thickness; a lack of response in the shallow groundwater and surface water systems during pumping; and differences between groundwater and surface water quality, CE 4, and by relation CE 4A, are considered not under the direct influence of surface water ("Non-GUDI") (Stantec, 2002).

CE 6 is screened in a fine sand deposit of the Bolton Buried Bedrock Valley Aquifer Complex and is considered confined by overlying clay and silt aquitard materials. Aquifer testing at a rate of 3,000 L/min over three days following well construction suggested the radius of influence of CE 6 was approximately 6,000 m and pumping of CE 6 at that rate would not result in significant drawdowns in existing domestic wells. Moreover, there was no interference registered in shallow depth wells monitored during the testing. Based on the testing completed at CE 6, the well is considered to not under the direction influence of surface water ("Non-GUDI") (Geo Kamp, 2020).

A surficial geology map capturing the Caledon East municipal wells is included as **Figure 6**. Hydrostratigraphic cross-sections taken through CE 3, CE 4, and CE 4A, and CE 6 in perpendicular directions from the ORMGP model (2024) are included as **Figure 7**, **Figure 8**, and **Figure 9**, respectively.

1.2.4 Bedrock Geology

Bedrock mapping of Southern Ontario, prepared by the OGS (OGS, 2011), accessed through the ORMGP, indicates that shale bedrock of the Queenston Formation underlies the overburden soils in the area. The bedrock topography in the area is characterized by a period of significant weathering from glacial and fluvial processes that lead to the formation of the numerous bedrock valleys now infilled with highly conductive sand and gravel deposits.

A bedrock geology map capturing the study area of the Caledon East municipal wells is included as **Figure 10**.

2 Groundwater and Surface Water Level Summary

2.1 Groundwater and Surface Water Level Monitoring Scope

A summary of the groundwater and surface water level monitoring conducted in 2025 is provided in the summary tables of **Appendix B**. In **Table B-1** of **Appendix B**, the monitoring locations are identified along with the frequency of monitoring which was included in the 2025 monitoring year. In 2025, the Caledon East municipal wellfield monitoring program included 38 groundwater monitoring stations capturing shallow, intermediate, and deep aquifer horizons, and 12 surface water monitoring stations. The monitoring locations are illustrated on **Figure 1** through **Figure 3**.

The groundwater and surface water level monitoring program for 2025 included the following major tasks:

- Above ground inspection of monitoring wells, drivepoints, and surface water staff gauges to document any maintenance requirements;
- Collection of above ground monitoring well and drivepoint construction details, including stick-up, well diameters, etc.;
- Entry of all field monitoring data into the Region of Peel Survey123 monitoring well inspection app;
- Installation of seasonal groundwater and surface water level monitoring level loggers in April 2025 and retrieval of the same in November 2025;
- Replacing missing, inoperable, or damaged level loggers with Region of Peel supplied spares, including shipping select inoperable level loggers to Solinst Canada Ltd. for repair and/or data retrieval;
- Downloading level loggers in the field at seasonal monitoring locations;
- Downloading and Quality Assurance/Quality Control (QA/QC) of data retrieved from FlowWorks where realtime data for non-seasonal monitoring locations is saved;
- Compiling continuous and static groundwater and surface water level monitoring data for submission to the Region of Peel; and
- Compiling continuous surface water temperature data at monitoring locations in the Centerville Creek and Boyce's Creek.

Groundwater levels were manually measured using a water level tape. To reduce the risk of cross-contamination between monitoring wells, the probe of the water level meter was cleaned with a 1% solution of Alconox® detergent and rinsed with distilled water, prior to each use.

Between April and November 2025, WEL downloaded continuous groundwater and surface water levels from level loggers installed in the seasonal monitoring locations for the Caledon East municipal well field. Continuous groundwater level monitoring data at all permanent (non-seasonal) monitoring locations was downloaded online from FlowWorks throughout the

entirety of 2025. Continuous groundwater levels and surface water levels from seasonal monitoring locations equipped with level loggers continued to be downloaded in the field and the data was managed by WEL prior to submission to the Region of Peel.

Groundwater levels from the municipal wells were provided by the Region of Peel, including manual groundwater levels measured by Region of Peel operators and continuous operations data on the Caledon East municipal wells recorded by the Region of Peel supervisory control and data acquisition (SCADA) system. Operations data from Caledon East municipal wells supplied by the Region of Peel included daily total flow, and maximum, minimum and average groundwater levels.

2.2 Groundwater and Surface Water Level Trends

Table C-1, **Table C-2**, and **Table C-3** in **Appendix C** summarize the groundwater and surface water levels from the Caledon East wellfields during the monitoring period together with water levels that have been collected historically. Historical groundwater levels were obtained directly from the ORMGP. Water level hydrographs are also included in **Appendix C** to illustrate the seasonal variability and overall continuity of water levels beginning from January 2025 through to December 2025 within the Caledon East wellfield. After review of the water level monitoring data from 2025, the following conclusions are offered:

- When compared with flow data from the municipal pumping wells CE 3, CE 4, and CE 4A, it can be seen that the normal short-term pumping operation of the municipal wells does not result in significant drawdowns at the monitoring wells or drivepoint piezometers. Overall, the influence of the pumping wells on surrounding groundwater levels is most evident in monitoring wells screened closer to, and at similar depths as the pumping wells. For example, under short-term pumping, monitoring well CE TW6R-05D near CE 3 is influenced by CE 3, while monitoring well CE TW6R-05S is not to the same extent. Similarly, at CE 4 and CE 4A, monitoring well CE GSR-05D is influenced by pumping of CE 4 and CE 4A, while monitoring well CE GSR-05S shows no influence. Groundwater levels are shown to rebound quickly following a measured drawdown under normal pumping operations at all monitoring locations.
- Upward hydraulic gradients at many nested drivepoint pairs around CE 3 and CE 4 and CE 4A which were noted in 2023 and 2024 remain in 2025, including CE DP21-06S/DP21R-10D, CE DP4-08S/D, and CE DP9R-10S/D.
- The operations of CE 3, CE 4, and CE 4A had no discernable influence on the shallow groundwater system and surface water system.
- Groundwater levels at various monitoring wells and seasonal monitors were observed to experience lower groundwater elevations for the summer and fall of 2025 in comparison to the 2024 monitoring season due to the drought conditions experienced over the months of July to September 2025. Over that time, less than half of the historical seasonal precipitation was recorded for many areas of southwestern Ontario leading to a period of prolonged drought. These observations were more pronounced

for the monitoring wells in the CE 3 wellfield than in the CE 4 and CE 4A wellfield perhaps due to the unconfined or semi-confined to confined aquifer conditions, respectively, between the two wellfields. Notwithstanding, the lower water elevations were observed across both wellfields at all drivepoint piezometers. It is anticipated that groundwater levels will recover to seasonal normals in 2026 since drought conditions appear to have ended in 2025.

- Surface water temperatures recorded by data loggers instrumented in the Centerville Creek (staff gauges CE SGTW5-07, CE SG1-02, and CE SG21-07) showed similar temperature trends throughout 2025. A similar conclusion is made based on the monitoring data from Boyce's Creek (staff gauges CE SG9A-07US, CE SG9B-07DS, CE SG12-07, CE SG8-07, and CE SG4R-10). Overall, surface water temperature data from 2025 fluctuated within the same range as in 2025, with a slightly higher peak temperature observed at staff gauge CE SG12-07; showing no variability as a result of municipal well pumping. Surface water temperature plots are included in **Appendix C**.

Considering groundwater levels collected in 2025, there were minor differences from the groundwater level variability recorded in 2023 and 2024 around CE 3, CE 4, and CE 4A due to the drought conditions experienced over the summer and early fall months. However, as the drought conditions appear to have ended in 2025, there have been no unexpected changes in the groundwater and surface water levels within the municipal wellfield. Therefore, the current operations of the Caledon East municipal wells are sustainable at present. Finally, there was no significant variability in groundwater levels recorded around CE 6.

Included at the end of **Appendix C** are hydrographs illustrating static groundwater levels at CE 3, CE 4, and CE 4A over the previous 5 years. As evidenced in those hydrographs, static groundwater levels fluctuate within a normal range of variability and have been stable overall during this time. A discernable increase in groundwater levels is observed at CE 4 and CE 4A due to the change in usage of CE 4 and CE 4A at the end of 2023 and into 2024. Based on these monitoring results, there have been no significant changes in the groundwater resources available to CE 3, CE 4, and CE 4A. Barring any significant changes in pumping intensity at the municipal wells, similar trends are expected in 2026.

3 Water Quality Summary

3.1 Water Quality Sampling Methodology

The results of groundwater and surface water sampling completed in 2025 are provided in the summary tables of **Appendix D**. Within the tables of **Appendix D**, the sampling locations are identified along with a water quality parameter reference table organizing the analyses that occur within the Caledon East wellfield. In all, 10 groundwater monitoring locations and one surface water monitoring location were included in the water quality sampling program for 2025. In 2025, water quality sampling in the Caledon East wellfield was completed in April and May 2025. Additionally, PFAS compounds were sampled in February, August, and November 2025 at the following locations in the CE 3 wellfield: CE EW3-3S, CE EW3-3D, CE EW4-17S, and CE EW4-17D. It is understood that from year-to-year, water quality sampling alternates between the autumn and spring sampling events; therefore, in 2026, water quality monitoring should be completed in the fall monitoring period.

Where possible, groundwater quality samples were collected following an initial purging of at least 3 well volumes measured at the time of sampling. In cases where a significant volume of groundwater would require purging, confirmation of sufficient well purging was determined on a case-by-case basis using field parameters for temperature, pH and conductivity as recorded by a handheld multi-parameter probe. Groundwater quality samples were collected by either a manual inertial pump or hydrolift, using wattera tubing and footvalves, or a bailer where more appropriate. Field-filtered samples were collected for metals as well as for Organic Nitrogen, Chemical Oxygen Demand, and Total Kjeldahl Nitrogen, as needed. Field-filtered samples were passed first through a 0.45 micron field filter.

Surface water quality samples were collected in-stream by grab methodology whereby a clean sample bottle not containing preservative was dunked into a well mixed part of the stream and decanted into subsequent sampling bottles. Field-filtered samples were collected for metals only, using a handheld pump and an inline 0.45 micron field filter.

After collection, all samples were placed on ice within dedicated coolers for transport to the laboratory. All samples were submitted to Bureau Veritas Canada Inc. (BV Labs) in Mississauga, Ontario, for analysis on the same day that they were collected. The Certificates of Analysis (CoAs) and Chains of Custody (COCs) are included in **Appendix E**.

3.2 Groundwater and Surface Water Quality Trends

Analytical results were compared to the Aesthetic Objectives (AOs), Operational Guidelines (OGs), and Maximum Acceptable Concentrations (MACs) of the Ontario Drinking Water Standards (ODWS) Ontario Regulation 169/03. After review of the water quality results from 2025, the following conclusions are offered:

- No exceedances of any parameter with a reported ODWS MAC criteria were identified in the CE 3, CE 4 nor CE 4A wellfields; however, Nitrate concentrations were reported at above 50% of the MAC at monitoring well CE EW4-18S near CE 3. Within the CE 6 wellfield, only monitoring well CE OW6S exceeded the MAC for Nitrate, continuing a trend reported in 2023 and 2024. Nitrate concentrations are stable to trending downward based on review of raw groundwater quality at CE 3. At CE 4 and CE 4A, Nitrate concentrations have remained very low or non-detect year-over-year based on review of raw groundwater quality at CE 4 and CE 4A. Finally, a stable to decreasing trend of Nitrate is observed at monitoring well CE OW6S in the CE 6 wellfield;
- VOCs, BTEX, and PHCs were reported as non-detect at all locations where those parameters were sampled with the exception of low-level concentrations for chloroform at monitoring well CE EW4-17S in the CE 3 wellfield. As well, low level concentrations of select VOCs and Toluene were reported at monitoring well CE EW1-3 in the CE 4 and CE 4A wellfield. Similar results have been reported historically (WEL, 2025);
- PFAS were reported as non-detect at locations where those parameters were sampled, except for low-level detections for PFBA, PFPeA, PFHxA, and PFOA at monitoring well CE EW4-17S in the CE 3 wellfield. The sum of a subset 25 PFAS (Health Canada, 2024) compounds at monitoring well CE EW4-17S ranged between 14.1 ng/L and 20.8 ng/L compared to the Health Canada objective of 30 ng/L. There were also low-level detections of PFBS at monitoring well CE EW4-17S and monitoring well CE EW3-3D. Similar results have been reported historically at monitoring well CE EW4-17S in particular (WEL, 2025);
- PFAS were also sampled for the first time at monitoring well CE EW3-3S in 2025. The sum of a subset 25 PFAS (Health Canada, 2024) compounds at monitoring well CE EW3-3S ranged between 16.5 ng/L and 22.3 ng/L compared to the Health Canada objective of 30 ng/L. Being that it is the first year of PFAS sampling at CE EW3-3S, changing trends should be assessed after sampling in the 2026 monitoring year; and
- Concentrations for Chloride and Sodium were at or below the ODWS AOs of 250 mg/L and 200 mg/L, respectively, at all locations sampled in 2025, except for monitoring well CE EW4-17S exceeding the chloride AO and sodium AO. It was noted that concentrations of Chloride and Sodium at the deep monitoring locations were generally lower than in shallow monitoring locations, except for monitoring well CE EW3-3D.

Historical time-concentration plots of the parameters Nitrate, Chloride, and Sodium supplemented with results of sampling from 2025 are provided in **Appendix D**. Historical water quality information was obtained directly from the ORMGP.

Based on the time-concentration plots, the concentration of Nitrate at the monitored locations have been low, if not non-detect, and stable over the previous 10 years at monitoring locations around CE 4/4A. This is to be expected considering the confined nature of the aquifer supplying those municipal wells and the locations of even the shallow wells being surrounded by predominantly estate residential. By comparison, Nitrate concentrations at monitoring locations at CE 3 were slightly elevated. For monitoring well CE EW4-17S, a slightly downward

trend overall is observed for the water quality data in the previous 10 years, while also remaining below the MAC over that time. Considering the limited historical dataset for the CE 6 wellfield, Nitrate concentrations remain stable above the MAC at monitoring well CE OW6S.

Recognizing that PFAS may have origin from any number of commercial/industrial operations, detection of select PFAS parameters at monitoring well CE EW4-17S may be related to historical operations and surface runoff from the Caledon Fire Station and Region of Peel Paramedic Services building which are upgradient of this well location. It must be stated the Health Canada objective of 30 ng/L for the sum of a subset of 25 PFAS compounds (Health Canada, 2024) was not exceeded, and review of raw groundwater sampling for PFAS at CE 3 has reported majority non-detect concentrations since 2020, with low level detections for PFBS and PFBA in 2025. No PFAS sampling was completed at the monitoring wells in the CE 4, CE 4A nor CE 6 wellfields in 2025.

When assessing concentrations for Chloride and Sodium, concentrations were within the established stable to declining trends that can be observed in historical water quality data. Two exceptions to this are Chloride and Sodium concentrations in monitoring well CE EW4-17S which were observed to spike in 2024. For monitoring well CE EW4-17S, both Chloride and Sodium concentrations historically tend to be high, with occasional lows, as observed in 2023. Being that CE EW4-17S is located downgradient and tributary to runoff from the parking lot area of the Caledon Fire Station and Region of Peel Paramedic Services building, fluctuating concentrations in Chloride may be expected due to winter salting operations from one year to the next. This trend was observed to continue based on the monitoring completed in 2025.

4 Conclusions and Recommendations

4.1 Conclusions

Using the water level and water quality monitoring data collected over the 2025 monitoring period, and considering the results historical water level and water quality monitoring, the following conclusions in regard to the operations of Caledon East municipal wells are offered:

- Groundwater and surface water elevations historically and in 2025 continue to display similar seasonal trends, with the exception of a number of locations observed to be influenced by temporary drought conditions in the summer and fall of 2025. Those drought conditions appear to have ended in 2025; therefore, more regular seasonal observations are anticipated in 2026;
- When compared with flow data from the municipal pumping wells CE 3, CE 4, and CE 4A, the normal short-term pumping operation of the municipal wells does not result in significant drawdowns at the monitoring wells nor drivepoint piezometers. Groundwater levels are shown to rebound quickly following a measured drawdown under normal pumping operations at all monitoring locations. CE 6 was not commissioned for water takings in 2025, and no significant variability in groundwater levels around CE 6 were observed;
- In 2025, the concentration of Nitrate at monitoring well CE OW6S in the CE 6 wellfield was reported above the MAC. Concentrations were similar to results reported in 2023 and 2024. There were no other water quality parameters that exceeded the ODWS MAC at the monitoring locations that were sampled within the CE 3, CE 4, and CE 4A, nor CE 6. It is noted that Nitrate concentrations at monitoring well CE EW4-17S in the CE 3 wellfield continue to be reported at greater than 50% of the MAC while maintaining a slightly downward trend in concentrations year-over-year; and
- Recognizing that PFAS may have origin from any number of commercial and industrial operations, detection of select PFAS parameters at monitoring well CE EW4-17S may be related to historical operations and surface runoff from the Caledon Fire Station and Region of Peel Paramedic Services building which are upgradient of this well location. Those land uses may also be contributing to PFAS encountered at CE EW3-3S. It must be stated the Health Canada objective of 30 ng/L for the sum of a subset of 25 PFAS compounds (Health Canada, 2024) was not exceeded, and review of raw groundwater sampling for PFAS at CE 3 has reported majority non-detect concentrations since 2020, with only low level detections for PFBS and PFBA reported in 2025.

4.2 Recommendations

Based on these conclusions, the following recommendations are offered for the 2026 monitoring year:

- Continue the current groundwater and surface water level monitoring program and assess the monitoring data in context of historical monitoring results for trends that may indicate irregular influences from the pumping wells; and
- Continue the current water quality sampling program to monitor for any changes in water quality at surrounding wells, and to continue reporting on the recorded concentrations of Nitrate in the CE 6 wellfield, and the detections of PFAS compounds in the CE 3 wellfield.

5 Signatures

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Revision History

Rev	Date	Description	Prepared by	Approved by
--	2026-02-17	Initial Draft submission for review	Victor Marcucci	Ian Gardiner
00	2026-02-26	Report Submission	Victor Marcucci	Ian Gardiner

This report was prepared using scientific principals and professional judgement in the assessment of the available facts and information. The interpretations within this report are based on the limits of the existing information, budgeted scope of work and schedule. The information presented in this document is not to be construed as legal advice.

Watermark Environmental Ltd. relied on information from the Region of Peel, independent sources, and other historical documentation as referenced in this report. The accuracy and completeness of third-party sources was not verified. It is noted that the regulatory guidelines, standards and related documents as they are referenced in this report are subject to interpretation and may change over time.

This report was prepared for the exclusive use of the Region of Peel and the Ministry of the Environment, Conservation and Parks. Any use which a third party makes of this report, or reliance of decisions based on it, are the responsibility of such third parties. Watermark Environmental Ltd. accepts no responsibility for damages, if it were to occur, suffered by any third party as a result of decisions made or actions taken based on this report.

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Figures

Appendix A

Caledon East Municipal Wells PTTW P-300-2095321129

Appendix B

Monitoring Network Summary Tables

Appendix C

Groundwater and Surface Water Levels

Appendix D

Groundwater and Surface Water Quality Results

Appendix E

Groundwater and Surface Water Quality Certificates of Analysis