REGIONAL MUNICIPALITY OF HALTON

CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE

2022 ANNUAL MONITORING REPORT

MARCH 30, 2023



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REGIONAL MUNICIPALITY OF HALTON

PROJECT NO.: 181-30000-00-100-1005
DATE: MARCH 30, 2023

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March 30, 2023

REGIONAL MUNICIPALITY OF HALTON
Public Works
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Attention: Mr. Andy De Jong, Landfill Technologist

Dear Mr. De Jong:

Subject: Closed Burlington North Service Road Landfill Site
2022 Annual Monitoring Report

We are pleased to provide the 2022 Annual Monitoring Report for the Closed Burlington North Service Road Landfill Site. This report is submitted as part of Condition 6 of the Certificate of Approval A210102 for the landfill site. This hydrogeological report presents an assessment of the effects of the landfill site on local groundwater and surface water. Comments provided by the Region have been incorporated into the report.

The 2022 monitoring program was completed in accordance with the program described in the *2021 Annual Monitoring Report*, prepared by WSP. The 2022 report combines historical data collected during previous monitoring programs with the data collected in 2022. Findings are summarized in the conclusions and recommendations section, and technical information is appended.

Thank you for the opportunity to work on this study. If there are any questions, please contact us.

Yours truly,

Leigh Davis

Leigh Davis, M.A.Sc., P.Eng.
Project Engineer, Earth & Environmental

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EXECUTIVE SUMMARY

The Closed Burlington North Service Road Landfill Site (Site) is located on the north side of the North Service Road and west of King Road. The licensed area that contains waste is approximately 34.5 ha. The landfill received waste between 1971 and December 1988, when it was closed. A monitoring program with annual reporting has been in place since 1980 under Provisional Certificate of Approval A210102.

There is a toe-drain leachate collection system around the western, eastern, and southern extents of the landfill to intercept the shallow egress of leachate along the periphery of the refuse. The northern extent of the landfill has an underdrain leachate collection system to control off-site leachate migration and to reduce landfill effects on the local groundwater and surface water. The underdrain and toe drain collectors continue to collect leachate as designed, and the volume of leachate collected in 2022 was similar to the volume collected in 2021. There continues to be minimal leachate mounding in the northern under-drained portion of the refuse. Within the southern portion of the refuse, the mounding is approximately 7 m above the base of the refuse, which has remained generally stable since 2012.

The leachate chemical characteristics have varied over time, but concentrations are generally decreasing over the long term for the diagnostic parameters. Organic parameter concentrations in 2022 were also lower than values detected in the past but continue to fluctuate. The 2022 leachate quality complies with Halton Region's Sewer Use By-Law No. 2-03, with the exception of TKN, phosphorus, BOD, iron, zinc and total suspended solids (TSS). Exceedances for TKN and BOD have historically occurred at the Site, but the exceedances for iron, zinc, phosphorus, BOD, and TSS have more frequently been observed since 2017. The elevated concentrations for iron and phosphorus are likely associated with the elevated suspended solids within the samples, compared to previous sampling events. The general increase in suspended solids since 2017 may be attributed to the cover enhancement activities that took place at the Site between 2017 and 2019, but continued monitoring is required to assess the potential long-term trend.

Regional groundwater flows in a southerly direction from higher elevations near the Escarpment toward the Hamilton Harbour portion of Lake Ontario. Local shallow groundwater flow is influenced primarily by local terrain with flow toward the local watercourses. Local groundwater quality in the overburden and bedrock is naturally poor with some parameters exceeding the Ontario Drinking Water Quality Standards (ODWQS, MECP 2006 and updates). There are no known groundwater users adjacent to the Site.

Landfill influences on groundwater quality are typically limited to areas immediately adjacent to and downgradient of the refuse. Groundwater quality at property boundary monitors between the waste fill and adjacent quarry, particularly in the northeastern portion of the Site, indicates a leachate influence. Monitors located on the Site property south and southwest of the refuse indicate that groundwater quality at the Site is marginally influenced by landfill leachate. Most inorganic parameter concentrations at the southern property boundary exceeded the Ministry of the Environment, Conservation and Parks (MECP) Guideline B-7 criteria for reasonable use in 2022; however, the concentrations were generally comparable to the background conditions. Guideline B-7 criteria and ODWQS guidelines were exceeded for many inorganic parameters at a majority of the groundwater monitors along the Site property boundary; however, these exceedances were also generally comparable to background conditions. Organic parameters also exceeded the Guideline B-7 criteria within on-site and property boundary monitors, including 1,4-dichlorobenzene, benzene, and vinyl chloride. These compounds were not

detected above the laboratory reported detection limit at the background well nest in 2022 and are inferred to be an indicator of landfill influence.

The groundwater chemical results from the Meridian Brick (formerly Hanson Brick and Forterra Brick) property indicate there is a landfill influence on groundwater quality immediately adjacent to the landfill along the west side of the Meridian Brick property. Meridian Brick quarrying activities do not appear to have adversely altered the groundwater regime on the landfill property, but continued monitoring is recommended for the assessment of potential landfill influences and to provide input to possible remedial measures, if required.

The Region of Halton and Meridian Brick, along with their respective environmental consulting firms, continue to meet on an annual basis and correspond with each other to review and compare monitoring results. To date, no adverse impacts have been detected and Meridian Brick has not expressed concerns with landfill influenced groundwater that may have migrated onto their property, or any other issues related to the Site. Meridian Brick is obligated to take remedial actions should contamination on their property become an issue.

No leachate influences on surface water quality were observed in Falcon Creek adjacent to, and downgradient of, the refuse. Historically, within the Indian Creek watershed east of the Site, downstream surface water quality has been similar to the upstream water quality along Falcon Creek and therefore, there has been no apparent landfill influence on the water quality within the Indian Creek tributary. Elevated chloride concentrations detected further downstream of the Site in the Indian Creek tributary are not landfill related.

Combustible gas (methane) is produced within the refuse and concentrations in some of the monitors immediately adjacent to the eastern boundary of the landfill, on the Meridian Brick property, periodically exceed the lower explosive limit for methane. It is recommended that the current standard operating practices should be continued within the eastern portion of the landfill, near the Meridian Brick borehole locations MW6 to MW11, to ensure that the methane does not pose a potential hazard to any activities. A sentinel gas monitoring network is currently in place on the Meridian Brick property in the area of the brick plant. No significant concentrations of combustible gas have been detected within the sentinel monitors, and no combustible gas has been detected within the Brick Plant. To date, Meridian Brick has expressed no concerns regarding landfill gas migration onto its property.

The 2022 Monitoring Program for the Site should be continued into 2023 for the established groundwater, surface water, and gas monitoring network at the established frequency. Water level and chemistry data obtained from the groundwater monitors and surface water stations within the adjacent Meridian Brick property should continue to be incorporated into any future monitoring reports prepared as part of the routine monitoring program, and the effect from operations at the Meridian Brick property should continue to be assessed with respect to the Site.

SIGNATURES

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The conclusions presented in this report are based on work performed by trained, professional and technical staff, in accordance with their reasonable interpretation of current and accepted engineering and scientific practices at the time the work was performed.

The content and opinions contained in the present report are based on the observations and/or information available to WSP at the time of preparation, using investigation techniques and engineering analysis methods consistent with those ordinarily exercised by WSP and other engineering/scientific practitioners working under similar conditions, and subject to the same time, financial and physical constraints applicable to this project.

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This limitations statement is considered an integral part of this report.

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1 INTRODUCTION

1.1 BACKGROUND

1.1.1 Site Setting

The Closed Burlington North Service Road Landfill Site (Site) is located on the north side of the North Service Road and west of King Road (**Figure 1-1**). The legal description is Part of Lot 4, Concession 2, City of Burlington.

The landfill received waste between 1971 and December 1988, when it was closed. A monitoring program has been in place since 1980 under Provisional Certificate of Approval A210102. Results are reported annually. The licensed area containing waste is approximately 34.5 ha.

1.1.2 Background Monitoring Nest

A background monitoring nest, designated OW5, was installed during 2003, north of the adjacent Closed Bayview Park Landfill Site, and east of the Closed Burlington North Service Road Landfill Site. This nest is installed on the west side of King Road, as shown on **Figure 1-2**. This monitoring nest serves as a background monitoring location for the Closed Bayview Park Landfill Site to determine the natural groundwater characteristics within the Queenston Shale. This monitoring nest is also used for comparison purposes in the assessment of potential downgradient influences from the Site.

1.1.3 Site Activity

Historical Site Activity

As shown on **Figure 1-2**, a toe-drain leachate collection system was installed around the western, eastern and southern extents of the landfill to intercept the shallow egress of leachate along the periphery. The northern extent of the landfill has an underdrain leachate collection system to control off-site leachate migration and to reduce landfill effects on the local groundwater and surface water. Collected leachate is discharged to the Regional sanitary sewer system.

In January 2003, the initial flow meter for the leachate collection system was determined to be inaccurate and was subsequently disconnected. As a result, the leachate volumes measured in 2001 and 2002 are considered to be suspect. The flow meter was connected to a SCADA remote monitoring system in March 2004. Flow monitoring equipment is being inspected and calibrated on an annual basis, or more frequently if necessary.

Recent Site Activity

A landfill cover assessment was completed in June 2010, which identified areas where deficiencies, such as thin cover or settled areas, were present. The Region has imported soil, when available, to improve the identified areas of the landfill cover. During 2014 and 2015, clayey silt material was imported and placed on the southern and northwest slopes of the refuse area to improve surface water runoff, reduce infiltration into the underlying refuse and increase the thickness of the cover. The Region continued to import additional soil for cover enhancement between 2017 and 2019, focusing on the southern portion of the refuse area**.**

The groundwater monitoring network was enhanced in 2016 with the decommissioning and replacement of damaged or blocked monitors, including borehole locations 18, 21, 22, and 25. Monitor 38-I was unblocked and rehabilitated, although it appears to have become blocked again.

A site inspection was completed by the MECP in 2017 and no issues were identified.

Site maintenance activities, such as road repairs, culvert replacements, flow meter calibration, LCS flushing, etc., are evaluated regularly and completed on an as-needed basis.

1.2 OBJECTIVES AND SCOPE

The principal objectives of the 2022 annual monitoring program were as follows:

- To assess the effects of the closed landfill site on local groundwater and surface water resources.
- To evaluate the potential for the off-site movement of combustible gas from the landfill.
- To assess the effectiveness of the leachate collection system.
- To assess the compliance of the leachate with water quality objectives in Halton Region Sewer Use By-Law No. 2-03.
- To assess the need for remedial measures.
- To make recommendations for the 2023 monitoring program.

The 2022 monitoring program involved a data collection component and a comprehensive analysis and interpretation component.

1.3 METHODOLOGY

The 2022 monitoring program for the Site was comprised of several major tasks, which are detailed in **Sections 1.3.1 to 1.3.5** and **Table 1-1**. The tasks completed as part of the program are as follows:

- Leachate monitoring for levels, quantity, and chemistry.
- Groundwater monitoring for water levels and chemistry.
- Surface water monitoring for flow rates and chemistry.
- Combustible gas monitoring.
- Review of Meridian Brick (formerly Hanson Brick and Forterra Brick) annual monitoring results.
- Interpretation and reporting.

A quality assurance and quality control (QA/QC) program was followed for each of the monitoring tasks carried out by WSP Canada Inc. (WSP). The program consisted of protocols and procedures for the purging of monitors and the collection of groundwater, surface water, and leachate samples.

1.3.1 Leachate Monitoring

Leachate monitoring is completed four times per year and involves the collection of a sample from Maintenance Hole 23, along the leachate collection system. The sampling was completed on the following dates in 2022:

- April 27

- June 22
- September 6
- December 12

Samples were analysed in the field for pH, conductivity and temperature, and were submitted to Bureau Veritas for analysis of inorganics, volatile organic compounds (VOCs), and metal parameters.

Leachate samples were also obtained from leachate monitors 25-I, 37-I, and 39-I in September 2022. Leachate monitor 36-I was not sampled in 2022 due to an insufficient volume in the well at the time of sampling.

1.3.2 Groundwater Monitoring

Groundwater monitor details are provided in **Table A-1**, **Appendix A**. The measurement of groundwater levels at the monitoring locations was completed in conjunction with the annual groundwater sampling event in September 2022. Prior to sampling, monitors were purged of at least three volumes of standing water, or were purged dry, using the dedicated Waterra tubing and check-valves. Sampling was completed in accordance with established sampling protocols for the Site.

Samples for chemical analysis were collected directly into bottles provided by the laboratory. The samples were submitted to Bureau Veritas for appropriate filtering and analysis of inorganics, VOCs, and metal parameters. Water samples were analysed in the field for pH, conductivity, and temperature.

Monitor 31-I was not sampled in 2022 due to an insufficient volume of water within the monitoring well at the time of sampling while monitor 38-I was not sampled in 2022 due to a blockage in the riser pipe. It is noted that monitoring locations 14 and 23, and monitor 32-III were sampled in December 2022 due to health and safety concerns associated with wasps nests within the monitoring well casings.

Water level data from the groundwater monitors located on the Meridian Brick property are also included in this report. The borehole designations for these monitors are MW6 to MW12. The individual monitors at these borehole locations are designated by a letter that indicates the relative installation depth at that location. For example, MW6A is the deep monitor and MW6B is the shallow monitor at the borehole location MW6.

1.3.3 Surface Water Monitoring

Surface water sampling is completed four times per year. The collection of surface water samples was attempted at stations SW1A to SW3, SW5, SW10 to SW14, and SW16 on the same dates as the leachate sampling, when there was sufficient stream flow. Samples were obtained by submerging the laboratory prepared sample bottles beneath the water surface, pointing upstream. The collected samples were unfiltered. Water samples were analysed in the field for pH, conductivity, and temperature for each sampling event. The samples were then submitted to Bureau Veritas for analysis of inorganic and metal parameters, and phenolics.

Surface water flows were estimated from velocity measurements and stream cross-section profiles at each monitoring station, where possible, for each sampling event.

The following stations were reported as dry during the sampling events in 2022:

- June: SW5, SW11, SW12, and SW16
- September: All stations except SW1A and SW2

- December: SW5, SW10, SW11 and SW16

The remaining surface water stations had sufficient volume for sampling during the sampling events in 2022.

1.3.4 Gas Monitoring

Combustible gas measurements were obtained at the monitors listed on **Table 1-1** on February 27 and September 6, 2022.

1.3.5 Interpretation and Reporting

Following collation of the landfill database, detailed analysis and interpretation of the data were completed. This component included the following items:

- Groundwater flow system mapping
- Preparation of hydrographs
- Preparation of time concentration graphs
- Statistical assessment
- Interpretation of long-term and short-term groundwater and surface water quality patterns and trends
- Compliance with the Sewer Use By-law
- Consideration of future monitoring

Results of the 2022 monitoring program, along with conclusions and recommendations, are presented in this report.

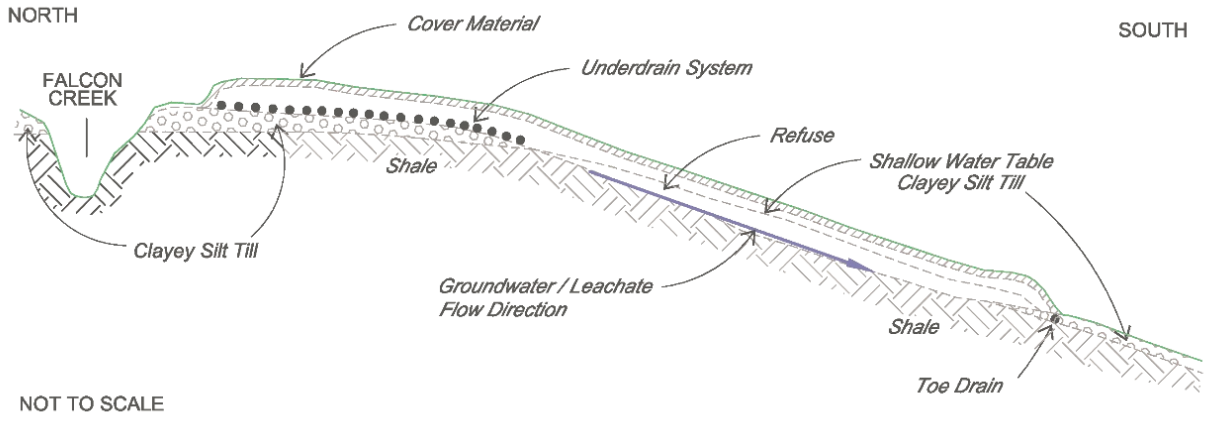
2 PHYSICAL SETTING

2.1 LOCAL GEOLOGY

Descriptions of geological and hydrogeological conditions at the Site were previously reported by Gartner Lee Limited and Henderson Paddon Environmental Inc.

The landfill is situated below the Niagara Escarpment on sloping terrain, which is characterized by deep gullies and ravines. The Site is located between Falcon Creek on the north and west sides and Indian Creek on the east side. The northern part of the Site is underlain by dense clayey silt till which directly overlies shale bedrock of the Queenston Formation. The till is generally absent in the southern portion of the Site where refuse lies directly on the bedrock. Local geological conditions are shown in the schematic cross section, below.

SCHEMATIC CROSS SECTION



2.2 GROUNDWATER FLOW SYSTEMS

Based on topographic maps and previous reports, it is concluded that regional shallow groundwater flow is toward local gullies and ravines, and to Falcon and Indian Creeks. Local groundwater divides for shallow groundwater flow systems are considered to follow surface watershed boundaries. Deeper groundwater flow is southward, toward the Hamilton Harbour portion of Lake Ontario. There are predominantly downward hydraulic gradients within the upper portion of the shale bedrock and between the overburden and bedrock. Periodic upward hydraulic gradients occur within the northern portion of the Site at Monitor Locations 18, 22, and 23.

There are no known groundwater users in the local vicinity which could be affected by potential landfill influenced groundwater.

The historical groundwater elevations for on-site monitors are presented in **Table A-2**, **Appendix A**. Water level hydrographs for individual monitors are shown in **Figures A-1 to A-18**, **Appendix A**. The water levels in 2022 were generally within the historical range, with the exception of Monitors 21-IIR (**Figure A-5**) and 29-I (**Figure A-13**) where the water levels were about 0.1 m above their respective historical ranges. Conversely, the water levels at Monitors 23-I and 23-III (**Figure A-7**) and 28-I (**Figure A-12**) were marginally below their respective historical range. Overall, most monitor locations showed a slight decrease in water levels in 2022 compared to 2021. Long term trends are as follows:

- The leachate levels within Monitor 25-I (**Figure A-9**) decreased between 1987 and 1993 but remained relatively stable between 1993 and 2006. A noticeable increase was observed between 2006 and 2011, and levels have remained at the higher range since that time.
- Water levels have generally remained stable over the long term at Monitor Locations 14 (**Figure A-1**), 15 (**Figure A-2**), 26 (**Figure A-10**), 27 (**Figure A-11**), 30 and 31 (**Figure A-13**), 32 (**Figure A-14**), and 34 (**Figure A-16**), although there have been slight variations which are attributed to climatic conditions.

- Water levels within Monitors 16-II and 16-III (**Figure A-3**) exhibited a noticeable decrease in 2020 but in 2021 had recovered to levels similar to those observed in 2019. Although the 2020 levels within these two monitors were at the low end of the historical range, it is not yet known if the levels for 2020 were anomalous. Continued monitoring over the short term will confirm if a trend change has occurred within these monitors.
- Water levels have generally remained stable over the long term at Monitor Location 35 (**Figure A-17**). There is a gap in the water level data for Monitor 35-I, between 2004 and 2010, due to the monitor being damaged in an automobile collision. Water levels at 35-IR have decreased since 2013.
- Water levels within Monitors 33-I (**Figure A-15**) and 38-I (**Figure A-16**) have exhibited a slight decreasing trend since 2009. There was a notable spike in the water level in 2021 at Monitor 33-I however the 2022 water level returned to the recent historical range.
- Water levels at Monitor Locations 18 (**Figure A-4**), 22 (**Figure A-6**), and 23 (**Figure A-7**) have generally fluctuated within a defined range over the long term with no distinguishable trend. The fluctuations are typically associated with climatic conditions at the time of monitoring. These monitors are located in the northern portion of the Site. As previously noted, historical low water levels were observed at monitors 23-I and 23-III in 2022.
- Leachate levels at Monitor 37-I (**Figure A-18**) increased significantly between 2002 and 2012 and have continued a slight increasing trend since that time.
- Water levels within Monitor 29-I (**Figure A-13**) have generally fluctuated within a 4-metre range over the long term with no distinguishable trend. Water level elevations notably spiked to elevated levels in 2008, 2014 and 2021. However, each time the water levels have subsequently returned to the historical range.
- The water levels at Monitor Location 21 (**Figure A-5**), located adjacent to the northern limit of the refuse, have been generally stable over the long term. However, levels within Monitor 21-II exhibited a decreasing trend between 2008 and 2016 followed by an increasing trend through to the end of 2022.
- Water levels have generally remained stable over the long term at Monitor Location 24 (**Figure A-8**). There was a significant decrease at Monitor 24-II in 2020, but the water level has recovered to be within the historical range. The 2020 water level is considered anomalous but continued monitoring over the short term will confirm if a trend change has occurred within this monitor.
- Water levels within Monitor 28-I (**Figure A-12**), located along the eastern property boundary, between the refuse and the Meridian Brick property, decreased between 1997 and 2002, and fluctuated slightly at the lower level until 2010. A second notable decrease occurred between 2010 and 2012, with levels remaining at the lower levels since that time. A third notable decrease occurred in 2022. It is inferred that the historical decreases are due to excavation activities on the Meridian Brick property.

The historical groundwater elevations for the Meridian Brick monitors are presented in **Table A-3**, **Appendix A**, and the water level hydrographs are shown in **Figures A-19 to A-22**, **Appendix A**. The water levels in 2022 were similar to recent historical levels, with the exception of Monitors 5 (**Figure A-19**) and 11 (**Figure A-22**) which were below their respective historical ranges in November 2022. Over the long term, water levels within the Meridian Brick monitors have been generally stable, with climatic and seasonal fluctuations, with the exception of the following.

- Historical water levels within Monitor 5 (**Figure A-19**) have generally fluctuated within a 3 m range over the long term. As previously noted, a historical low water level was observed at Monitor 5 in November 2022. This monitor is located within the northwestern portion of the Phase III quarry area.
- Water levels within Monitor 7A (**Figure A-20**) noticeably decreased in 2009 compared to the historical range, but have since returned to be within the historical range established prior to 2009. The water levels in Monitor 7B generally increased between 2013 and early 2016 but have exhibited a larger fluctuating range since that time. Water levels within Monitor 7B have generally fluctuated on a seasonal basis, with levels being generally higher during the spring/summer monitoring events and lower during the fall/winter monitoring events. These monitors are located within the northwest corner of the Phase III quarry area.
- Water levels within Monitor 10B (**Figure A-21**) decreased approximately 3 m between 2003 and 2004 but have remained generally stable since that time. Water levels within Monitor 10A decreased approximately 9 m between 2002 and 2004, were relatively stable until 2009, increased until early 2016, and decreased through 2016. The water levels within Monitor 10A have since remained stable at the lower levels measured since 2016. These monitors are located along the west side of the Phase I excavation area of the Meridian Brick property.
- Water levels within Monitor 12B (**Figure A-22**) have been generally stable over the long term but increased significantly in April 2009 and have remained at the higher levels since that time. Water levels in Monitor 12A remained relatively stable between 2000 and 2004, then gradually decreased through 2009 and have remained relatively stable since that time. The lower groundwater elevations at these monitors, compared to the other Monitor locations, is inferred to be the result of quarry excavation activities, as they are located to the west of the brick plant and the brick storage yard.

An interpretation of shallow groundwater flow directions is presented in **Figure 2-1**. The water elevations within the figure are based on the September and November 2022 water level data for the landfill monitors and the Meridian Brick monitors, respectively. Groundwater elevations used in the interpretation were obtained from the shallowest monitor at each monitor location. The flow pattern indicates a southerly flow direction within, and south of, the refuse. There are also lateral flow components toward the ravines to the north, and west, along with an easterly flow component toward the Phase I Meridian Brick excavation. This flow pattern is consistent with historical interpretations.

Based on the current groundwater elevations within the shallow flow system, the horizontal gradient of the flow component from the refuse area toward the Meridian Brick property is approximately 0.25 m/m, assuming an interpreted decrease from 160 mASL to 155 mASL, over a distance of 20 m in the area of MW7 and MW8.

Information provided to the Region by Meridian Brick has confirmed that excavation activities along the western extent of the Meridian Brick property are complete and current excavation has advanced to the northern extent of the property. Additionally, rehabilitation activities along the western extent of the quarry property adjacent to the landfill property have been completed. As such, no further changes in groundwater levels due to the excavation are expected. A formal agreement is in place between the Region of Halton and Meridian Brick, whereby Meridian Brick is responsible for the implementation of remedial measures if the Meridian Brick site activities contribute to an adverse influence on the local groundwater or surface water regime from the Site.

Based on the groundwater level hydrographs, downward hydraulic gradients exist between nested monitors at most monitoring locations. Exceptions occur at Monitor Locations 18 (**Figure A-4**), 22 (**Figure A-6**), and 23 (**Figure A-7**), where large fluctuations in the long-term water levels are noted. It is

interpreted that during periods in which the groundwater table intersects the base of the adjacent streams, the surface water channels function as discharge areas for the groundwater.

2.3 SURFACE WATER FLOW SYSTEM

The Site is located within the Falcon Creek and Indian Creek Watersheds. Both of these watersheds drain to the Hamilton Harbour portion of Lake Ontario. A tributary of Falcon Creek is present along portions of the northern, western, and southern Site boundaries. As shown in **Figure 1-2**, surface water monitoring stations are established along the watercourses which drain the Site.

Within the Falcon Creek Watershed, stations SW1A (upstream of the landfill), SW2, SW15, SW3, and SW14 are located along Falcon Creek, and stations SW11, SW12, and SW13 are located along tributaries of Falcon Creek, to the south of the Site. Within the Indian Creek Watershed, station SW16 is located in a ditch along the east side of the Site, which drains to a storm sewer located on the Meridian Brick property boundary. This storm sewer then discharges to a surface water drainage channel near SW10. This drainage channel discharges to a series of stormwater management ponds just north of the North Service Road, which also accept runoff / discharge from the Meridian Brick shale quarry. Station SW5 is located along a ditch just north of the North Service Road, prior to discharge into the series of stormwater management ponds. This configuration is shown in **Figure 1-2**. The stormwater management ponds discharge to a tributary of Indian Creek.

Surface water was monitored for flow rate and quality in April, June, September, and December in conjunction with the leachate sampling events. As indicated in **Section 1.3.3**, several stations were reported as dry during the sampling events. The number of dry surface water stations during the sampling events in 2022 is comparable to the number of dry stations in recent years. Stream flow rate estimates are presented in **Table D-1**, **Appendix D**.

2.4 WATER BUDGET

2.4.1 Precipitation

Water budgets since 1987 have been calculated by applying the Thornthwaite Analytical Method (1957) to climatic data obtained for various climatological stations. As stations have ceased operation over time, data from alternate stations have been incorporated into the water budget calculation. The data for the water budgets have been obtained from the following stations:

- 1987-2004: Millgrove Climatological Station
- 2005-2018: Hamilton Royal Botanical Gardens
- 2019-2022: Hamilton Airport

The 30-year normals for the original Hamilton Royal Botanical Gardens (RBG) station, the Millgrove station, and Hamilton Airport are presented in **Tables E-1, E-2, and E-3**, respectively. As shown in these tables, the temperature and precipitation values are comparable between the three stations, with the Millgrove and Airport stations having an average temperature of one degree lower. Total precipitation ranges from a low of 893 mm/year at the RBG station to a high of 973 mm/year at the Millgrove station. It is noted that the RBG station is situated below the escarpment along the shore of Cootes Paradise, whereas the Millgrove and Hamilton Airport stations are situated above the escarpment further from the Site. A summary of the historical water budgets is shown in **Table E-4**, and the detailed water budget for 2022 is presented in **Table E-5**, **Appendix E**.

As shown in **Table 2-1**, the total precipitation in 2022 was 32% lower than in 2021 and significantly lower than the 30-year normal for the Hamilton Airport Station. This is likely the cause of the historical low water level elevations noted previously.

2.4.2 Leachate Quantities

The annual volumes of leachate removed from the Site between 1987 and 2022 are presented in **Table 2-1**. It is noted that annual quantities prior to 1989 are based on less than 12 months of monitoring. The leachate volume removed in 2022 was 3% higher compared to the volume removed in 2021. For a refuse area of 34.5 ha, the leachate removed in 2022 would be equivalent to about 27% of the annual precipitation. From **Table 2-1**, the percentage of leachate collected, compared to total precipitation, has historically ranged between 10% and 32%; therefore, the 2022 equivalent of 27% is within the historical range.

The historical leachate volumes collected, which are presented graphically in **Figure 2-2**, indicate an increase in the percentage of leachate collected between 1997 and 2000, a decrease between 2000 and 2003, an increase between 2003 and 2008, and a gradual decrease up to 2020. A gradual increase in the percentage of leachate collected has been observed since 2020. The fluctuations are attributed to climatic conditions although the gradual decreasing trend since 2018 may be attributed to the landfill cover enhancement activities that have occurred at the Site during the past few years. The effectiveness of the landfill cover enhancements can only be confirmed with a continued review of annual leachate volumes and climate data in the future. The averaging of the annual percentages accounts for snow that is received over the winter months. The annual water budgets may record a large precipitation amount during the latter part of a given year, but the effect of the infiltration from this precipitation would not appear until the early part of the following year. Averaging of the annual percentage negates the time lag between when the precipitation is received, when it infiltrates into the soils and refuse, and when it is collected.

3 WATER QUALITY

3.1 QUALITY ASSURANCE/QUALITY CONTROL

Water sampling events carried out for the 2022 monitoring program followed field sampling protocols established for the Site. Included in the protocols is a QA/QC program which uses blind duplicate samples. A list of field-prepared blind duplicate samples prepared during the 2022 monitoring program is summarized in the following table.

Sampling Task	Sampling Event	Original Sample ID	Duplicate Sample ID
Groundwater	September	16-I	GW Dupe 2
	September	21-IR	GW Dupe 3
	September	26-I	GW Dupe 5
	September	32-I	GW Dupe 1
	September	35-I	GW Dupe 4

Surface Water	April	SW1A	SW DUP
	June	SW1A	SW DUP
	September	SW2	SW DUP
	December	SW1A	SW DUP

Results of statistical comparisons between the original and field duplicate samples are provided in **Table C-4**, **Appendix C**. Relative Percent Differences (RPD) were calculated to compare the parameter results from both samples, with a value of less than or equal to 20% considered as an acceptable level for concentrations which are at least five times greater than the Reportable Detection Limit (RDL). In cases where the result is less than or equal to five times the RDL, a difference greater than two times the RDL was considered unacceptable.

The comparisons of groundwater duplicate samples were generally within the acceptable range of statistical comparison with the exception of phenols at Monitor 16-I; nitrite and potassium at Monitor 21-IR; and ammonia, BOD, hardness, nitrite, potassium, and Total Kjeldahl Nitrogen (TKN) at Monitor 32-I. The concentrations of the above noted parameters within the original sample and duplicate samples at Monitors 21-IR and 32-I were all within their respective historical ranges. The original and duplicate phenols concentrations at Monitor 16-I, however, were elevated above the historical range. As such, this result should be interpreted with caution. Further monitoring will determine if this result is anomalous.

Surface water duplicate comparisons were also generally within the acceptable range. The exceptions were the concentrations of phosphorus and TSS in June at SW1A. These variances within the surface water samples are attributed to variable sediment content within the collected samples. Overall, based on the results of the statistical comparisons, the analytical values were acceptable for interpretation as part of this assessment.

3.2 LEACHATE QUALITY

Leachate is produced at the Site from the percolation of precipitation through the refuse. The chemistry of the leachate depends on factors such as refuse composition and age, residence time, and flow pathways.

As noted in **Section 1.1**, toe drain and underdrain leachate collection systems discharge to the Regional sanitary sewer system. To determine typical chemical characteristics of the leachate, samples were obtained from Maintenance Hole 23 in April, June, September, and December 2022. This location has historically been used for this purpose.

The leachate collection system chemistry data for 2022, along with the historical results, are presented in **Table B-1**, **Appendix B**. Time concentration graphs for selected parameters are shown in **Figures B-1 to B-8**, **Appendix B**.

Leachate samples were also obtained from Monitors 25-I, 37-I, and 39-I in 2022. The chemistry data from the refuse monitors are presented in **Table C-2, Appendix C**. The parameter concentrations for Monitors 25-I, 37-I and 39-I are also included in **Figures B-1 to B-8** for comparison. As shown on the figures, the concentrations for chloride, alkalinity, nitrogen, potassium, sodium, and hardness at Monitor 25-I exhibit noticeable increases since 2012. The cause of the parameter concentration increase at this location may be attributed to cover enhancements, which would reduce the potential dilution from

infiltrating precipitation. Alternatively, the concentration increase may be associated with a potential localized blockage within the underdrain system, although inspections by the Region have not identified issues with the underdrain system. Although the datasets are limited, concentrations of nitrogen at Monitor 37-I, alkalinity at Monitor 39-I, and potassium and sodium at Monitors 37-I and 39-I have generally increased since sampling began in 2019 and 2021, respectively. Additionally, concentrations of chloride, alkalinity, nitrogen, potassium, sodium and hardness at the leachate monitors are generally elevated as compared to the concentrations observed in MH23. Leachate characteristics at these locations will continue to be monitored in the future.

3.2.1 Field Measurements

A summary of the 2022 field measurements from Maintenance Hole 23 is presented in the following table. Supporting laboratory reports of analysis are on file with WSP for reference purposes.

Date	pH (units)	Temperature (°C)	Conductivity (µs/cm)
April	7.13	13.7	361
June	7.21	24.2	> 3,999
September	7.68	25.2	> 3,999
December	7.09	11.3	7,283

The field pH and conductivity measurements were generally comparable to the laboratory results. Any differences can be attributed to the differences in the testing environment.

3.2.2 General Chemistry Concentration Trends

The historical inorganic parameter concentration ranges for the leachate from Maintenance Hole 23 (MH23) and Refuse Monitors 25-I and 37-I, along with the reference groundwater at Monitor Location 23, and background groundwater at Monitor Location OW5, north of the Closed Bayview Park Landfill Site; are summarized in **Table 3-1**. Reported concentrations of dissolved substances in the leachate from MH23 in 2022 were within the range of historical values for the Site with the exception of ammonia in September, and nitrate and nitrite in December, which were elevated above their respective historical ranges. Several parameter concentrations at Monitor 25-I in 2022 were elevated above the historical ranges, including specific conductance, TKN, ammonia, nitrate, nitrite, and sodium. The nitrate concentration at Monitor 25-I was significantly elevated above its historical range in 2022. Further monitoring will determine if the result is anomalous. It is noted that the concentrations of several parameters at Monitor 25-I, including specific conductance, alkalinity, and sodium, had historically been lower than the concentrations at MH23, but the concentrations have increased during the sampling events between 2012 and 2022 and have generally been higher than the concentrations at MH23 over that time. As shown by the minimum and maximum ranges in 2022, the characteristics of the leachate were generally similar between refuse monitors 25-I and 37-I.

As shown in **Figures B-1 to B-8**, **Appendix B**, chloride, sodium, sulphate, hardness, potassium, nitrogen, and alkalinity concentrations in the leachate from MH23 have generally been lower in samples collected during the spring and higher in samples collected at other times of the year. This pattern is likely a function of dilution from increased infiltration during the spring.

Concentrations of iron and phosphorus within MH23 have been noticeably higher for the sampling events between 2017 and 2022, compared to prior historical results, which are attributed to significantly elevated suspended solids content within the samples. The change in leachate chemistry may be associated with cover enhancement activities that took place at the Site between 2017 and 2019, although continued monitoring is required to confirm if a change has occurred over the long term.

It is noted that sulphate concentrations increased at MH23 between November 2001 and November 2003 but decreased through to 2005 and have remained at the low levels since that time. The nitrogen concentration at MH23 in 2022 spiked to a concentration similar to 2013. Concentrations of specific conductance, chloride, sulphate, hardness, and sodium within the leachate have generally been lower compared to concentrations at the upgradient monitors, especially the concentrations observed at the OW5 monitoring location.

The average concentrations for the parameters listed in **Table 3-1** have fluctuated over time. The trendline analyses, as presented in **Figures B-1 to B-8**, have historically indicated a general decreasing trend for chloride, alkalinity, and hardness over the long term. Potassium, iron, and nitrogen concentrations have exhibited a slight long-term increasing trend although the trendline for iron is influenced by the significant concentration increase since 2017.

At Monitor 25-I, the concentrations for chloride, potassium, alkalinity, and sodium spiked in 2001, decreased through 2002 and 2003, were stable through to 2006 and have increased since that time. Hardness has also increased since 2006. The concentrations of chloride, alkalinity, sodium, potassium, hardness and, to a lesser extent, nitrogen, have increased in samples obtained at Monitor 25-I since 2013. The sodium concentration in 2022 was the historical high for this location and it is noted that a historical high has been observed in each year since 2014, with the exception of 2017. The remaining parameter concentrations have generally fluctuated over the long term with no distinguishable trend.

3.2.3 Organic Chemistry

The laboratory organic chemistry results are summarized in **Table B-2**, **Appendix B**. Most organic parameter concentrations were below their RDL. Select organic parameter detections are identified in **Table 3-2**. As shown in the table, the results in 2022 for MH23, Monitor 25-I, and Monitor 37-I were generally within the historical ranges for their respective locations. The exceptions were chlorobenzene and o-xylene at Monitor 37-I which exceeded the historical range in 2022.

The leachate quality at the Site is considered typical of other similar municipal solid waste landfill sites in Ontario.

3.2.4 Sewer Use Compliance

Based on the leachate chemistry results for MH23 in **Table B-1**, the leachate quality during the sampling events in 2022 generally satisfied criteria contained in Sewer Use By-law No. 2-03. The exceptions were TKN in June, September and December; phosphorus and BOD in September and December; zinc in December; and total suspended solids and iron during each event. The above noted parameters have frequently exceeded the Sewer Use By-law since 2017.

3.3 GROUNDWATER QUALITY

3.3.1 Field Measurements

Based on the September 2022 field measurements summarized in **Table C-1**, **Appendix C**, groundwater sample temperatures at the time of collection ranged between 11.2°C and 27.2°C, and averaged 14.4°C. The field pH and conductivity measurements in 2022 were generally similar to the laboratory values. Differences between field and laboratory values are attributed primarily to differences in the testing environment.

3.3.2 General Chemistry Results

Based on the configuration of the groundwater flow system, the existing monitors are located downgradient from the landfill refuse with the exception of Monitor Locations 21 and 23. Since there were no definitive background groundwater monitors in the area of the Site, a detailed analysis and interpretation was carried out in 1995 to determine the preferred “indicator” parameters that could be used to assess for potential leachate movement or influences. Some of the typical leachate diagnostic parameters which can be used at other landfill sites, such as chloride, were not considered to be as effective for assessments at the Site because of their natural occurrence at elevated concentrations within the shale bedrock. Monitor Location 23 has been used as a reference location in the past as there were no alternate locations; however, its close proximity to the refuse footprint does not provide for an accurate assessment.

A groundwater monitoring nest, designated OW5, was installed north of the closed Bayview Park Landfill Site in 2003, along King Road, approximately 350 m east of the Site, to determine the background water quality within the overburden and the Queenston Shale bedrock. The historical chemistry results (2003 to 2021) from the four various screen depths at this location are presented in **Table 3-1**.

As shown in **Table 3-1**, major concentrations generally increase with depth in the groundwater at Monitor Locations 23 and OW5. The concentrations of most parameters in the leachate have exceeded the concentrations in groundwater within the shallow monitors at Monitor Location 23; however, some parameter concentrations in leachate have been within the respective concentration ranges for groundwater in the monitors at the background Monitor Location OW5, including the shallow monitors. Exceptions to this pattern at OW5 include alkalinity, TKN, ammonia, nitrate, and iron where the concentrations within the leachate have been elevated compared to the background groundwater concentrations.

Based on the contrasts between the leachate quality and background groundwater quality at the Site, alkalinity, iron, and nitrogen compounds (particularly TKN) have been used as indicator parameters for interpretation purposes. These parameters are considered useful "tracers" to assess leachate influences because of their relatively elevated concentrations within the leachate and their mobility within groundwater and surface water. Total nitrogen concentrations were calculated from the water quality database by adding together TKN, nitrate, and nitrite. Chloride is also used as an indicator parameter owing to the mobility of chloride in groundwater, but results are interpreted with caution due to the naturally elevated chloride concentrations in the shale bedrock groundwater.

The laboratory general chemistry data for 2022 are presented in **Table C-2**, **Appendix C**, along with the historical data. The concentrations of general chemical parameters for the 2022 sampling event were similar to historical results with some exceptions as discussed below. Time concentration graphs for chloride, alkalinity, total nitrogen, and iron at individual groundwater monitors are provided in **Figures C-1**

to C-17, **Appendix C**. As noted previously, chloride is included for reference purposes but results are interpreted with caution. In general, the parameter concentrations have remained stable over the long term with the following exceptions:

- At Monitor Location 14 (**Figure C-1**), the alkalinity values at Monitor 14-II have exhibited a steady increasing trend over the long term; however, concentrations have been generally stable since 2013. The chloride concentrations have been higher at Monitor 14-I compared to Monitor 14-II, and the alkalinity values at Monitor 14-II have been greater than at Monitor 14-I. Chloride concentrations at Monitor 14-II have been slightly decreasing since 2000. Iron concentrations at both Monitors 14-I and 14-II have fluctuated over time.
- Alkalinity and total nitrogen concentrations at Monitor 15-II (**Figure C-2**), and chloride concentrations at Monitors 15-I and 15-II, have fluctuated over time. Historical total nitrogen concentrations at Monitor 15-II have generally remained stable but elevated concentrations have been observed periodically in 2000, 2006, 2009 and 2019. In each case, the total nitrogen concentrations returned to the historical range within 1 or 2 years. The 2021 concentrations of chloride, hardness, and conductivity at Monitor 15-II were marginally below the historical range but returned to within their respective historical ranges in 2022.
- Chloride concentrations at Monitors 16-I and 16-II (**Figure C-3**) decreased between 1992 and 2004 but increased through to 2007 and have remained relatively stable since that time. A short term increasing trend in chloride at Monitor 16-II has been observed since 2020. Chloride and nitrogen concentrations at Monitors 16-I, 16-II, and 16-III have been significantly elevated compared to the concentrations exhibited at Monitor 16-IV and other locations. Conversely, alkalinity values have been significantly higher at Monitor 16-IV compared to the other nested wells. Concentrations of iron at Monitor 16-I have fluctuated over the long term but have generally been elevated compared to the other monitors at Monitor Location 16. TKN concentrations at Monitor 16-IV were historically low but generally increased between 2003 and 2008 and exhibited noticeable fluctuations until returning in 2015 to the historical range established prior to 2003. The 2022 phenols concentrations at Monitors 16-I, 16-II and 16-III were above their respective historical ranges.
- Historical nitrogen concentrations at Monitors 18-II and 18-III (**Figure C-4**) have been low, but generally increased at Monitors 18-II and 18-III between 1996 and 2011 before exhibiting a decreasing trend since that time. The remaining indicator parameter concentrations have fluctuated over time. It is noted that the replacement wells 18-IIR and 18-IIIR were incorporated into the sampling program in 2017, and concentrations since that time have remained generally similar to historical ranges from the original wells.
- At Monitor 21-II (**Figure C-5**), alkalinity and nitrogen concentrations have fluctuated within a defined range over the long term. A short term increasing trend in alkalinity concentrations have been observed since 2016 in Monitors 21-I and 21-II. Iron concentrations exhibited a significant increase between 2004 and 2006 but subsequently returned to lower levels in 2007 and have remained low since 2008. It is noted that replacement wells 21-IR and 21-IIR were incorporated into the sampling program in 2017, and concentrations since that time have remained generally similar to historical ranges from the original wells, with the exception of an increase in alkalinity at Monitor 21-IR. A historical low TKN concentration was observed at Monitor 21-IR in 2022.
- Historical nitrogen concentrations at Monitors 22-I and 22-II (**Figure C-6**) have typically been low, although periodic spikes in concentrations have been exhibited. It is noted that replacement wells 22-IR, 22-IIR, and 22-IIIR were incorporated into the sampling program in 2017, and chloride, iron, and

concentrations have remained similar to historical ranges from the original wells. However, alkalinity concentrations at 22-IR and 22-IIR have generally been elevated compared to the historical range.

- Alkalinity concentrations at Monitor 23-II (**Figure C-7**) were generally similar between 1989 and 1998, but increased slightly between 1998 and 2006, followed by a slight decrease to 2012. Since 2012 the concentrations have remained stable. Alkalinity concentrations at Monitor 23-III have exhibited a slight decreasing trend over the long term. A spike in iron concentrations was observed at Monitors 23-I, 23-II and 23-III in 2022 including a historical high concentration at Monitor 23-III. It is noted that the iron concentration at Monitor 23-III is significantly elevated above its historical range. Further monitoring will determine if the result is anomalous. Additionally, a historical low concentration of sulphate was observed at Monitor 23-II in 2022 while historical high concentrations of ammonia and BOD were also observed at Monitor 23-III.
- Chloride and nitrogen concentrations at Monitors 24-I and 24-II (**Figure C-8**) have been significantly elevated compared to the concentrations at Monitor 24-III and other locations. The concentrations of iron at Monitors 24-I and 24-II have fluctuated over the long term, although the iron concentrations at Monitor 24-I have exhibited an increasing trend since 2016; the concentrations in 2019 and 2020 reached a historical high but subsequently returned to lower levels in 2021. The alkalinity concentrations for Monitors 24-I and 24-II have been significantly lower than the concentrations at Monitor 24-III but have remained relatively stable over the long term. The TKN and ammonia concentrations at Monitor 24-II were elevated above their respective historical ranges in 2022.
- Chloride and alkalinity concentrations at Monitors 26-I and 26-II (**Figure C-10**) have remained fairly consistent over time. Iron concentrations have remained low and relatively stable since 2007 at Monitor Location 26. The alkalinity concentration at Monitor 26-III appears to be slowly decreasing over time.
- At Monitor 27-III (**Figure C-11**), chloride concentrations have slowly decreased over the long term, while alkalinity concentrations have slowly increased since 1994. At Monitor 27-II, there was a notable increase in the concentration of alkalinity and nitrogen in 2000 and 2001, but the concentrations of these parameters decreased through 2002 and 2003 to values similar to pre-2000 levels and have remained relatively stable since that time. Iron concentrations at Monitors 27-I and 27-II have fluctuated over time. Historically high concentrations of phenols at Monitor 27-I and nitrate at Monitor 27-II were observed in 2022.
- Chloride concentrations at Monitor 28-I (**Figure C-12**) have fluctuated but have shown a decreasing trend over the long term. TKN concentrations at Monitor 28-I reached a historical high in 2014 but returned to pre-2014 levels in 2015 and have remained at the low levels since that time. The 2022 concentration of hardness at Monitor 28-I was elevated above the historical range.
- Alkalinity concentrations at Monitor 30-I (**Figure C-12**) have fluctuated but exhibit a slight increasing trend over the long term. Iron concentrations have fluctuated over the long term with peaks observed in 1995, 1999, 2006, 2012/2013, and 2017. The concentration of sulphate was below the historical range of concentrations at Monitor 30-I in 2022. Alkalinity and nitrogen concentrations at Monitor 31-I have fluctuated but have remained within a defined range over the long term. There was an insufficient volume of water in Monitor 31-I to facilitate sampling in 2022.
- The chloride concentrations at Monitor Location 32 (**Figure C-13**) have fluctuated but generally exhibit a decreasing trend over the long term whereas alkalinity concentrations have increased slightly over the long term. It is noted that chloride concentrations at Monitor 32-II and Monitor 32-III have increased slightly since 2017 and 2019, respectively. At Monitor 32-III, alkalinity concentrations peaked in 2001 followed by a decreasing trend since that time, while nitrogen concentrations peaked

in 2009 but have since decreased. Iron concentrations at Monitor 32-III have fluctuated over the long term, with peaks observed in 1996, 1999, 2005, 2012, and 2017. Historically low concentrations of sulphate and hardness at Monitor 32-I and sulphate, hardness, chloride and potassium at Monitor 32-II were observed in 2022.

- Concentrations of chloride and alkalinity at Monitor 33-I (**Figure C-14**) have generally increased since 2005. Chloride and alkalinity concentrations at Monitor 34-I fluctuated historically between 1996 and 2004 but have generally decreased since 2005. The 2021 and 2022 BOD concentrations at Monitor 33-I were marginally above the historical range.
- The concentrations for most parameters at Monitor Location 35 (**Figure C-15**) generally fluctuated for the first few years of sampling following installation in 1998, but then generally stabilized after 2005. Chloride concentrations at Monitor 35-IV have increased over the long term, whereas iron concentrations at Monitors 35-II and 35-IV peaked in 2005 followed by a decrease to low levels in 2007. The monitors at Monitor Location 35 were decommissioned in 2013 and replaced by Monitor Location 35R with screened intervals at similar elevations.
- The results for Monitor Location 35R (**Figure C-16**) indicate that the water characteristics within the replacement groundwater monitors are generally similar to the groundwater chemistry at the original Monitor Location 35. However, concentrations of chloride and nitrogen at Monitor 35-IR have been significantly higher compared to the concentrations at Monitor 35-I. Concentrations of chloride and nitrogen at Monitor 35-IR have fluctuated over a larger range and are higher than concentrations at the other monitors at Monitor Location 35R. Alkalinity concentrations have been higher at Monitor 35-IVR compared to the other monitors at Monitor Location 35R. Concentrations of phenols at Monitors 35-IR and 35-IIR were elevated above their respective historical ranges in 2022. Historical low concentrations of alkalinity at Monitor 35-IR and ammonia at Monitor 35-IIIR were also observed in 2022.
- There is a limited database of historical results for Monitor 38-I (**Figure C-17**). However, nitrogen concentrations decreased between 2008 and 2019. It is noted that a sample has not been obtained from Monitor 38-I since 2019 due to a blockage in the well. The cause of the blockage should be determined and, if it is not repairable, Monitor 38-I should be decommissioned and replaced.

In general, these results indicate that the chloride and alkalinity concentrations appear to have an inverse correlation with one another. Where chloride concentrations are elevated, or are increasing, the alkalinity values are low or decreasing. Groundwater quality at about half of the groundwater monitoring locations becomes noticeably poorer with depth. This can be attributed to the natural water quality of the Queenston Shale bedrock in the Site area. In general, chloride concentrations at some shallow downgradient groundwater monitors have gradually decreased over the long term, including Monitors 14-I, 27-III, 28-I, 32-I, 32-II, 32-III, and 34-I.

3.3.3 Organic Chemistry Results

The organic chemistry results for the 2022 sampling event are presented in **Table C-3**, **Appendix C**, along with the historical data. Parameters reported at concentrations above their RDLs at downgradient monitors are summarized in **Table 3-3**. As shown in **Table 3-3**, organic parameters were detected above the RDL at Monitor Locations 14, 15, 16, 18R, 21, 23, 28, 30, 32, 33, and 35R. The majority of these monitors are located within the southern portion of the Site (downgradient of the refuse footprint). The organic parameters detected at the downgradient monitors had generally low concentrations at, or near, their respective RDL and, for the organic parameters detected in 2022, the concentrations were generally below their respective ODWQS. The exceptions were vinyl chloride at Monitors 14-II and 30-I. The 2022

VOC detections and ODWQS exceedances are consistent with historical results. Monitors 14-II and 30-I are located in close proximity to the refuse footprint. It is noted that the ODWQS for vinyl chloride is a health-related guideline.

The VOCs detected at the downgradient monitors reported in **Table 3-3** have historically also been detected in the leachate monitors, as shown in **Table 3-2**. VOCs detected in the groundwater but not in the leachate during 2022 included 1,1,1-trichloroethane, 1,1-dichloroethane, 1,2-dichloropropane, acetone, cis-1,2-dichloroethylene, toluene, and vinyl chloride. It is noted that the RDL for leachate samples is typically greater than the RDL for groundwater samples due to high colour and suspended solids content; therefore, the higher detection limits for some organic parameters in the leachate could obscure their presence at relatively low concentrations. Some VOCs detected downgradient of the refuse footprint (such as vinyl chloride) are also potential degradation products of organic compounds that may be present in the leachate. It is also noted that the VOCs detected in the groundwater in 2022 were generally consistent with historical results with the exception of xylenes and toluene at Monitor 21-IIR.

3.3.4 Water Quality Compliance

The 2022 groundwater quality results were generally below their respective ODWQS, with the exception of the results summarized in **Table 3-4**. The monitoring locations in **Table 3-4** include the background location and those that are downgradient, and along the perimeter of, the refuse area. Chloride, sulphate, alkalinity, hardness, organic nitrogen, and sodium exceeded the ODWQS in the background groundwater in 2022. Downgradient exceedances of these parameters may be partially attributed to natural background conditions; however, the concentrations for some parameters in **Table 3-4** exceeded the background ranges. The exceedances for some parameters tend to be greater within the deeper monitors at several locations, which is not unexpected given the generally poor groundwater quality within the underlying Queenston shale bedrock.

The 2022 groundwater quality results at the background monitors did not exceed the ODWQS for nitrite, iron, and pH. A nitrite exceedance was observed at Monitor 16-II, iron exceedances were observed at Monitors 14-I, 14-II, 23-I, 23-III, 24-I, 24-II and 27-I, and the pH was below the ODWQS range at Monitor 24-I. The 2022 exceedances were generally similar to historical results.

The majority of the 2022 ODWQS exceedances were for parameters that affect the aesthetic quality of water or operational guidelines for water treatment and are not health-related. The exception is nitrite which is a health-related parameter. Nitrite is produced as an intermediate step in the nitrification of ammonia to nitrate and is typically not detected above the laboratory RDL in most stable groundwater settings. The 2022 nitrite results at Monitor 16-II were within the historical range, and nitrite results have been consistently above the RDL since 2006. The results suggest that active on-going nitrification is occurring at Monitor 16-II. Nitrite has also been frequently detected above the RDL at Monitor 16-III since 2013.

Based on MECP Guideline B-7, a comparison was made between background groundwater quality and the monitors located around and downgradient of the refuse. The guideline outlines the concept of Reasonable Use Criteria to establish groundwater compliance at the Site boundary, buffer zones, or Contaminant Attenuation Zones for potential contaminants originating from landfills.

The average of the historical (2003 to 2021) inorganic parameter results at Monitor Location OW5 was used for the calculation of the inorganic parameter criteria for reasonable use. The natural background concentration for VOCs was assumed as 0.0 µg/L to calculate the organic parameter criteria. The Guideline B-7 assessment is summarized in **Table 3-5**. It is noted that compliance with Guideline B-7

only applies at property boundary monitors, but all of the sampled monitors are included in the table for comparison and assessment purposes.

The concentrations for the inorganic parameters exceeded the criteria for reasonable use at most groundwater monitors at the Site. Exceedances of the reasonable use criteria also occurred at the background location OW5 during 2022. The 2022 Guideline B-7 inorganic parameter exceedances are consistent with historical results.

It is noted that the magnitude of the exceedances for sulphate were generally greater at the upgradient background Monitor Location OW5 compared to the groundwater monitors downgradient of the refuse area.

The VOC concentrations were typically below the Guideline B-7 criteria, with the exception of the following parameters:

- 1,4-Dichlorobenzene at 14-II;
- Benzene at 14-II and 18-IIIR; and
- Vinyl chloride at 14-II and 30-I

These exceedances are generally consistent with historical results. It is noted that a dichloromethane exceedance was observed at Monitor 23-II in 2021, where this compound has not previously been detected and was not detected in 2022. The 2021 detection may be anomalous; continued assessment of the trends is recommended.

3.3.5 Meridian Brick Property

The 2022 groundwater chemistry results for the samples collected from the Meridian Brick (formerly Hanson Brick and Forterra Brick) property are presented in **Table C-5**, **Appendix C**, and the time concentration graphs for chloride, alkalinity, TKN, and iron at individual groundwater monitors are provided in **Figures C-18 to C-22**, **Appendix C**.

In general, the indicator parameter concentrations at the Meridian Brick monitors have been stable or have fluctuated over the long term with no distinguishable trends. The following exceptions are noted:

- Iron and alkalinity concentrations at Monitor 6B and chloride concentrations at Monitor 6A (**Figure C-18**) have fluctuated with an overall increase since the early 2000s. The concentrations of alkalinity and iron at Monitor 6B in 2022 were elevated above their respective historical ranges.
- Iron concentrations at Monitor 7A (**Figure C-19**) were historically comparable to the iron concentrations within Monitor 7B before 2010. Iron concentrations at Monitor 7B have subsequently increased since that time, with a historically high concentration observed in 2021. Iron concentrations at Monitor 7A have continued within the historical range.
- Chloride concentrations at Monitors 8A, 8B, and 9 (**Figure C-20**) have been relatively stable over the long term, whereas alkalinity concentrations have generally increased over the long term. Iron concentrations at Monitors 8A and 9 have fluctuated over the long term, with occasional spikes observed in 2005, 2010, 2014, 2017, and 2022. Iron concentrations at Monitor 8A have generally been lower compared to the concentrations at Monitor 8B.
- Historical chloride concentrations at Monitor 10A (**Figure C-21**) were significantly higher compared to concentrations at Monitor 10B and the other Meridian Brick monitors along the eastern Site property boundary, but the concentrations at Monitor 10A significantly decreased in 2009. Since 2009, the chloride concentration in Monitor 10A fluctuated with a slight decreasing trend to 2015, but the

concentrations have steadily increased since that time. Nitrogen concentrations have fluctuated at Monitor 10A with peaks observed in 2001, 2010, 2017, and 2021. Alkalinity concentrations at Monitor 10B have fluctuated over the long term. Iron concentrations peaked at Monitor 10B in 2005 and have fluctuated over a large range since that time.

- Chloride, iron, and nitrogen concentrations at Monitor 11 (**Figure C-22**) have fluctuated but exhibit a decreasing trend over the long term. Alkalinity concentrations at Monitor 11 were higher compared to the concentrations at the other Meridian Brick monitors but show a decreasing trend; whereas alkalinity concentrations at Monitors 12A and 12B show an increasing trend. Iron concentrations at Monitors 11 and 12A have shown large fluctuations compared to other Meridian Brick monitors along the eastern Site property boundary.

The results from the Meridian Brick monitors will continue to be used to assess potential landfill influences on groundwater quality. The parameter concentrations which exceeded the ODWQS are summarized in **Table 3-6**. In general, chloride, iron, alkalinity, hardness, vinyl chloride, benzene, and organic nitrogen were the parameters that most commonly exceeded the ODWQS in 2022. It is noted that for the majority of these inorganic parameters, the concentrations at background Monitor Location OW5 also exceeded the ODWQS.

VOCs were detected in each of the Meridian Brick monitors during the sampling event in 2022 with the exception of Monitor 5. VOC concentrations generally satisfied their respective ODWQS except for those presented in **Table 3-6**. Concentrations of vinyl chloride at Monitor 6B have increased during recent years. Continued monitoring is required to assess the long-term trend at this location. Meridian Brick Monitor 6B is located within the northwest corner of the quarry excavation area near Site Monitor Location 30, where vinyl chloride concentrations above the laboratory RDL are also observed at Monitor 30-I. Vinyl chloride concentrations at Monitor 30-I have been generally increasing since they were first detected above the RDL in 1997.

Based on MECP Guideline B-7, a comparison was made between background groundwater quality and the Meridian Brick monitors for VOCs. The natural background concentrations for VOCs was assumed as 0.0 µg/L. The Guideline B-7 assessment is summarized in **Table 3-7**.

The VOC concentrations were typically below the Guideline B-7 criteria, with the exception of the following parameters:

- 1,4-Dichlorobenzene at Monitors 8A, 8B, 10B, and 12A;
- Benzene at Monitors 6B, 8A, 8B, 9, 10B, 11, 12A, and 12B;
- Chlorobenzene at Monitors 8A and 10B; and
- Vinyl chloride at 6A, 6B, 7A, 7B, 8A, 8B, and 9.

These exceedances are generally consistent with historical results.

It is noted that the Meridian Brick monitors are located in close proximity to the refuse footprint so the presence of a landfill influence at these locations is not unexpected. However, no adverse landfill affects have been observed within Meridian Brick stormwater management pond or the discharge water. Additionally, no groundwater seepage was observed during the Meridian Brick sampling events. The chemistry results will continue to be used to assess potential leachate influences on groundwater quality at the Meridian Brick property.

3.4 SURFACE WATER QUALITY

3.4.1 Field Measurements

The average surface water temperatures were 6.8°C, 19.8°C, 17.1°C and 5.5°C for the April, June, September and December 2022 sampling events, respectively. Surface water temperatures are influenced by the ambient air temperature at the time of sampling. Field pH and conductivity measurements were generally similar to the laboratory results. Any differences between field and laboratory values are attributed primarily to differences in the testing environment.

3.4.2 Concentration Trends

The surface water field chemistry and laboratory analysis results are summarized in **Tables D-1 and D-2**, **Appendix D**. Based on the detailed parameter analysis carried out in 1995, as outlined in **Section 3.3.2**, alkalinity, iron, and nitrogen compounds (particularly TKN) are used as indicator parameters for the Site to assess for potential leachate influences. Chloride is also used as an indicator parameter but results are interpreted with caution due to the naturally elevated chloride concentrations in the shale bedrock groundwater.

The time concentration graphs for chloride, alkalinity, total nitrogen, and iron at each surface water monitoring station are provided in **Figures D-1 to D-4**, **Appendix D**. The 2022 chemical results were generally consistent with the historical range. As shown in the figures, parameter concentrations for stations along Falcon Creek generally fluctuated through 2022.

Along the main channel of Falcon Creek (**Figure D-1**), the chloride concentrations at downstream station SW3 and intermediate station SW2 have historically been similar, while chloride concentrations at upstream station SW1-A are typically elevated relative to downstream conditions. Iron concentrations at SW1-A, SW2, and SW3 increased significantly in 2009 and have since shown variable concentrations. The historical concentrations for iron and TKN have been comparable between the upstream and downstream stations.

The parameter concentrations at stations SW11 to SW13 (**Figures D-2 and D-3**), which are located along intermittent tributaries of Falcon Creek, have fluctuated between each sampling event. The historical data suggests no measurable landfill influences in the Falcon Creek surface water quality, as the indicator parameter concentrations at downstream location SW14 have generally been similar to upstream conditions at SW1-A. The 2022 results are consistent with this interpretation.

Stations SW5, SW10, and SW16 (**Figure D-4**) are situated within the Indian Creek watershed east of the Site. There are no stations along Indian Creek situated upstream of the refuse footprint; however, the available historical alkalinity, iron, and total nitrogen concentrations at the Indian Creek downstream station SW5 have generally been consistent with the upstream conditions at station SW1-A in Falcon Creek. Chloride concentrations at SW5 have been marginally elevated compared to upstream conditions at SW1-A; however, SW5 receives runoff and discharge from the Meridian Brick shale quarry and therefore elevated chloride concentrations are not unexpected. In addition, road salt influences are also inferred to contribute to elevated chloride concentrations at SW5 due to the proximity to North Service Road. Chloride concentrations have generally been lower at SW16 and SW10 in comparison to SW5. These stations are situated upstream of SW5 but downstream of the landfill and do not receive runoff or discharge from the shale quarry. These results suggest that the elevated chloride concentrations at SW5 are not related to the landfill. The 2022 results are consistent with this interpretation.

3.4.3 Water Quality Compliance

The surface water quality for the sampling events in 2022 generally complied with the Provincial Water Quality Objectives (PWQO, 1994), as summarized in **Table 3-8**. The exceptions were iron and total phosphorus concentrations, which exceeded the PWQO at all locations during at least one event. The exceedances for iron and total phosphorus also occurred at upstream station SW1-A, which indicates these exceedances were due to natural conditions within the surface water and not related to the landfill. The 2022 exceedances were consistent with historical results.

3.5 COMBUSTIBLE GAS MONITORING

3.5.1 On Site Monitoring

Results of the combustible gas monitoring for 2022, along with the historical results, are summarized in **Table F-1**, **Appendix F**. As shown in the table, combustible gas was not detected at Maintenance Hole 23 during the February and September 2022 monitoring events. Combustible gas was detected at concentrations between 25% and 60% by volume in air during the February and September 2022 monitoring events at the refuse Monitors 36-I, 37-I, and 39-I. Combustible gas has historically been sporadically detected in refuse Monitor 25-I, including a detection of 25% by volume in air in September 2022. The presence of combustible gas within the refuse monitors is not unexpected. Combustible gas concentrations measured at the refuse monitors in 2022 were higher than the lower explosive limit (LEL) for methane of 5% by volume in air.

Combustible gas was generally not detected at the other gas monitoring locations during the 2022 monitoring events, with the exception of GP2 during the February and September events and GP4 and GP5 during the September event. These detections were below the LEL for methane. Historically, combustible gas concentrations have been detected at low levels at gas probes GP2 and GP4. However, gas was not detected at GP2 between December 2005 and February 2020 and at GP4 since 2008. Gas detections at GP5 have not been observed historically. Gas concentrations at these probes should continue to be monitored for potential emerging trends.

Based on the gas monitoring results for 2022, there were no off-site influences associated with combustible gas from the Site.

3.5.2 Meridian Brick Property

The combustible gas monitoring results for the Meridian Brick property are presented in **Table F-2**, **Appendix F**.

Measurable quantities of combustible gas were detected at most monitors along the western boundary of the Meridian property on at least one occasion in 2022. Where detected, the combustible gas readings ranged between 1,001 ppm and 385,040 ppm (approximately 38.5% gas by volume in air).

Historically, combustible gas has primarily been detected along the west Meridian Brick property boundary, between the excavated area and the Site. Combustible gas has only been sporadically detected in Monitors MW12A and MW12B and gas probes GP00-1 to GP00-10, and GP08-1, and at lower concentrations relative to the western boundary monitors. The 2022 results are consistent with these observations.

4 DISCUSSION

4.1 GROUNDWATER ASSESSMENT

4.1.1 Leachate

Leachate is produced at the landfill by the percolation of precipitation through refuse. The volume of leachate produced depends on a variety of criteria, including precipitation, evapotranspiration rate, type of cover material and slope, vegetative cover, and minor groundwater infiltration. The landfill cover study that was completed in 2009 and 2010 identified potential areas of reduced cover material and areas of settlement, which the Region has enhanced and repaired over time. The placement of additional cover and regrading of deficient areas of the landfill cover should continue to reduce the amount of percolation into the refuse. Additional cover material was imported and placed along the south slope of the refuse area in 2013 and 2014 and continued within the northeast portion of the refuse area in 2015. Additional cover material was placed mainly within the southern portion of the refuse area between 2017 and 2019.

In 2022, approximately 63 million litres (63,297 m^3) of leachate were collected by the leachate collection system, which is equivalent to an infiltration rate of approximately 3.5 L/min/ha, or about 27% of the annual precipitation. The volume collected in 2022 was similar to the average of annual volumes collected since 1989. A generally decreasing volume trend has been observed since 2018, which may be attributed to the landfill cover enhancement activities that have occurred at the Site during the past few years. The effectiveness of the landfill cover enhancements can only be confirmed with a continued review of annual leachate volumes and climate data in the future.

Some leachate mounding occurs within the refuse. Mounding within the northern part of the refuse occurs between the refuse underdrains and is estimated to be less than 0.5 m above the bottom of the refuse. Some variation of the leachate mound level is likely due to the influence of the underdrains. Within the southern part of the refuse, which has a system of peripheral toe-drains to intercept shallow leachate migration, the leachate mound is approximately 7 m above the base of the refuse at monitor locations based on elevations in 2022. Saturation levels within the refuse have shown relatively stable trends over the period of record although elevations have generally risen in recent years. The leachate collection pipes are flushed annually with the most recent flushing occurring in September 2022. No obstructions within the leachate collection system were noted during the flushing in 2022.

The chemical characteristics of the leachate have varied over time. The concentrations of several parameters in the leachate, including conductivity, chloride, hardness, and sodium have been lower than in some of the groundwater monitors. Although the parameter concentrations have fluctuated between sampling events, the trendline analysis for the leachate collected from Maintenance Hole 23 shows that there has been a concentration decrease over the long term for chloride, alkalinity, and hardness. Concentrations of iron (**Figure B-1**) exhibited a significant increase in 2017 and have remained at the elevated level since that time. The concentration increase for iron is likely attributed to elevated suspended solids within the samples compared to previous sampling events, which may be associated with recent cover enhancement activities, but continued monitoring will confirm this. It is expected that leachate concentrations will continue to gradually decrease over the contaminating lifespan of the waste.

The leachate indicator parameters at Monitor 25-I have increased since 2010, with historical highs for total nitrogen observed in 2022 (**Figure C-9**). A notable increase in the liquid level at Monitor 25-I of about 4 m was also observed at the same time concentrations started to increase. As shown in **Table C-**

3, VOC concentrations which had been detected at elevated concentrations prior to 2010 noticeably decreased or were not detected above the laboratory RDL after this time. Continued monitoring is recommended to assess this trend at Monitor 25-I.

VOCs continue to be detected within the leachate. Although the parameters detected in 2022 were comparable to historical results, the parameter concentrations continue to fluctuate from year to year.

The 2022 leachate quality at MH23 continued to comply with the Halton Region Sewer Use By-law No. 2-03, except for TKN in June, September and December; phosphorus and BOD in September and December; zinc in December; and total suspended solids and iron during each event. The above noted parameters have frequently exceeded the Sewer Use By-law since 2017. Prior to 2017, exceedances of those parameters were infrequent. The elevated concentrations for iron and phosphorus are likely associated with the elevated suspended solids within the samples compared to historical events. The general increase in suspended solids since 2017 may be attributed to the cover enhancement activities that have been undertaken by the Region and/or relatively low flows at the time of sampling. Continued quarterly monitoring of MH23 is recommended to assess long term trends.

4.1.2 Groundwater

Regional groundwater flows in a southerly direction from higher elevations near the Escarpment toward the Hamilton Harbour portion of Lake Ontario. Shallow groundwater flow directions on the Site are influenced primarily by local terrain. More deeply incised watercourses which intersect the water table function as groundwater discharge zones, and heights of land which separate watersheds are also inferred to act as shallow groundwater divides. The 2022 results are consistent with this interpretation, but groundwater elevations at most monitoring locations were generally slightly lower compared to 2021.

Concentrations of most groundwater quality parameters have been relatively stable over the long term. Parameters such as chloride, conductivity, and sodium generally increase in concentration with depth, while the pattern is reversed for alkalinity concentrations. Part of the increase in the concentration with depth for dissolved solids is attributed to the shale bedrock, which contains soluble salts retained from deposition in a marine environment. The data indicate that local groundwater quality within the shale is naturally poor due to the presence of elevated hardness, chloride, sodium, and sulphate concentrations. The 2022 groundwater quality results were generally below the ODWQS. Concentrations of chloride, sulphate, alkalinity, hardness, organic nitrogen, and sodium are elevated in the background groundwater and exceedances of these parameters at perimeter / downgradient monitors may be partially attributed to natural conditions at the Site. Elevated sulphate concentrations in the groundwater are considered to be naturally occurring since the concentrations within the leachate are significantly lower, which is consistent with most municipal landfills in southern Ontario.

A comparison of the inorganic parameter concentrations to MECP Guideline B-7 indicates that hardness, chloride, sulphate, sodium, alkalinity, organic nitrogen, and iron exceeded the criteria for reasonable use at most perimeter / downgradient groundwater monitors, as well as the background monitors at Monitor Location OW5. The concentrations for the exceedances at the perimeter boundary monitors were generally lower compared to the concentrations at the background location, and therefore these exceedances are not considered to be landfill related. Given the naturally poor quality of the groundwater at the Site, as discussed in Section 3.3.2, inorganic parameter exceedances are generally not suitable for assessment of leachate impacts. Organic parameter exceedances are inferred to be the most effective indicator of leachate impacts downgradient of the Site.

VOC concentrations were typically below the criteria for reasonable use, with the exception of 1,4-dichlorobenzene at 14-II, benzene at 14-II and 18-IIIR, and vinyl chloride at 14-II and 30-I. The 2022

exceedances are generally consistent with historical results. These monitors are located in close proximity to the refuse footprint on the Site.

The monitors that are inferred to be impacted by landfill leachate (i.e., where VOC concentrations exceed Guideline B-7) are situated downgradient to the south (monitor nest 14) and east (monitor nests 18 and 30) of the waste and have historically been reported as impacted to some degree. In general, the deeper monitors located to the south / southeast of the refuse footprint indicate higher concentrations of inorganic parameters compared to the shallower monitors. Although the contaminants are inferred to migrate deeper as groundwater flows downgradient, the influence of landfill leachate on the inorganic parameter concentrations is considered to be masked by the naturally poor shale groundwater quality. The downward movement of leachate is attributed to the natural downward hydraulic gradients for the area and the leachate mounding, particularly within the southern portion of the refuse, which acts as a "driving force" for the leachate. In addition, the detected chlorinated VOCs are denser than water and tend to accumulate on the bedrock surface, with the dissolved component potentially influencing the deeper groundwater. The downgradient monitors screened within the overburden till or the weathered shale at the northern, southern, and western property boundaries generally do not indicate a landfill influence.

At Monitor Location 35R, located at the downgradient southeast property boundary, there does not appear to be a landfill leachate influence on groundwater at depth. The diagnostic inorganic parameter concentrations, while elevated, are still comparable to the natural levels within the background groundwater and VOCs were not detected. As noted previously, most inorganic parameter concentrations at this location exceeded the criteria for reasonable use in 2022; however, the concentrations are generally comparable to the background monitors at Monitor Location OW5, northeast of the Site. It should also be noted that the surface elevation at Monitor Location OW5 is significantly higher compared to Monitor Location 35R and as such the deep monitor at 35R is advanced much deeper into the bedrock formation. This likely affects chemical concentrations influenced by naturally occurring parameters.

Falcon Creek represents a hydraulic boundary for groundwater flow to the southwest of impacted monitor nest 14. Additionally, along the eastern boundary of the Site, both Indian Creek and the excavation at the Meridian Brick Properties represents a hydraulic boundary for groundwater flow to the southeast of impacted monitor nests 18 and 30. Therefore, it is interpreted that groundwater movement from the Site does not progress beyond the creeks or the excavation.

4.2 SURFACE WATER ASSESSMENT

Landfill influences were not observed in the adjacent surface water within Falcon Creek (north and west side) or Indian Creek (east side). Potentially impacted groundwater may flow radially outward from the refuse toward the adjacent watercourses. However, the surface water results to date suggest that the amount of impacted groundwater reaching the watercourses has an immeasurably small affect on surface water quality. Downstream surface water quality within Indian Creek along the east side of the Site was generally consistent with the upstream surface water quality in Falcon Creek. Marginally elevated chloride concentrations at SW5 are inferred to be the result of runoff / discharge from the Meridian Brick shale quarry and not landfill-related.

4.3 GAS MONITORING

Combustible gas monitoring results indicate that there is combustible gas in the refuse and along the east side of the Site at the property boundary wells, which is not unexpected. Combustible gas was also detected at most Meridian Brick monitor locations situated between the waste footprint and the quarry

excavation. Gas concentrations were above the lower explosive limit for methane at some monitors on the Meridian Brick property, on the east of the Site, and within the refuse monitors on the Site. Levels measured at the Site gas probes were generally lower than the Meridian Brick monitors. This difference is likely attributed to the differences in the monitoring techniques.

Combustible gas was generally not detected at the other Site gas probes during the 2022 monitoring events, with the exception of GP2 during the February and September events and GP4 and GP5 during the September event. These detections were below the LEL. Historically, combustible gas concentrations have been detected at low levels at gas probes GP2 and GP4. However, gas was not detected at GP2 between December 2005 and February 2020 and at GP4 since 2008. Gas detections at GP5 have not been observed historically. Gas concentrations at GP5 should continue to be monitored for potential emerging trends. It is recommended the gas monitoring results from the Meridian Brick monitors continue to be incorporated into the landfill monitoring database to provide additional delineation of landfill gas movement from the Site.

Studies have shown the principal combustible gas generated within a landfill site is methane. Since methane is lighter than air, it typically moves upwards from the refuse into the soil cover and dissipates by venting to the atmosphere. During periods of frost and/or snow cover, venting is reduced or inhibited. With the low hydraulic conductivity soils and bedrock, the relatively high groundwater table, and the configuration of the Site, gas concentrations tend to increase in the refuse during these periods. As discussed above, there is some localized lateral gas migration. Gas will collect in maintenance holes and any other on-site structures. Appropriate safety precautions should continue to be followed for work in these areas including the Meridian Brick property in the area of MW6 to MW11 and in the area of the refuse monitors.

4.4 MERIDIAN BRICK PROPERTY

Commencing in 1998, Meridian Brick (formerly Hanson Brick and Forterra Brick) initiated excavation activities adjacent to the Site to allow construction of the brick plant within the southern portion of the property. During 2009, the base of the quarry in the area of the retention pond to the north of the plant was lowered approximately 6 m compared to the base that had previously been in place. Based on a review of the proposed design drawings and correspondence with Meridian Brick, the proposed excavation depth of the mining area is 127 mASL, which is approximately 2 m to 25 m below the pre-construction groundwater table along the eastern Site property boundary. As a result, the groundwater flow within that area of the property has been altered such that a portion of the groundwater flow is directed towards the Meridian Brick excavation. A significant influence on groundwater levels or groundwater chemistry has generally not been detected to date at Site monitors, with the exception of a long-term decrease in water levels at Monitor 28-I.

The groundwater level elevations at Monitor 28-I and at Meridian Brick Monitor MW12A, located between the refuse and the brick plant, have decreased over the long term and have remained at lower levels since 2012. Prior to 1998, water level elevations at Monitor 28-I were approximately 131 mASL, however, these levels declined to approximately 128.3 mASL in 2012, which is 1.3 m above the planned final elevation of the excavation base of 127 mASL. The historical decreasing water level pattern since 1998 is likely a response to the afore-mentioned excavation activities on the Meridian Brick property. It is noted the water level in Monitor 28-I has remained relatively stable since 2012 with the exception of a historically low water level in 2022 (127.6 mASL). In February 2016, the water level at Monitor 12A reached a historical low of 126.66 mASL before rebounding to the historical range in spring 2016; the

water level has remained stable since that time. The February 2016 water level at Monitor 12A was 0.34 m below the planned final elevation of the excavation base of 127 mASL.

Groundwater level elevations at the Meridian Brick Monitor MW10A showed a decrease between 2002 and 2004, a decrease until 2009, and an increase between 2001 and early 2016. Water levels within the monitor exhibited a noticeable decrease through 2016 and have remained within the lower range since that time. Water levels within Monitor 7A decreased in 2009 to below the historical range of 158 mASL to 161 mASL but returned to higher levels more reflective of historical patterns in 2010. Monitor 7A is located near the northwest limit of the quarry excavation. The groundwater level patterns exhibited at these monitors may be attributed to both the mining activities on the Meridian Brick property and to climatic conditions. Continued monitoring is required to assess the results for these locations and the long-term trends.

Surface water sampling for the Site will be continued within the surface water channel to the west and south of the Meridian Brick property, at stations SW16 and SW10, respectively, to assess potential landfill influences on downstream surface water quality in Indian Creek. Based on discussions with Meridian Brick, any surface water sampling results which are obtained from the adjacent surface water channels/storm sewers on the Meridian Brick property will be available to be incorporated and reviewed as part of the annual monitoring program. As noted in **Section 3.4.2**, surface water quality at station SW10 has historically been consistent with the background surface water quality in Falcon Creek. To date there have been no measurable landfill influences on surface water quality in Indian Creek, however continued monitoring is recommended.

The historical groundwater chemistry results for the Meridian Brick monitors have been generally stable or have fluctuated within a defined range, with some exceptions. Historical chloride concentrations are significantly higher at Monitor 10A compared to the remaining monitors and are likely attributed to the natural water quality characteristics at the deeper screen depth; however, concentrations have significantly decreased since 2009. The cause of this noticeable decrease is unknown at the present time. Iron concentrations have increased at Monitor 6B over the long term. Also, iron concentrations are significantly higher at Monitors 11 and 12A compared to the remaining monitors. Chloride, alkalinity, iron, and nitrogen concentrations at Monitor 11 have generally decreased over the long term whereas alkalinity at Monitors 12A and 12B has increased. These monitors are located in close proximity to the brick plant.

VOCs were also detected at the monitors along the western Meridian Brick property boundary in 2022, which is consistent with historical results. The concentration of vinyl chloride at Monitor 6B has exhibited a noticeable increase during recent years although continued monitoring is required to confirm the long-term trend at this location. Monitor 6B is located within the northwest corner of the Meridian Brick excavation area. Monitors 8 and 9 are located within the middle portion of the quarry excavation. Elevated organic parameter concentrations at these monitors are likely a result of landfill leachate migration from the Site; however, this concentration pattern is not unexpected as the monitors are located close to the refuse footprint.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

The following conclusions are based on the findings presented in this report.

- Regional groundwater flows in a southerly direction from higher elevations near the Escarpment toward the Hamilton Harbour portion of Lake Ontario. Local shallow groundwater flow is influenced primarily by local terrain. Downward hydraulic gradients predominate within the upper portion of the shale bedrock and between the overburden and bedrock. Periodic upward hydraulic gradients occur within the northern portion of the Site at Monitors 18, 22, and 23. The 2022 groundwater elevations were consistent with previous interpretations.
- Leachate within the refuse is produced from the infiltration of precipitation and snowmelt. Leachate levels within the refuse remained relatively stable in 2022 compared to the historical range. There is minimal leachate mounding in the northern under-drained portion of the refuse. Within the southern portion of the refuse, the mounding is approximately 7 m above the base of the refuse.
- Underdrain and toe drain collectors continue to collect leachate as designed. The volume collected in 2023 (63,297 m^3) was about 10% lower compared to the average annual volume collected since 2003 (70,274 m^3) but was similar to the volume collected in 2021.
- Leachate chemical characteristics have fluctuated over time; concentrations are generally decreasing over the long term for the diagnostic parameters, including chloride, iron, hardness, and alkalinity.
- Based on the leachate chemistry results, the leachate quality in 2022 generally complied with Sewer Use By-law No. 2-03 except for exceedances of TKN, phosphorus, BOD, iron, zinc, and suspended solids. The recent exceedances since 2017 may be attributed to the cover enhancement activities at the Site and/or relatively low flows at the time of sampling, continued monitoring is required to confirm this trend over the long term.
- Leachate influences on groundwater quality have generally been limited to areas immediately adjacent to and downgradient of the refuse. Monitors located south and southwest of the refuse, within the Site property, indicate that groundwater quality is marginally influenced by landfill leachate. Most inorganic parameter concentrations at Monitor Location 35R exceeded the criteria for reasonable use in 2022; however, the concentrations were generally comparable to the background monitors at Monitor Location OW5, northeast of the Site.
- MECP Guideline B-7 criteria and ODWQS were exceeded for many inorganic parameters at a majority of the monitors along the Site property boundary; however, given the concentrations of the exceedances were comparable to the respective concentrations at the background Monitor Location OW5, the Site does not appear to be having a measurable influence on the inorganic groundwater quality at the property boundary monitors. In 2022, organic parameter exceedances near, but within, the Site property boundary consisted of 1,4-dichlorobenzene, benzene, and vinyl chloride. These exceedances are an indication of a leachate influence on groundwater quality.
- There are no known groundwater users adjacent to the Site which could be affected by potentially landfill influenced groundwater. No landfill influenced groundwater has been detected beyond the

Meridian Brick property, and Meridian Brick has not expressed a concern regarding the possible landfill influence of local groundwater quality on their property.

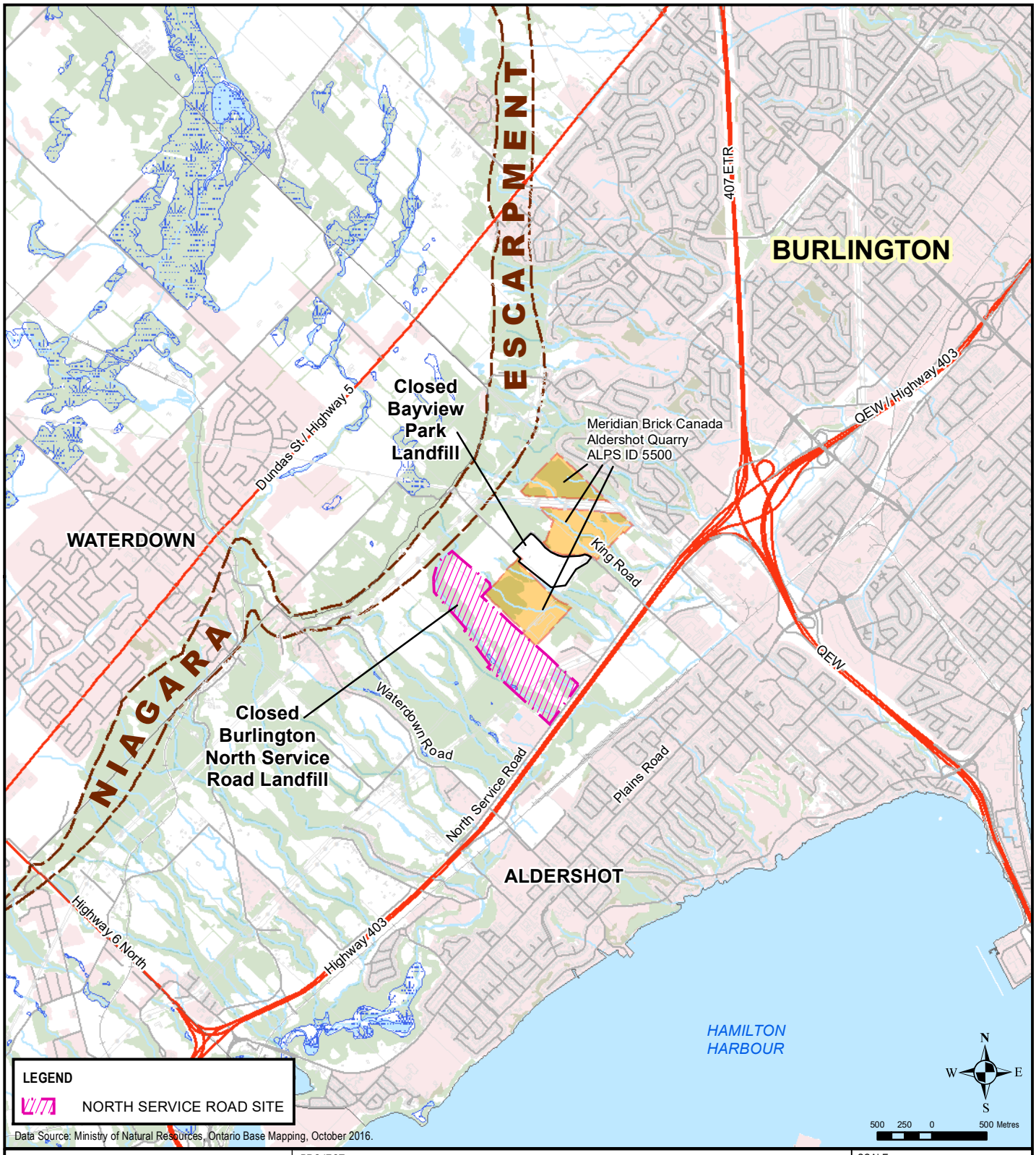
- The groundwater chemistry results for the Meridian Brick property indicate there is a landfill influence on groundwater quality along the west side of their property. Excavation activities to lower base elevations in the Meridian Brick quarry, to date, do not appear to have had an adverse effect on the groundwater elevations at most Site monitors. The existing groundwater chemistry database and continued monitoring will permit assessment of potential groundwater quality changes and provide input to remedial measures, if required; however, no concerns regarding possible landfill influences on the quarry operations have been noted.
- No landfill influences on surface water quality were observed in Falcon Creek adjacent to and downgradient of the Site. Historically, within the Indian Creek watershed, water quality downstream of the Site has been similar to the upstream water quality along Falcon Creek and therefore it is concluded that there has been no landfill influence on the water quality within the Indian Creek tributary.
- Combustible gas is present within the refuse footprint and, historically, has been detected within the on-site maintenance hole, MH23. Combustible gas concentrations periodically exceeded the lower explosive limit for methane at some Meridian Brick monitoring wells immediately adjacent to the eastern Site property boundary, along with on-site locations MH23, at the southern extent of the refuse, and the refuse monitors. The existing gas monitoring network (sentry network) on the Meridian Brick property indicates there are no combustible gas concerns adjacent to, or inside, the brick plant. Meridian Brick has not expressed a concern regarding this limited migration of gas onto their property.

5.2 RECOMMENDATIONS

We respectfully submit the following recommendations based on the study findings for your consideration.

- To ensure that methane gas does not pose a potential hazard to any activities, current standard operating practices should continue to ensure that precautions are taken within the eastern portion of the landfill, near the Meridian Brick borehole locations MW6 to MW11.
- Water level and chemistry data obtained from the groundwater monitors and surface water stations within the adjacent Meridian Brick property should continue to be incorporated into any future monitoring reports prepared as part of the routine monitoring program, and the effect of operations at the Meridian Brick property should be assessed with respect to the Site.
- The 2022 Monitoring Program should be continued in 2023 for the established groundwater, surface water, and gas monitoring network, at the established frequency.
- The blockage at 38-I should be investigated. If the monitor cannot be repaired, 38-I should be decommissioned and replaced by a licensed well driller.
- No other remedial measures are required for the Site at the present time.

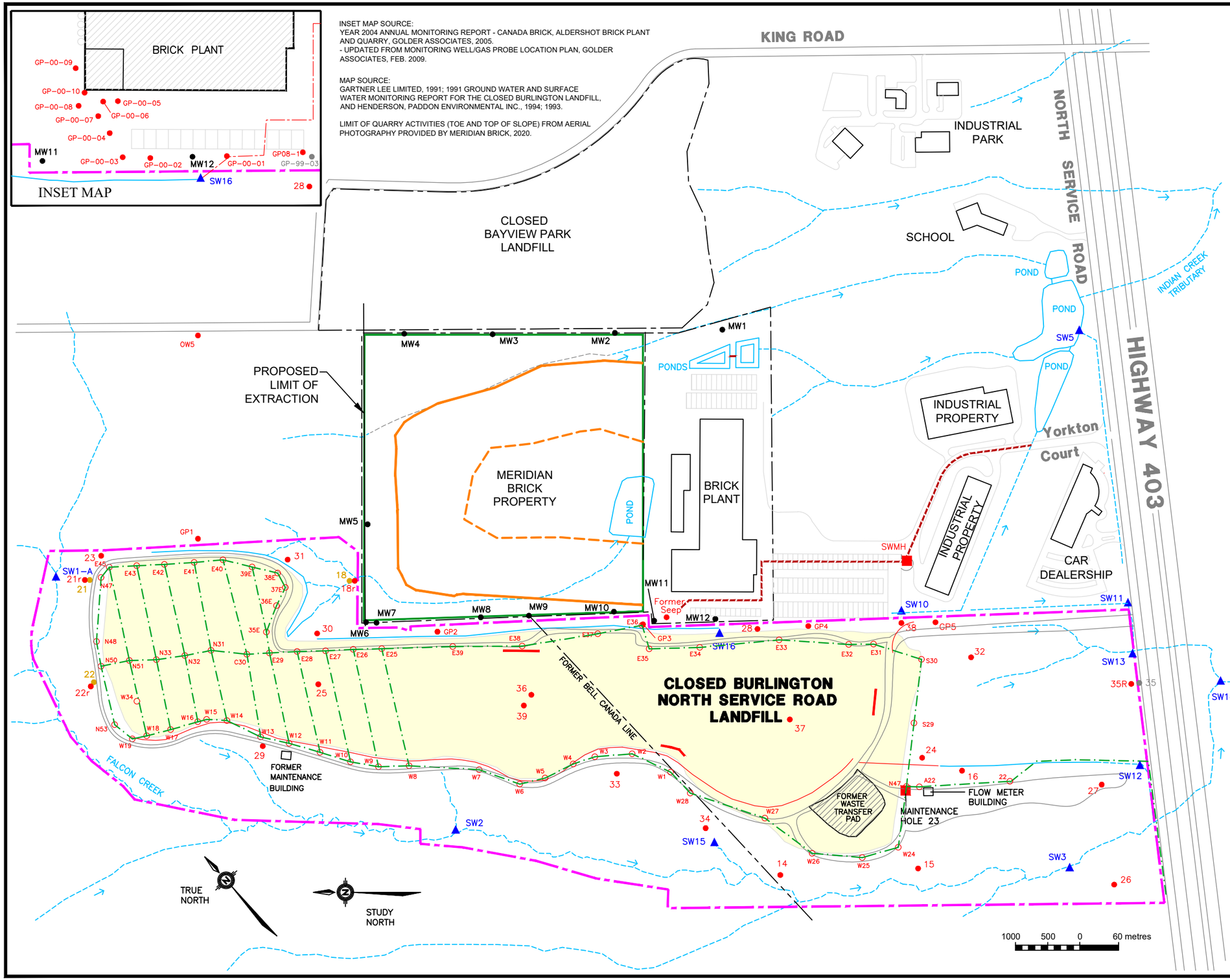
FIGURES



126 DON HILLOCK DRIVE, UNIT 2
AURORA, ONTARIO CANADA L4G 0G9
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PROJECT: 2022 ANNUAL MONITORING REPORT CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE	SCALE: 1:50,000
	DRAWN BY: JLD / CHECKED BY: -
TITLE: LOCATION MAP	PROJECT NO: 181-30000-100-1005
	DATE: MARCH 2023
CLIENT: REGIONAL MUNICIPALITY OF HALTON	FIGURE NO: 1-1 / REV.: -

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LEGEND

- 24 GROUNDWATER MONITOR LOCATION AND DESIGNATION
- 18 FORMER MONITOR LOCATION, DECOMMISSIONED IN 2016
- 35 PREVIOUS BOREHOLE LOCATION AND DESIGNATION (DESTROYED, DECOMMISSIONED OR DAMAGED AND NO LONGER IN USE)
- MW1 MERIDIAN BRICK BOREHOLE LOCATION & DESIGNATION
- SW3 SURFACE WATER MONITORING STATION & DESIGNATION
- INTERMITTENT DRAINAGE COURSE WITH FLOW DIRECTION
- FORMER DRAINAGE COURSE
- PROPERTY BOUNDARY
- APPROXIMATE EXTENT OF REFUSE
- LEACHATE COLLECTION SYSTEM
- STORM SEWER (LANDFILL SITE)
- STORM SEWER (HANSON BRICK SITE)
- SEEP REPAIR LOCATION
- APPROX. LIMIT OF QUARRY ACTIVITIES - TOP OF SLOPE
- APPROX. LIMIT OF QUARRY ACTIVITIES - TOE OF SLOPE

CLIENT:
REGIONAL MUNICIPALITY OF HALTON

CLIENT REF. #:

PROJECT:
2022 ANNUAL MONITORING REPORT CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE

PROJECT NO:	DATE / DATE:
181-30000-100-1005	MARCH 2023

DESIGNED BY:

DRAWN BY: JLD

CHECKED BY:

FIGURE NO:	SCALE:
1-2	1:6000 (APPROX.)

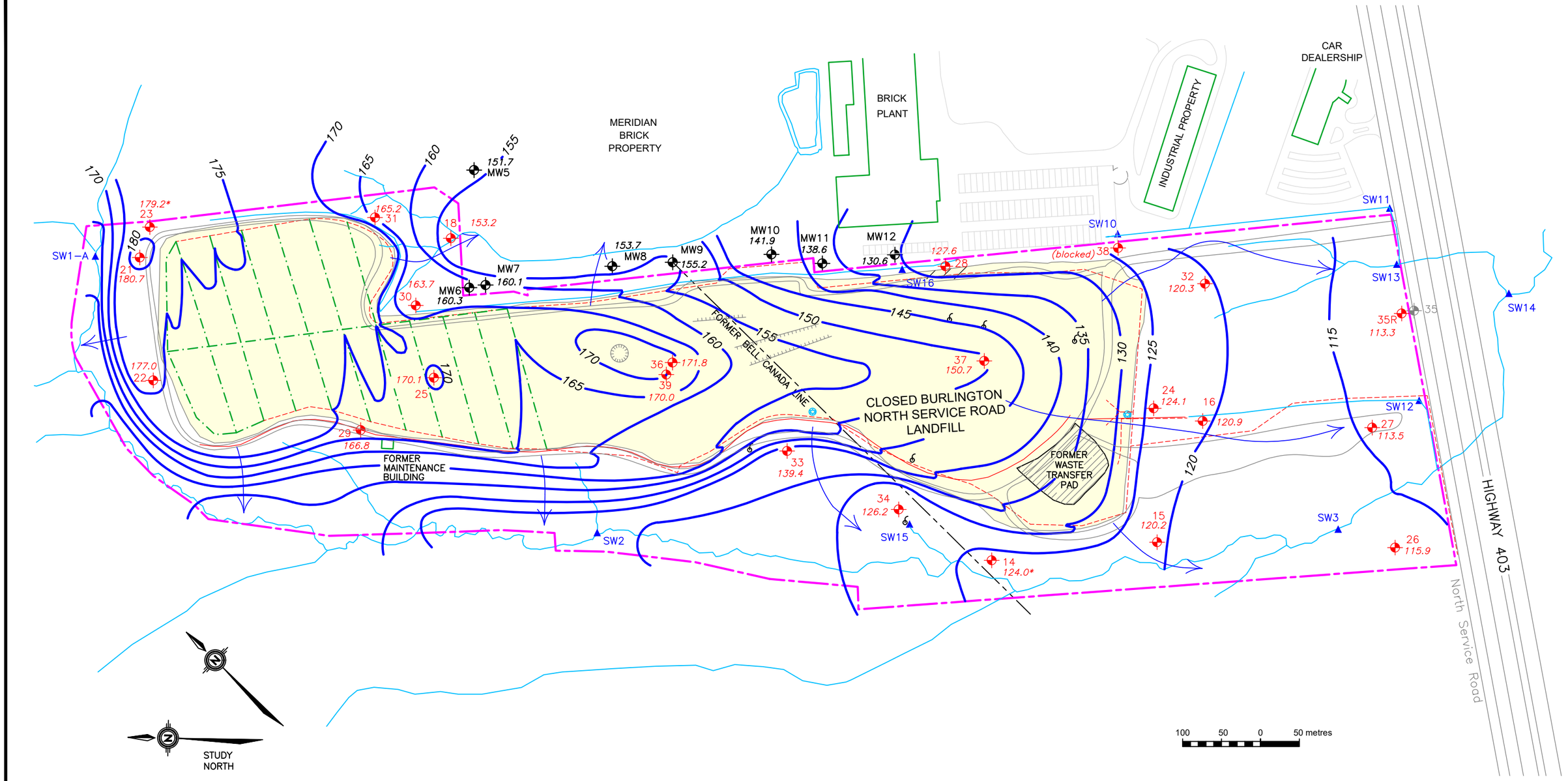
TITLE:
SITE PLAN

DISCIPLINE:
ENVIRONMENT

ISSUE:

DATE OF:

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LEGEND

- PROPERTY BOUNDARY
- LIMIT OF EXISTING LANDFILL
- 29 / 166.3 — BOREHOLE LOCATION, DESIGNATION AND SHALLOW GROUNDWATER ELEVATION (mASL), (SEPTEMBER 2022)
- 35 — PREVIOUS BOREHOLE LOCATION AND DESIGNATION (DESTROYED, DECOMMISSIONED OR DAMAGED AND NO LONGER IN USE)
- MW6 / 159.6 — MERIDIAN BRICK BOREHOLE LOCATION, DESIGNATION AND SHALLOW GROUNDWATER ELEVATION (mASL), (NOVEMBER 2022)
- SW3 — SURFACE WATER MONITORING STATION LOCATION AND DESIGNATION
- INTERMITTENT DRAINAGE COURSE
- FORMER INTERMITTENT DRAINAGE COURSE
- LEACHATE UNDERDRAIN SYSTEM
- EXISTING TOE DRAIN SYSTEM
- 175 — INFERRED GROUNDWATER TABLE CONTOUR (mASL)
- PROBABLE DIRECTION OF SHALLOW GROUNDWATER FLOW
- * — GROUNDWATER ELEVATION FROM DECEMBER 2022

CLIENT:
REGIONAL MUNICIPALITY OF HALTON

CLIENT REF. #:

PROJECT:
2022 ANNUAL MONITORING REPORT CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE

PROJECT NO: 181-30000-100-1005	DATE: MARCH 2023
DESIGNED BY:	
DRAWN BY: JLD	
CHECKED BY:	
FIGURE NO: 2-1	SCALE: 1:5000

TITLE:
SHALLOW GROUNDWATER FLOW REGIME - FALL 2022

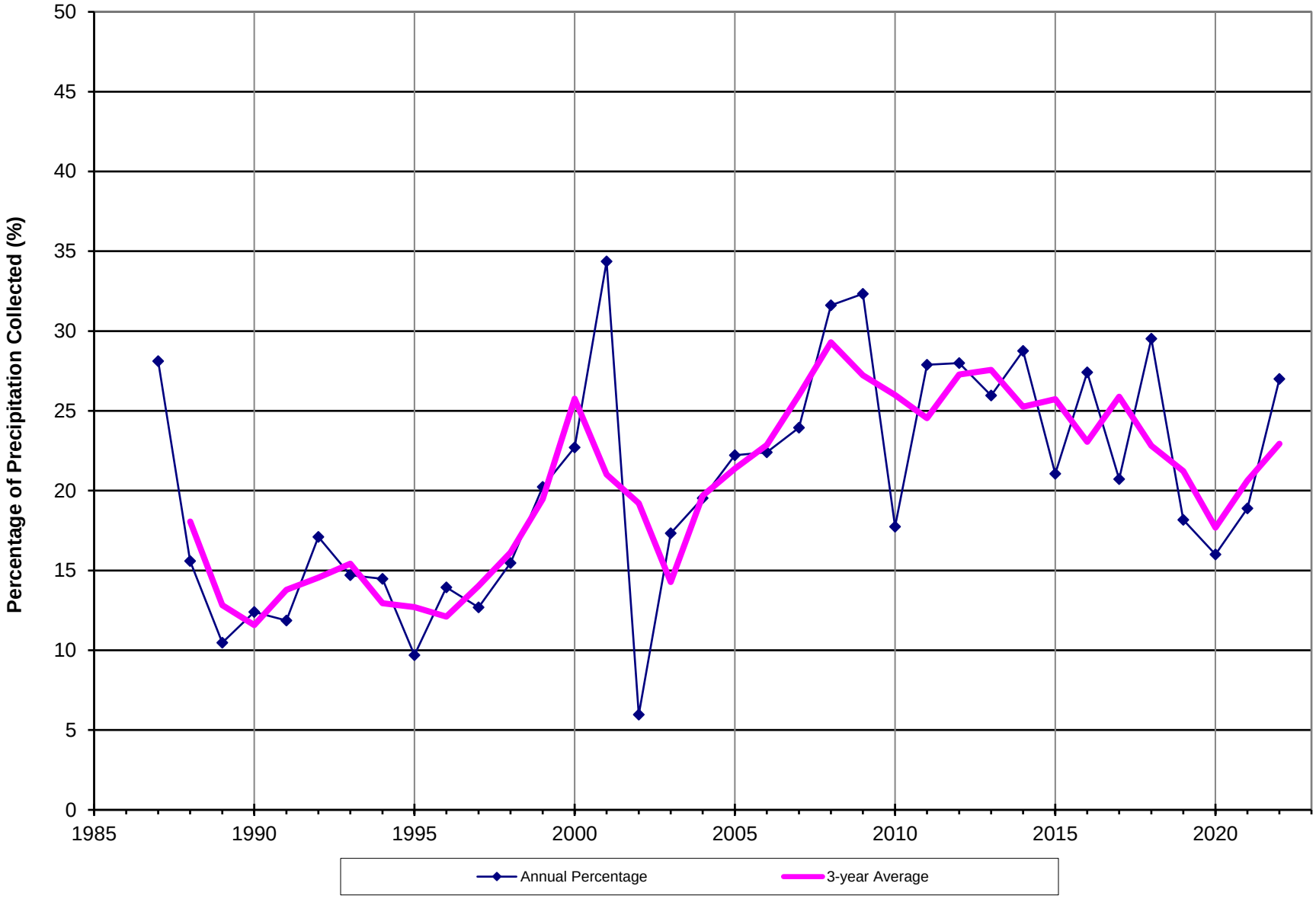
DISCIPLINE:
ENVIRONMENT

ISSUE:

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FIGURE 2-2
Leachate Volumes vs Time



TABLES

TABLE 1-1
MONITORING PROGRAM SUMMARY
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

SAMPLING LOCATIONS	MONITORING LOCATION	PARAMETERS	SAMPLING FREQUENCY
GROUNDWATER MONITORS	14-I, 14-II, 15-I, 15-II 16-I, 16-II, 16-III, 16-IV 18-II, 18-III, 21-I, 21-II, 21-III 22-IR, 22-IIR, 22-IIIR, 23-I, 23-II, 23-III 24-I, 24-II, 24-III 26-I, 26-II, 26-III 27-I, 27-II, 27-III 28-I, 29-I, 30-I, 31-I 32-I, 32-II, 32-III, 33-I, 34-I 35-IR, 35-IIR, 35-IIIR, 35-IVR 38-I	pH, conductivity, chloride sulphate, nitrate, nitrite, iron potassium, sodium, hardness, alkalinity TKN, ammonia, BOD, phenols volatile organics	Once per year
REFUSE MONITORS	25-I, 37-I, 39-I		
	All accessible monitors	Water levels	
LEACHATE COLLECTOR SYSTEM	Maintenance Hole 23	pH, conductivity, chloride sulphate, nitrate, nitrite, iron potassium, sodium, hardness, alkalinity phosphorous, TKN, ammonia, BOD, metals suspended solids, phenols, volatile organics	Four times per year
SURFACE WATER STATIONS	SW1A, SW2, SW3, SW5, SW10, SW11, SW12 SW13, SW14, SW16	pH, conductivity, chloride sulphate, nitrate, nitrite, iron potassium, sodium, hardness, alkalinity phosphorous, TKN, ammonia, BOD suspended solids, phenols	Four times per year
GAS MONITORING	MH 23, 22-III, 24-III, 28-I 29-I, 30-I, 31-I, 32-III, 38-I GP1, GP2, GP3, GP4, GP5	Combustible gas (methane)	Twice per year

NOTES: 1) Water levels taken prior to purging.
2) Flow rates calculated at surface water stations based on field measurements.

TABLE 2-1
LEACHATE QUANTITY SUMMARY
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

YEAR	TOTAL ANNUAL PRECIPITATION		LEACHATE REMOVED			
	(mm)	(m^3)	(m^3)		(% of Precip.)	Rate (L/min/ha)
1987	1057	364,734	102,525	(351)	28.1	5.9
1988	902	311,328	48,543	(131)	15.6	7.5
1989	884	305,084	31,969	(360)	10.5	1.8
1990	1098	378,707	46,935	(361)	12.4	2.6
1991	985	339,722	40,289	(365)	11.9	2.2
1992	1213	418,589	71,616	(364)	17.1	4.0
1993	942	324,956	47,775	(365)	14.7	2.6
1994	1027	354,246	51,253	(365)	14.5	2.8
1995	1080	372,669	36,117	(365)	9.7	2.0
1996	1261	434,942	60,660	(366)	13.9	3.3
1997	977	337,031	42,773	(365)	12.7	2.4
1998	837	288,593	44,640	(365)	15.5	2.5
1999	858	295,838	59,854	(365)	20.2	3.3
2000	1042	359,387	81,624	(366)	22.7	4.5
2001	887	305,843	* 105,087	(365)	* 34.4	* 5.8
2002	859	296,286	* 17,665	(365)	* 6.0	* 1.0
2003	1016	350,520	60,726	(365)	17.3	3.3
2004	942	324,990	63,475	(366)	19.5	3.5
2005	900	310,604	69,014	(365)	22.2	3.8
2006	1047	361,181	80,928	(365)	22.4	4.5
2007	716	247,089	59,176	(365)	23.9	3.3
2008	1014	349,658	110,519	(366)	31.6	6.1
2009	866	298,667	96,553	(365)	32.3	5.3
2010	915	315,641	56,032	(365)	17.8	3.1
2011	900	310,431	86,548	(365)	27.9	4.8
2012	586	202,274	56,631	(366)	28.0	3.1
2013	832	287,144	74,551	(365)	26.0	4.1
2014	740	255,197	73,378	(365)	28.8	4.0

NOTES: 1) 1987 to 2004 precipitation based on data from the Millgrove climatological station.
2005 to 2018 precipitation based on data from the Royal Botanical Gardens climatological station.
2019 to present precipitation based on data from the Hamilton Airport climatological station.
2) Number in brackets indicates number of days leachate volume was monitored.
* - Indicates volume is considered to be anomalous.
3) The 30-year normal precipitation for the Millgrove climatological station is 973 mm.

TABLE 2-1
LEACHATE QUANTITY SUMMARY
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

YEAR	TOTAL ANNUAL PRECIPITATION		LEACHATE REMOVED			
	(mm)	(m^3)	(m^3)		(% of Precip.)	Rate (L/min/ha)
2015	698	240,810	50,695	(365)	21.1	2.8
2016	717	247,227	67,762	(366)	27.4	3.7
2017	1045	360,663	74,758	(365)	20.7	4.1
2018	797	274,965	81,177	(365)	29.5	4.5
2019	1087	375,015	68,163	(365)	18.2	3.8
2020	797	275,000	44,002	(365)	16.0	2.4
2021	938	323,541	61,115	(365)	18.9	3.4
2022	680	234,462	63,297	(365)	27.0	3.5

NOTES: 1) 1987 to 2004 precipitation based on data from the Millgrove climatological station.
2005 to 2018 precipitation based on data from the Royal Botanical Gardens climatological station.
2019 to present precipitation based on data from the Hamilton Airport climatological station.
2) Number in brackets indicates number of days leachate volume was monitored.
* - Indicates volume is considered to be anomalous.
3) The 30-year normal precipitation for the Millgrove climatological station is 973 mm.

TABLE 3-1
GENERAL CHEMISTRY CONCENTRATION SUMMARY - Leachate and Refuse
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	UNITS	LEACHATE CONCENTRATION RANGE				GROUNDWATER HISTORICAL CONCENTRATION RANGE (Reference)						
			COLLECTOR		REFUSE MONITOR		BH23 (N.Service Rd Landfill)			OW5 (North of Bayview Park Landfill)			
			SYSTEM (MH 23)		25-I, 37-I & 39-I	25-I, 37-I & 39-I	23-I	23-II	23-III	5-I	5-II	5-III	5-IV
			1985 to 2021	2022	1990 to 2021	2022	(18 m)	(12 m)	(7 m)	(35 m)	(26 m)	(17 m)	(6 m)
Specific Conductance		µS/cm	620-11130	3000-7600	2010-17000	13000-18000	1230-3530	853-1620	110-959	8300-22600	3362-4900	4520-5500	7120-9300
Chloride	**250**	mg/L	18-1457	240-750	107-2800	1300-2300	4.7-250	1.2-230	<1.6-220	1500-11000	140-365	42-57	221-500
Sulphate	**500**	mg/L	<1-517	3.1-37	<1.0-664	<20-120	409-2120	98-282	22-111	1700-3200	1550-1900	2830-3410	3630-6590
Alkalinity		mg/L	223-4058	1300-3000	1150-7300	6000-6200	66-393	497-898	340-495	45-74	100-120	58-80	700-846
Hardness		mg/L	385-3710	810-1300	1100-3300	1100-3000	267-1880	598-848	330-572	740-5590	232-310	1480-2100	5700-7000
TKN		mg/L	2.8-1000	85-1000	5.7-950	710-1300	1.0-8.0	0.08-5.7	0.02-1.9	4.40-14.5	0.44-6.00	<0.5-31.0	0.1-9.0
Ammonia		mg/L	1.4-328	88-420	3.4-880	510-980	0.9-5.4	<0.01-3.15	<0.01-1.60	4.8-13.4	0.6-4.3	0.16-3.2	<0.05-0.29
Nitrate	**10.0**	mg/L	<0.1-6.3	<0.17-21.7	<0.02-0.60	<1.0-98.3	<0.1-2.51	<0.02-0.6	<0.02-0.3	<0.1	0.7-2.47	0.95-2.0	<0.1
Nitrite	**1.0**	mg/L	<0.01-1.9	<0.021-2.46	<0.01-0.10	<0.10-0.87	<0.01-1.36	<0.01-0.52	<0.01-<0.2	<0.01	0.09-0.38	0.03-0.7	<0.01-<0.1
Sodium		mg/L	41.8-710	7.49-580	52-1700	1400-1800	65-328	40-79	9-41	1500-4570	755-980	600-776	420-700
Iron	**0.3**	mg/L	0.2-2300	240-1200	0.03-75.4	2.70-22.0	<0.01-1.57	<0.01-0.42	<0.01-5.60	<0.5-1.10	<0.1-<0.5	<0.1	<0.1
BOD		mg/L	4-9860	13-1200	0.03-254	1.9-170	<0.5-44	0.1-75	0.2-25	<0.5-<4	<0.5-15	<0.5-10	<0.5-<4
Phenolics		µg/L	0.4-3400	6.8-240	0.015-72	4.0-47	0.02-6.5	<1-32.0	<0.1-41	<1-4.9	<1-1.2	<1-1.3	<1-<10

NOTES: 1) ODWQS - Ontario Drinking Water Quality Standards (2006 and updates).

TABLE 3-2
ORGANIC PARAMETERS CONCENTRATION SUMMARY - Leachate and Refuse
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	LEACHATE CONCENTRATION RANGE			
		COLLECTOR SYSTEM (MH 23)		REFUSE MONITORS 25-I, 37-I & 39-I	REFUSE MONITORS 25-I, 37-I & 39-I
		1984-2021	2022	1984-2021	2022
1,1,1-Trichloroethane		<0.5-236	<1-<5	<0.2-3.8	<2-<5
1,1-Dichloroethane		0.1-330	<1-<5	<0.2-230	<2-<5
1,2-Dichlorobenzene	200	<1-20	<2-<10	<0.2-6.7	<4-<10
1,2-Dichloroethane	5	<0.2-40	<2-<10	<0.2-5.4	<4-<10
1,2-Dichloropropane		<0.1-25.6	<1-<5	<0.2-15.8	<2-<5
1,4-Dichlorobenzene	5	<0.2-12	4.1-<10	<0.2-37	11-34
Acetone		<20-761	<100-<500	<100-<500	<200-<500
Benzene	1	<0.1-58	2.0-<5	<0.2-24	3.2-<5
Chlorobenzene	80	<0.2-188	<2.5-13	<0.2-57	<2-68
Chloroform	100	<0.2-11.8	<1-<5	<0.2-7.8	<2-<5
cis-1,2-Dichloroethylene		<0.2-385	<1-<5	<0.2-365	<2-<5
Dichloromethane	50	<0.3-2300	<5-<100	<1.0-510	<10-<25
Ethyl benzene	1.6	<0.2-129	1.8-<5	<0.2-190	35-140
Methyl ethyl ketone		<5-976	<50-<250	<5-527	<100-<250
m/p-Xylenes	20	<0.2-377	<2.5-12	<0.5-490	110-370
o-Xylene	20	<0.2-180	<2.5-<5	<0.1-130	54-170
Tetrachloroethylene	10	<0.2-23	<1-<5	<0.2-420	<2-<5
Toluene	24	0.2-1060	<2-<10	<0.2-839	<4-<10
trans-1,2-Dichloroethylene		0.2-32	<1-<5	<0.2-20	<5-7.0
Trichloroethylene	5	<0.3-137	<1-<5	<0.2-167	<2-<5
Vinyl chloride	1	<0.2-212	<2-<10	<0.2-100	<4-<10

NOTES: 1) ODWQS - Ontario Drinking Water Quality Standards (2006 and updates).
2) Value ranges presented are for historical parameter concentrations which have been detected above the Reported Detection Limit.
3) All values are in µg/L.

TABLE 3-3
DETECTED ORGANIC PARAMETERS - Groundwater
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	14-I	14-II	15-I	15-II	16-I	16-II	16-III	16-IV	18-IR	18-IIR	18-IIIR	21-IR	21-IIR	21-IIIR	22-IR	22-IIR	22-IIIR	23-I	23-II	23-III	24-I	24-II	24-III	26-I	26-II	26-III
1,1,1-Trichloroethane						10	4.2	0.86	0.15																		
1,1-Dichloroethane			1.2		0.10			0.78																			
1,2-Dichloropropane			0.19																								
1,4-Dichlorobenzene	**5**		3.2																								
Acetone																			31								
Benzene	**1**		0.65					0.13		0.13	0.19	0.40		0.22													
Chlorobenzene	**80**		6.0		0.11																						
cis-1,2-Dichloroethylene			7.3		0.15						0.13																
Ethylbenzene	**1.6**																										
m/p-Xylenes												0.13		0.16													
o-Xylenes																											
Toluene	**24**							0.64		0.20		0.28		0.25													
Total Xylenes	**20**											0.13		0.16													
trans-1,2-Dichloroethylene			0.35																								
Trichloroethylene	**5**																										
Vinyl Chloride	**1**		**4.8**																								

																			BAYVIEW PARK REFERENCE MONITORS			
PARAMETER	**ODWQS**	**27-I**	**27-II**	**27-III**	**28-I**	**29-I**	**30-I**	**31-I**	**32-I**	**32-II**	**32-III**	**33-I**	**34-I**	**35-IR**	**35-IIR**	**35-IIIR**	**35-IVR**	**38-I**	**39-I**	**5-I**	**5-II**	**5-III**	**5-IV**
1,1,1-Trichloroethane								*										*					
1,1-Dichloroethane					0.10		0.30			0.22	0.34												
1,2-Dichloropropane																							
1,4-Dichlorobenzene	**5**				0.27														**32**				
Acetone																							
Benzene	**1**						0.20																
Chlorobenzene	**80**				0.27														18				
cis-1,2-Dichloroethylene					0.48		5.7			0.15	0.18												
Ethylbenzene	**1.6**																		140				
m/p-Xylenes																			340				
o-Xylenes																			130				
Toluene	**24**															1.4							
Total Xylenes	**20**																		**470**				
trans-1,2-Dichloroethylene							0.63																
Trichloroethylene	**5**						1.0			0.16	0.16												
Vinyl Chloride	**1**						**2.9**																

NOTES: 1) Values presented are for parameter concentrations detected above the Reported Detection Limit in 2022.
2) ODWQS - Ontario Drinking Water Quality Standards (2006 and updates)
3) Blank indicates parameter concentration is below the Reported Detection Limit.
4) Bold and shading indicates an exceedance of the ODWQS.
5) All values are in µg/L.
6) * 31-I not sampled due to insufficient volume. 38-I not sampled due to blockage.

TABLE 3-4
GROUNDWATER ODWQS EXCEEDANCES
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

			PARAMETER and ODWQS								
		MONITOR LOCATION	CHLORIDE (250 mg/L)	SULPHATE (500 mg/L)	ALKALINITY (30-500 mg/L)	HARDNESS (80-100 mg/L)	ORGANIC N (0.15 mg/L)	NITRITE (1.0 mg/L)	SODIUM (200 mg/L)	IRON (0.3 mg/L)	pH (6.5-8.5)
REFERENCE	KING ROAD	5-I	3500	2900		2200	0.90		2500		
		5-II	290	1700		290	0.17		920		
		5-III		3200		2000	0.40		710		
		5-IV	500	6100	740	6400	0.62		530		
PERIMETER	North	21-IR		1500		1100			500		
		21-IIR		1800	600	1000	0.23		780		
		21-IIIR		710	630	1200					
		22-IR			710	670	0.19		230		
		22-IIR			630	750			310		
		22-IIIR			520	650					
		23-I		1300		1500	0.40		220	0.51	
		23-II			780	750	0.50				
		23-III				360				5.6	
	West	29-I				460					
	East	28-I		860	810	2100	0.56				
		30-I			700	690					
DOWNGRADIENT	West	14-I	1400	1500		2100	0.60		870	1.3	
		14-II			1000	1400	0.57			1.4	
		33-I	410		1100	1200	1.20		290		
		34-I		340		750	0.25				
	East	18-IR				610					
		18-IIR				880					
		18-IIIR				510	0.17				
	South	15-I	1300			1400	0.50		430		
		15-II	410			910	0.30				
		16-I	16000	1600		9700	5.0		7900		
		16-II	15000	1900		7200	2.0	1.79	6300		
		16-III	24000	1300		17000	3.0		7900		
		16-IV				500					
		24-I	34000	1100		27000	4.0		15000	37	6.3
		24-II	39000	1100		25000	8.0		14000	28	
		24-III				410	0.23				
		26-I	470	870		540			560		
		26-II				500	0.30				
		26-III			640	830					
		27-I	2900	750		2100	1.1		1400	0.43	
		27-II	850			710	0.70		430		
		27-III			540	740	0.21				
		32-I				640			220		
		32-II				780	0.21				
		32-III	360	720		1000	0.39		270		
		35-IR	67000	800		50000	11.0		20000		
		35-IIR	1600			1300	0.70		680		
		35-IIIR	760	510		940	1.7		360		
		35-IVR		1500	520	1700			380		

NOTES: 1) ODWQS - Ontario Drinking Water Quality Standards (2006 and updates)
2) Blank indicates parameter concentration below ODWQS guideline.
3) Results for King Road (Bayview Park) monitors from April or September 2022.

TABLE 3-5
GUIDELINE B-7 CRITERIA - On Site Monitors
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL - 2022 MONITORING PROGRAM

PARAMETER	ODWQS		CRITERIA FOR REASONABLE USE		REFERENCE				DOWNGRADIENT										
					5-I	5-II	5-III	5-IV	14-I	14-II	15-I	15-II	16-I	16-II	16-III	16-IV	18-IR	18-IIR	18-IIIR
			SHALLOW	DEEP	D	S	S	S	S	S	S	S	D	S	S	S	D	S	S
	MAC	MDC	MONITORS	MONITOR	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep
Alkalinity		500	403	278	48	110	61	**740**	110	**1000**	220	**450**	41	23	37	**440**	**460**	370	400
Chloride		250	227	1699*	**3500**	**290**	48	**500**	**1400**	170	**1300**	**410**	**16000**	**15000**	**24000**	59	22	130	45
Hardness		100	1453*	1028*	**2200**	290	**2000**	**6400**	**2100**	1400	1400	910	**9700**	**7200**	**17000**	500	610	880	510
Organic Nitrogen		0.15	0.89*	0.42*	**0.50**	<0.05	0.40	0.37	0.60	0.57	0.50	0.30	**5.0**	**2.0**	**3.0**	0.02	<0.05	0.10	0.17
Sodium		200	444*	1316*	**2500**	**910**	**680**	**510**	**870**	180	430	190	**7900**	**6300**	**7900**	56	42	170	52
Sulphate		500	2056*	1607*	**2900**	1600	**3200**	**6100**	1500	420	330	240	1600	1900	1300	67	160	480	130
1,1-Dichloroethylene	14		3.5		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dichlorobenzene	200		50.0		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<1.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5		1.3		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<1.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	5		1.3		<0.20	<0.20	<0.20	<0.20	<0.20	**3.2**	<0.20	<0.20	<1.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Benzene	1		0.25		<0.10	<0.10	<0.10	<0.10	<0.10	**0.65**	<0.10	<0.10	<0.50	<0.10	0.13	<0.10	0.13	0.19	**0.40**
Carbon tetrachloride	2		0.50		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80		20.0		<0.10	<0.10	<0.10	<0.10	<0.10	6.0	<0.10	0.11	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Dichloromethane	50		12.5		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene		1.6	0.8		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
m/p-Xylenes		20	10.0		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	0.13
o-Xylene		20	10.0		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Tetrachloroethylene	10		2.5		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene		24	12.0		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<1.0	<0.20	0.64	<0.20	0.20	<0.20	0.28
Trichloroethylene	5		1.3		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Vinyl chloride	1		0.25		<0.20	<0.20	<0.20	<0.20	<0.20	**4.8**	<0.20	<0.20	<1.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

NOTES: 1) ODWQS - Ontario Drinking Water Quality Standards (2006 and updates).
MAC - Maximum Acceptable Concentration (health related parameter)
MDC - Maximum Desirable Concentration (aesthetic parameter)
* - Indicates reference concentration exceeds the ODWQS.
D - Indicates that the 2022 values are compared to the criteria for deep groundwater monitors (greater than, or equal to, 30 m in depth)
S - Indicates that the 2022 values are compared to the criteria for shallow groundwater monitors (less than 30 m in depth)
2) Concentrations in mg/L for inorganic parameters and µg/L for organic parameters.
3) Reference average is assumed as 0.0 µg/L for all organic parameters.
4) Shading indicates parameter exceeds criteria for reasonable use.
5) ** 30-I not sampled due to an insufficient volume; 38-I not sampled due to blockage.

TABLE 3-5
GUIDELINE B-7 CRITERIA - On Site Monitors
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL - 2022 MONITORING PROGRAM

PARAMETER	ODWQS		CRITERIA FOR REASONABLE USE		DOWNGRADIENT																	
					24-I	24-II	24-III	26-I	26-II	26-III	27-I	27-II	27-III	32-I	32-II	32-III	33-I	34-I	35-IR	35-IIR	35-IIIR	35-IVR
			SHALLOW	DEEP	S	S	S	S	S	S	S	S	S	S	S	S	S	S	D	S	S	S
	MAC	MDC	MONITORS	MONITOR	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep
Alkalinity		500	403	278	22	89	**450**	220	**440**	**640**	170	160	**540**	**420**	**480**	**490**	**1100**	**460**	14	250	160	**520**
Chloride		250	227	1699*	**34000**	**39000**	38	**470**	25	14	**2900**	**850**	170	210	180	**360**	**410**	100	**67000**	**1600**	**760**	170
Hardness		100	1453*	1028*	**27000**	**25000**	410	540	500	830	**2100**	710	740	640	780	1000	1200	750	**50000**	1300	940	**1700**
Organic Nitrogen		0.15	0.89*	0.42*	**4.0**	**8.0**	0.23	<0.05	0.30	<0.05	**1.1**	0.70	0.21	0.10	0.21	0.39	**1.2**	0.25	**11.0**	0.70	**1.7**	0.12
Sodium		200	444*	1316*	**15000**	**14000**	74	**560**	160	77	**1400**	430	140	220	190	270	290	110	**20000**	**680**	360	380
Sulphate		500	2056*	1607*	1100	1100	38	870	320	290	750	300	200	330	400	720	130	340	800	380	510	1500
1,1-Dichloroethylene	14		3.5		<0.25	<0.25	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.25	<0.10	<0.10	<0.10
1,2-Dichlorobenzene	200		50.0		<0.50	<0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.50	<0.20	<0.20	<0.20
1,2-Dichloroethane	5		1.3		<0.50	<0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.50	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	5		1.3		<0.50	<0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.50	<0.20	<0.20	<0.20
Benzene	1		0.25		<0.25	<0.25	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.25	<0.10	<0.10	<0.10
Carbon tetrachloride	2		0.50		<0.25	<0.25	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.25	<0.10	<0.10	<0.10
Chlorobenzene	80		20.0		<0.25	<0.25	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.25	<0.10	<0.10	<0.10
Dichloromethane	50		12.5		<1.3	<1.3	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.3	<0.50	<1.3	<0.50	<0.50	<0.50
Ethyl benzene		1.6	0.8		<0.25	<0.25	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.25	<0.10	<0.10	<0.10
m/p-Xylenes		20	10.0		<0.25	<0.25	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.25	<0.10	<0.10	<0.10
o-Xylene		20	10.0		<0.25	<0.25	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.25	<0.10	<0.10	<0.10
Tetrachloroethylene	10		2.5		<0.25	<0.25	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.25	<0.10	<0.10	<0.10
Toluene		24	12.0		<0.50	<0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.50	<0.20	1.4	<0.20
Trichloroethylene	5		1.3		<0.25	<0.25	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.16	0.16	<0.25	<0.10	<0.25	<0.10	<0.10	<0.10
Vinyl chloride	1		0.25		<0.50	<0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.50	<0.20	<0.20	<0.20

NOTES: 1) ODWQS - Ontario Drinking Water Quality Standards (2006 and updates).
MAC - Maximum Acceptable Concentration (health related parameter)
MDC - Maximum Desirable Concentration (aesthetic parameter)
* - Indicates reference concentration exceeds the ODWQS.
D - Indicates that the 2022 values are compared to the criteria for deep groundwater monitors (greater than, or equal to, 30 m in depth)
S - Indicates that the 2022 values are compared to the criteria for shallow groundwater monitors (less than 30 m in depth)
2) Concentrations in mg/L for inorganic parameters and µg/L for organic parameters.
3) Reference average is assumed as 0.0 µg/L for all organic parameters.
4) Shading indicates parameter exceeds criteria for reasonable use.
5) ** 30-I not sampled due to an insufficient volume; 38-I not sampled due to blockage.

TABLE 3-5
GUIDELINE B-7 CRITERIA - On Site Monitors
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL - 2022 MONITORING PROGRAM

PARAMETER	ODWQS		CRITERIA FOR REASONABLE USE		PERIMETER													
					21-IR	21-IIR	21-IIIR	22-IR	22-IIR	22-IIIR	23-I	23-II	23-III	28-I	29-I	30-I	31-I	38-I
			SHALLOW	DEEP	S	S	S	S	S	S	S	S	S	S	S	S	S	S
	MAC	MDC	MONITORS	MONITOR	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep
Alkalinity		500	403	278	**470**	**600**	**630**	**710**	**630**	**520**	170	**780**	**370**	**810**	400	**700**	**	**
Chloride		250	227	1699*	7.4	9.5	6.4	6.4	6.6	14	7.3	3.3	4.3	220	7.1	18		
Hardness		100	1453*	1028*	1100	1000	1200	670	750	650	**1500**	750	360	**2100**	460	690		
Organic Nitrogen		0.15	0.89*	0.42*	0.11	0.23	0.13	0.19	<0.05	0.04	0.40	0.50	<0.05	0.56	<0.05	0.06		
Sodium		200	444*	1316*	**500**	**780**	160	230	310	16	220	67	19	140	11	26		
Sulphate		500	2056*	1607*	1500	1800	710	370	310	130	1300	98	24	860	39	1.5		
1,1-Dichloroethylene	14		3.5		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.25	<0.10	<0.10	<0.10		
1,2-Dichlorobenzene	200		50.0		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<0.50	<0.20	<0.20	<0.20		
1,2-Dichloroethane	5		1.3		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<0.50	<0.20	<0.20	<0.20		
1,4-Dichlorobenzene	5		1.3		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<0.50	0.27	<0.20	<0.20		
Benzene	1		0.25		<0.10	0.22	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.25	<0.10	<0.10	0.20		
Carbon tetrachloride	2		0.50		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.25	<0.10	<0.10	<0.10		
Chlorobenzene	80		20.0		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.25	0.27	<0.10	<0.10		
Dichloromethane	50		12.5		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<1.3	<0.50	<0.50	<0.50		
Ethyl benzene		1.6	0.8		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.25	<0.10	<0.10	<0.10		
m/p-Xylenes		20	10.0		<0.10	0.16	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.25	<0.10	<0.10	<0.10		
o-Xylene		20	10.0		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.25	<0.10	<0.10	<0.10		
Tetrachloroethylene	10		2.5		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.25	<0.10	<0.10	<0.10		
Toluene		24	12.0		<0.20	0.25	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<0.50	<0.20	<0.20	<0.20		
Trichloroethylene	5		1.3		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.25	<0.10	<0.10	1.0		
Vinyl chloride	1		0.25		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<0.50	<0.20	<0.20	**2.9**		

NOTES: 1) ODWQS - Ontario Drinking Water Quality Standards (2006 and updates).
MAC - Maximum Acceptable Concentration (health related parameter)
MDC - Maximum Desirable Concentration (aesthetic parameter)
* - Indicates reference concentration exceeds the ODWQS.
D - Indicates that the 2022 values are compared to the criteria for deep groundwater monitors (greater than, or equal to, 30 m in depth)
S - Indicates that the 2022 values are compared to the criteria for shallow groundwater monitors (less than 30 m in depth)
2) Concentrations in mg/L for inorganic parameters and µg/L for organic parameters.
3) Reference average is assumed as 0.0 µg/L for all organic parameters.
4) Shading indicates parameter exceeds criteria for reasonable use.
5) ** 30-I not sampled due to an insufficient volume; 38-I not sampled due to blockage.

TABLE 3-6

GROUNDWATER ODWQS EXCEEDANCES - Meridian Brick Property

BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR LOCATION	SAMPLING EVENT	PARAMETER and ODWQS										
		Iron	Chloride	Sulphate	Nitrate	Organic Nitrogen	Alkalinity	Hardness	Benzene	1,4-Dichloro benzene	Chloro-benzene	Vinyl chloride
		0.3 mg/L	250 mg/L	500 mg/L	10.0 mg/L	0.15 mg/L	500 mg/L	100 mg/L	1 µg/L	5 µg/L	80 µg/L	1 µg/L
6A	May 22		820					380				
6B	May 22	8.6					850	660	3.5			51
7A	May 22							330				13
7B	May 22	3.1					680	610				
8A	May 22	2.0				0.28	1400	1300	2.0			4.8
8B	May 22	0.83				0.34	1500	1200	2.0			2.6
9	May 22	0.47				0.18	1700	860				
10A	May 22		26000	1300	36.4	3.0		17000				
10B	May 22	11.0	790			3.0	1300	1600	3.1	8.9	81	
11	May 22	3.5	410			2.0	1200	1100	4.3			
12A	May 22	0.63	940	1000		0.70	850	2200				
12B	May 22		810			1.0	1200	2000				

NOTES: 1) ODWQS - Ontario Drinking Water Quality Standards (2006 and updates)

2) Blank indicates parameter concentration was within the ODWQS.

3) Inorganic parameter concentrations in mg/L, organic parameter concentrations in µg/L.

TABLE 3-7

GUIDELINE B-7 CRITERIA - Volatile Organic Compounds : Meridian Brick Monitors

CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS STANDARDS		CRITERIA FOR REASONABLE USE	6A	6B	7A	7B	8A	8B
	MAC	MDC		Jun	Jun	Jun	Jun	Jun	Jun
1,1-Dichloroethylene	14		3.5	<0.20	<0.20	<0.20	<0.20	<0.40	<0.20
1,2-Dichlorobenzene	200		100.0	<0.40	<0.40	<0.40	<0.40	<0.80	<0.40
1,2-Dichloroethane	5		1.3	<0.49	0.79	<0.49	<0.49	<0.98	<0.49
1,4-Dichlorobenzene	5.0		2.5	<0.40	<0.40	<0.40	<0.40	**4.5**	**4.2**
Benzene	1.0		0.25	<0.20	**3.5**	<0.20	<0.20	**2.0**	**2.0**
Carbon tetrachloride	2.0		0.50	<0.19	<0.19	<0.19	<0.19	<0.38	<0.19
Chlorobenzene	80.0		40.0	<0.20	1.4	<0.20	<0.20	**44**	17
Dichloromethane	50		12.5	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0
Ethyl Benzene		1.6	0.8	<0.20	<0.20	<0.20	<0.20	<0.40	<0.20
m/p-Xylenes		20	10.0	<0.20	0.30	<0.20	<0.20	<0.40	<0.20
o-Xylene		20	10.0	<0.20	0.65	<0.20	<0.20	<0.40	<0.20
Tetrachloroethylene	10		2.5	<0.20	<0.20	<0.20	<0.20	<0.40	<0.20
Toluene		24	12.0	<0.20	0.60	<0.20	<0.20	<0.80	0.29
Trichloroethylene	5		1.3	<0.20	0.49	<0.20	0.40	<0.40	<0.20
Vinyl chloride	1		0.25	**0.31**	**51**	**13**	**0.97**	**4.8**	**2.6**

PARAMETER	ODWQS STANDARDS		CRITERIA FOR REASONABLE USE	9	10A	10B	11	12A	12B
	MAC	MDC		Jun	Jun	Jun	Jun	Jun	Jun
1,1-Dichloroethylene	14		3.5	<0.20	<0.20	<0.40	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	200		100.0	<0.40	<0.40	4.8	0.43	<0.40	<0.40
1,2-Dichloroethane	5		1.3	<0.49	<0.49	<0.98	<0.49	<0.49	<0.49
1,4-Dichlorobenzene	5.0		2.5	<0.40	<0.40	**8.9**	1.7	**3.8**	1.5
Benzene	1.0		0.25	**0.95**	<0.20	**3.1**	**4.3**	**0.49**	**0.68**
Carbon tetrachloride	2.0		0.50	<0.19	<0.19	<0.38	<0.19	<0.19	<0.19
Chlorobenzene	80.0		40.0	0.95	<0.20	**81**	5.9	39	21
Dichloromethane	50		12.5	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0
Ethyl Benzene		1.6	0.8	<0.20	<0.20	<0.40	<0.20	<0.20	<0.20
m/p-Xylenes		20	10.0	<0.20	<0.20	<0.40	<0.20	<0.20	<0.20
o-Xylene		20	10.0	<0.20	<0.20	<0.40	<0.20	<0.20	<0.20
Tetrachloroethylene	10		2.5	<0.20	<0.20	<0.40	<0.20	<0.20	<0.20
Toluene		24	12.0	<0.20	<0.20	<0.80	<0.20	<0.20	<0.20
Trichloroethylene	5		1.3	<0.20	<0.20	<0.40	<0.20	<0.20	<0.20
Vinyl chloride	1		0.25	**0.34**	<0.20	<0.40	<0.20	<0.20	<0.20

NOTES: 1) ODWQS - Ontario Drinking Water Quality Standards (2006).
MAC - Maximum Acceptable Concentration (health related parameter)
MDC - Maximum Desirable Concentration (aesthetic parameter)
"*" - Indicates concentration detected below the Limit of Quantitation
2) Reference average is assumed as 0.0 µg/L for all organic parameters.
3) Shading indicates parameter exceeds criteria for reasonable use.
4) All units are µg/L.

TABLE 3-8
SURFACE WATER PWQO EXCEEDANCES
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAI

LOCATION			SAMPLING EVENT	PARAMETER and PWQO	
				IRON (0.30 mg/L)	PHOSPHORUS (0.030 mg/L)
FALCON CREEK	UPSTREAM	SW1A	April		
			June		0.150
			September	1.1	0.093
			December		0.040
	ADJACENT/ DOWNSTREAM	SW2	April		
			June		0.160
			September	0.45	0.072
			December		0.080
		SW3	April		
			June		0.150
			September	Dry	
			December		0.088
	DOWNSTREAM	SW11	April		
			June	Dry	
			September	Dry	
			December	Dry	
		SW12	April		
			June	Dry	
			September	Dry	
			December	0.46	0.081
		SW13	April		
			June		0.130
			September	Dry	
			December	0.90	0.049
		SW14	April		
			June		0.140
			September	Dry	
			December	Dry	
INDIAN CREEK	DOWNSTREAM	SW5	April	Dry	
			June	Dry	
			September	Dry	
			December		
		SW10	April		
			June		0.110
			September	Dry	
			December	Dry	
		SW16	April		
			June	Dry	
			September	Dry	
			December	Dry	

NOTES: 1) PWQO - Provincial Water Quality Objectives (1994 and updates)
2) Blank indicates parameter concentration was within the PWQO.

APPENDIX

A GROUNDWATER REGIME

FIGURE A-1
GROUNDWATER HYDROGRAPH - Monitor Location 14

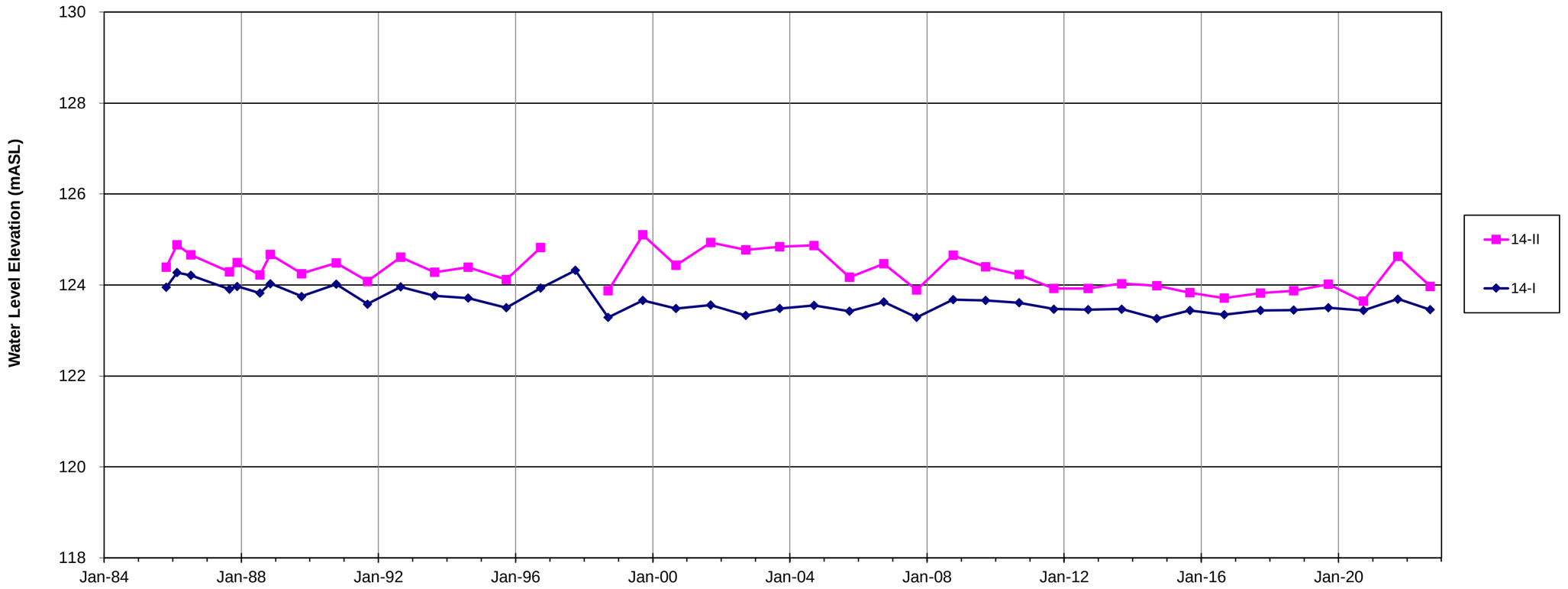


FIGURE A-2
GROUNDWATER HYDROGRAPH - Monitor Location 15

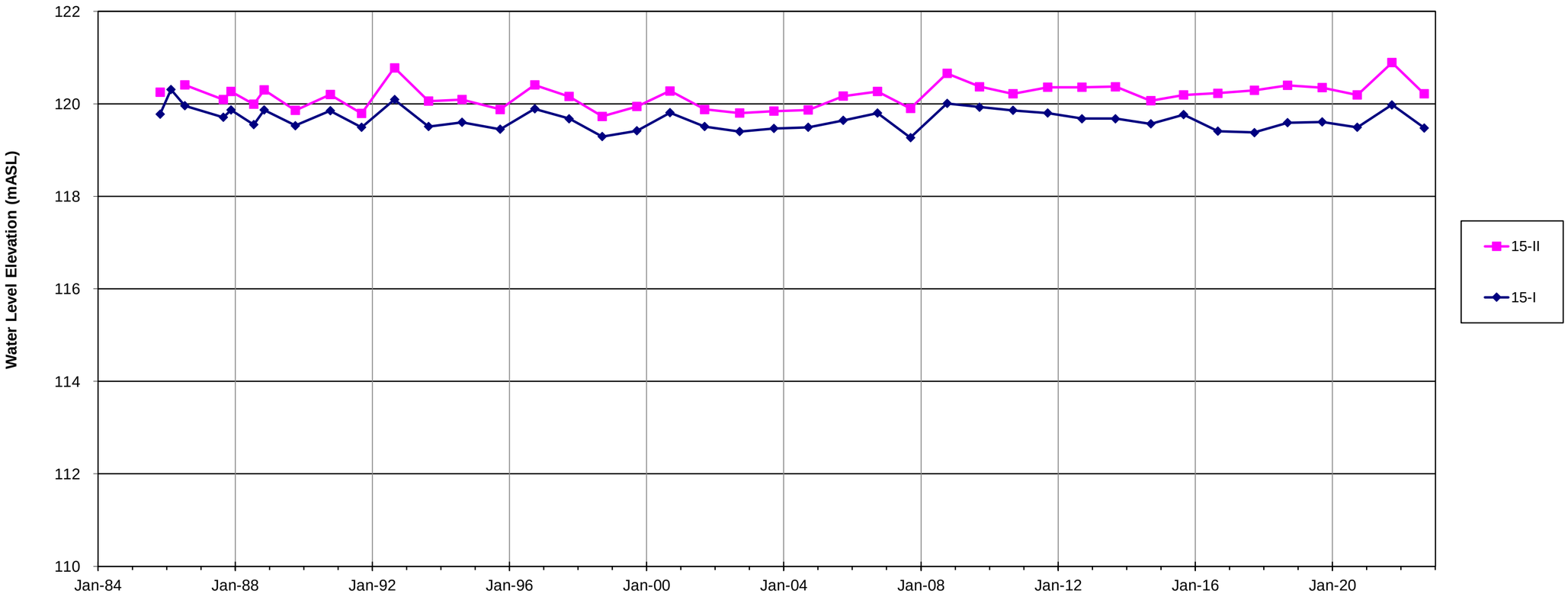


FIGURE A-3
GROUNDWATER HYDROGRAPH - Monitor Location 16

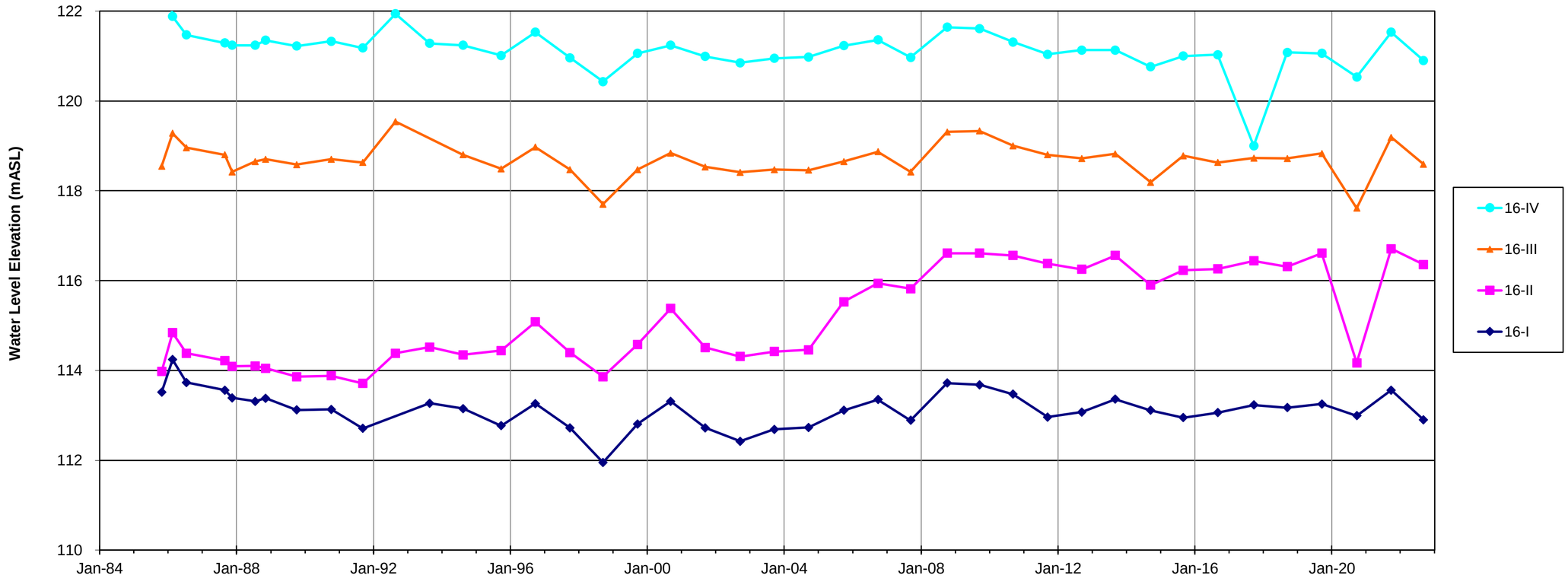


FIGURE A-4
GROUNDWATER HYDROGRAPH - Monitor Location 18

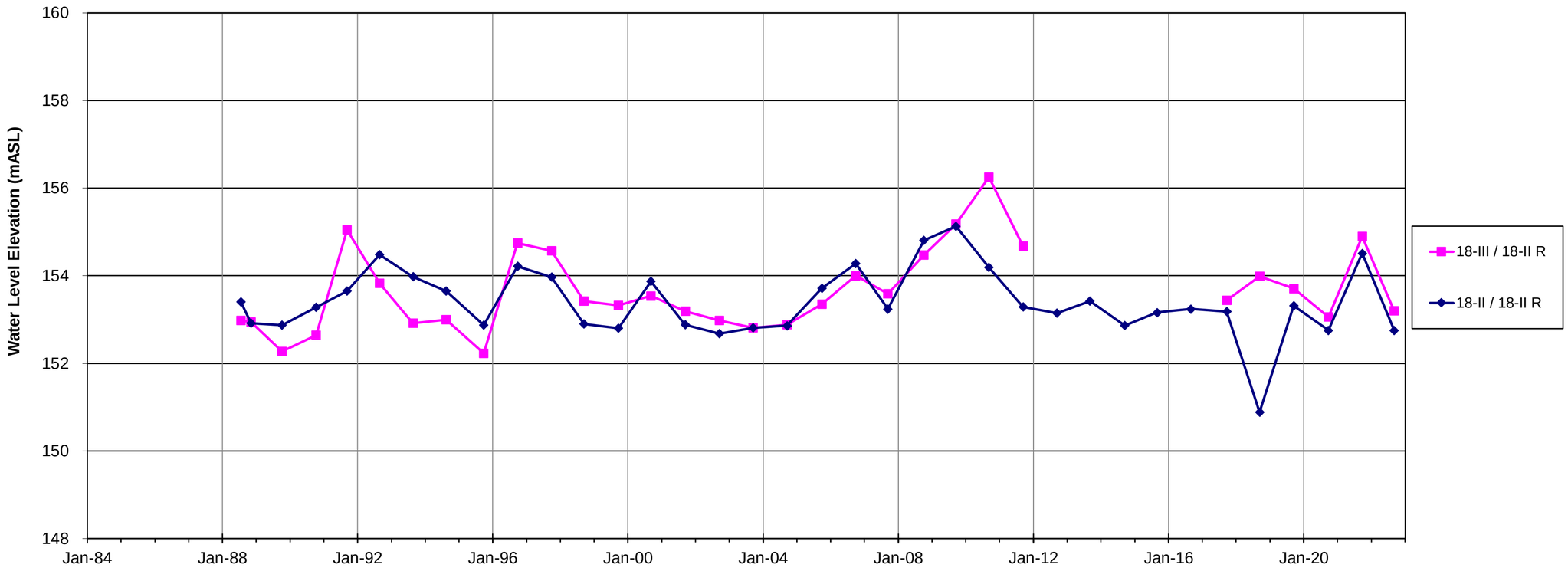


FIGURE A-5
GROUNDWATER HYDROGRAPH - Monitor Location 21

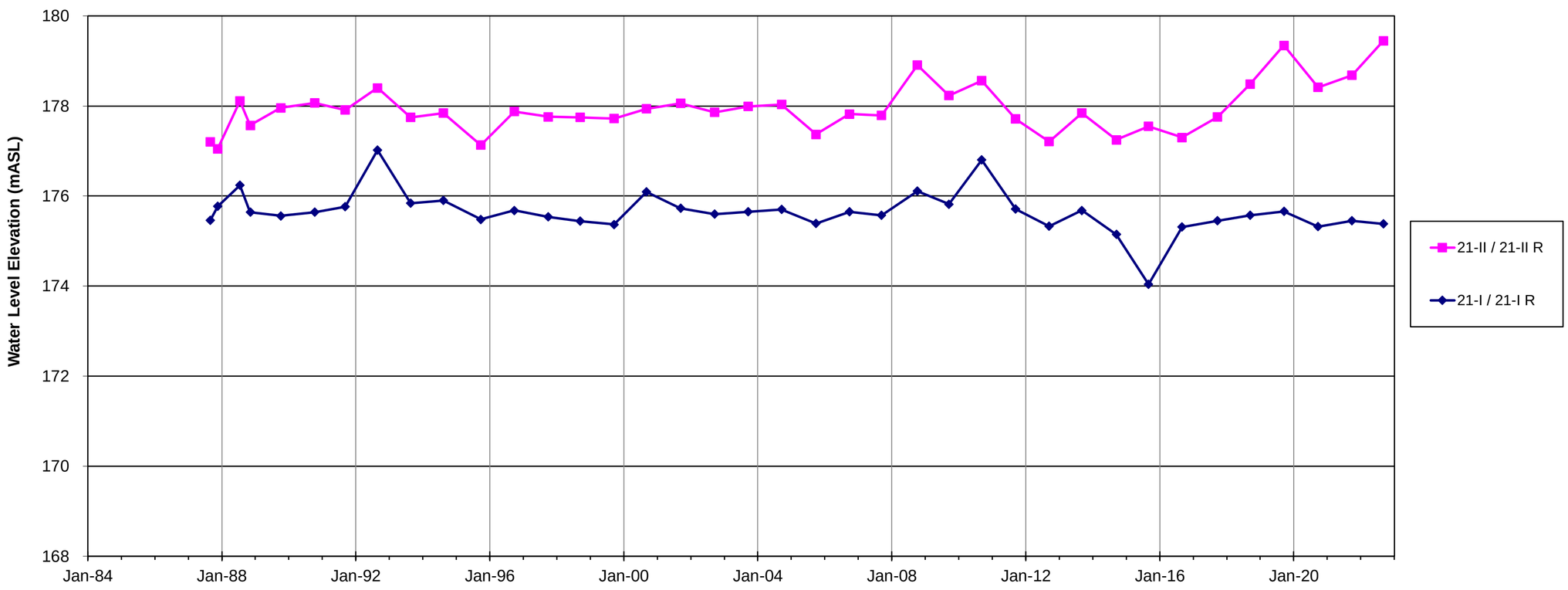


FIGURE A-6
GROUNDWATER HYDROGRAPH - Monitor Location 22

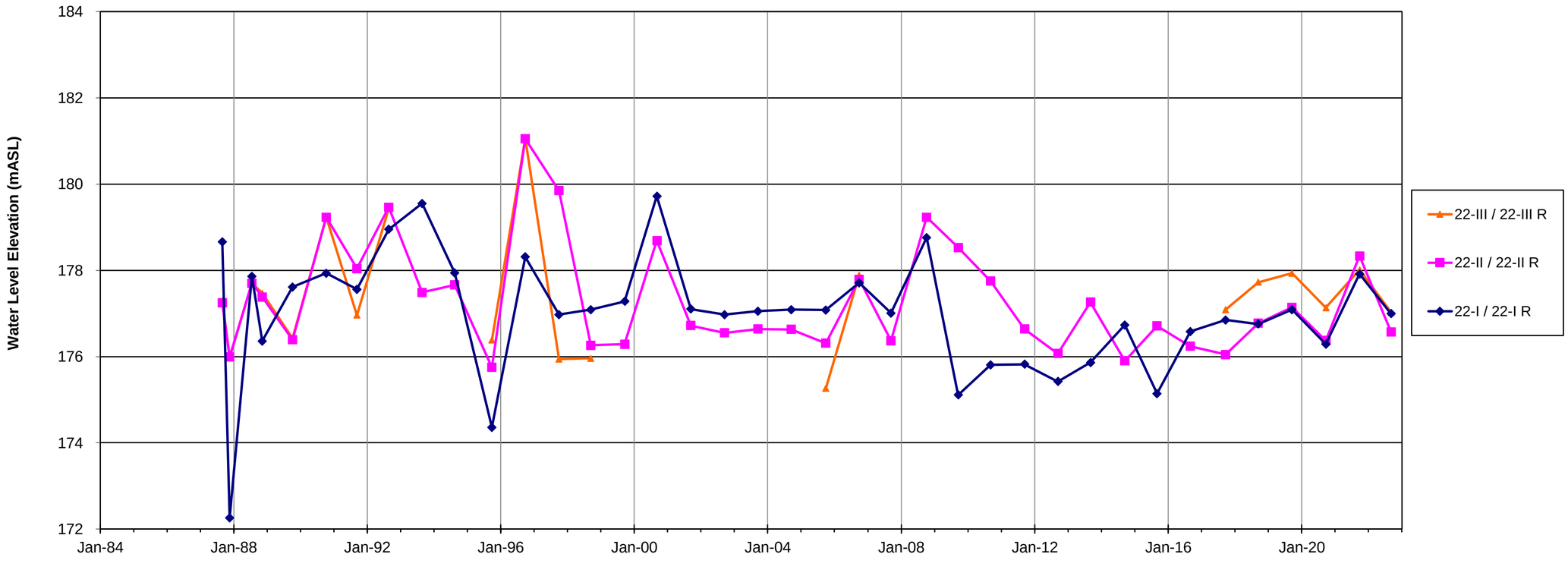


FIGURE A-7
GROUNDWATER HYDROGRAPH - Monitor Location 23

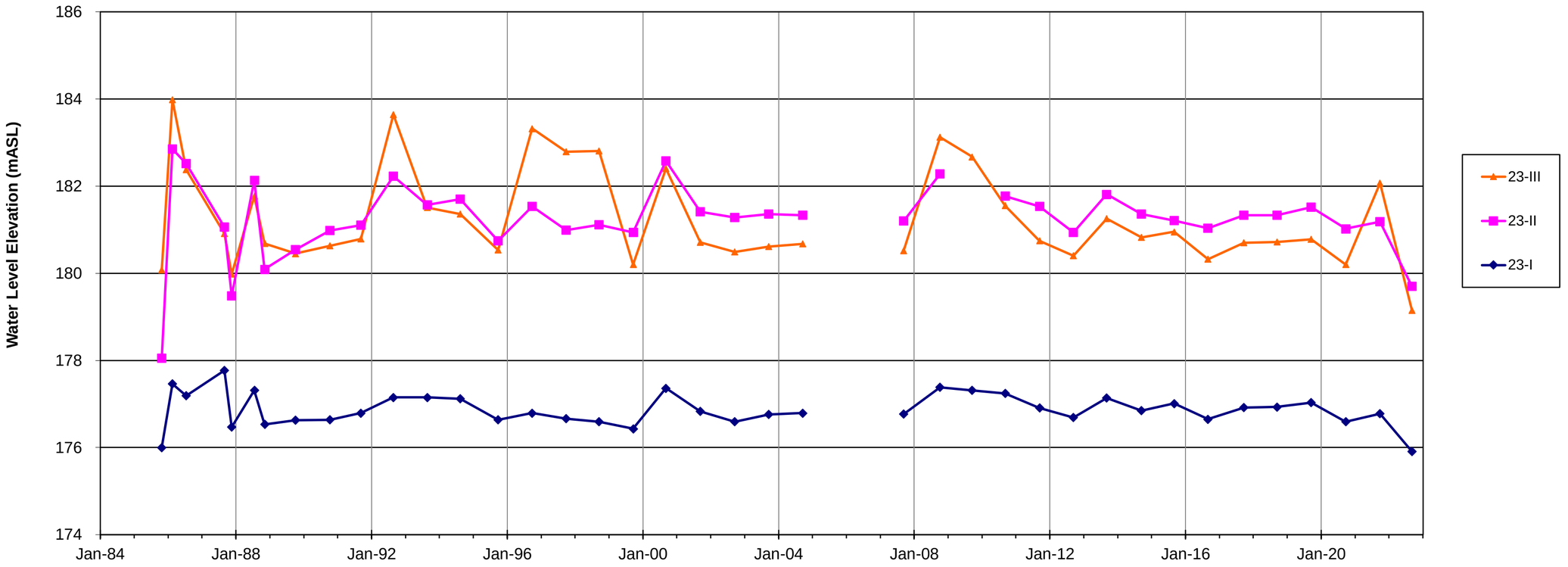


FIGURE A-8
GROUNDWATER HYDROGRAPH - Monitor Location 24

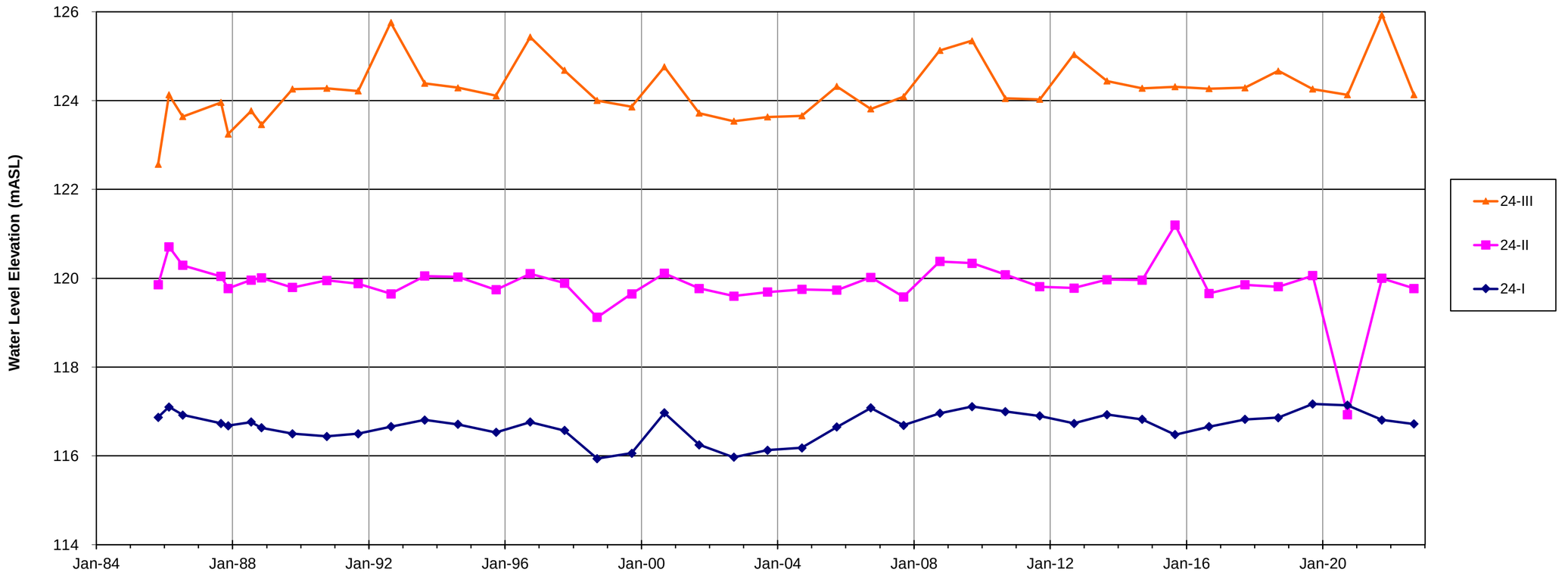


FIGURE A-9
LEACHATE HYDROGRAPH - Monitor Location 25

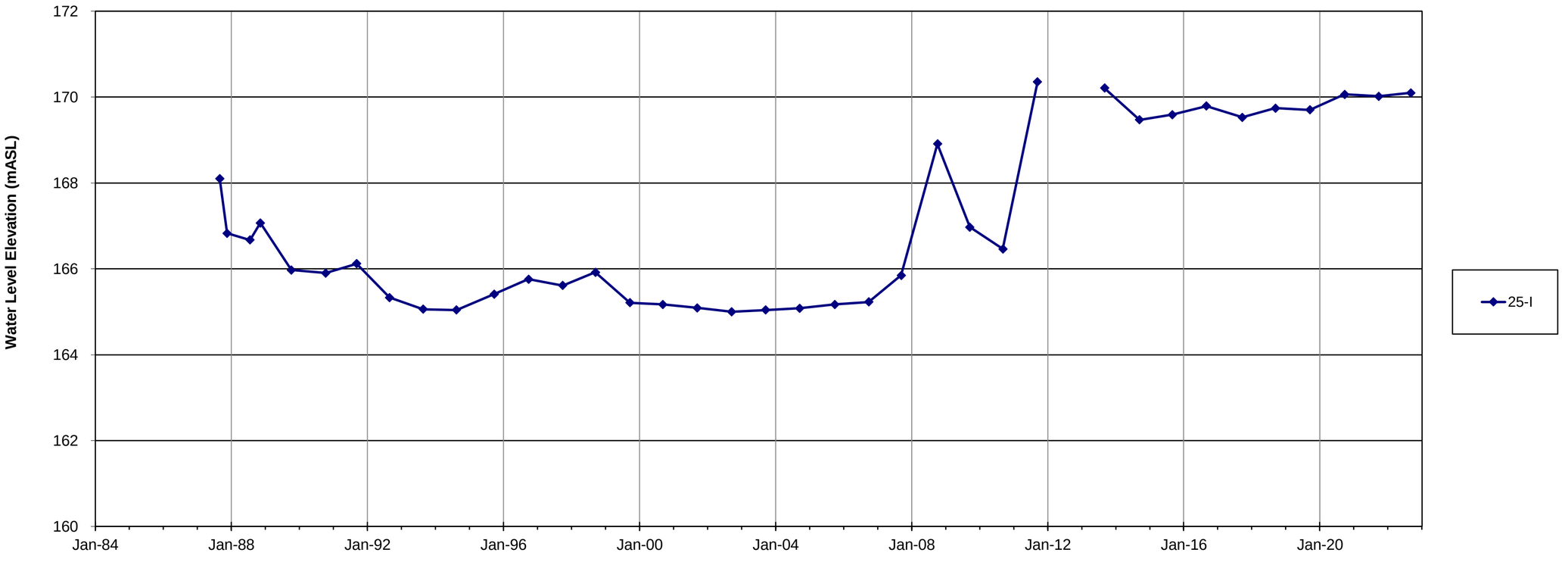


FIGURE A-10
GROUNDWATER HYDROGRAPH - Monitor Location 26

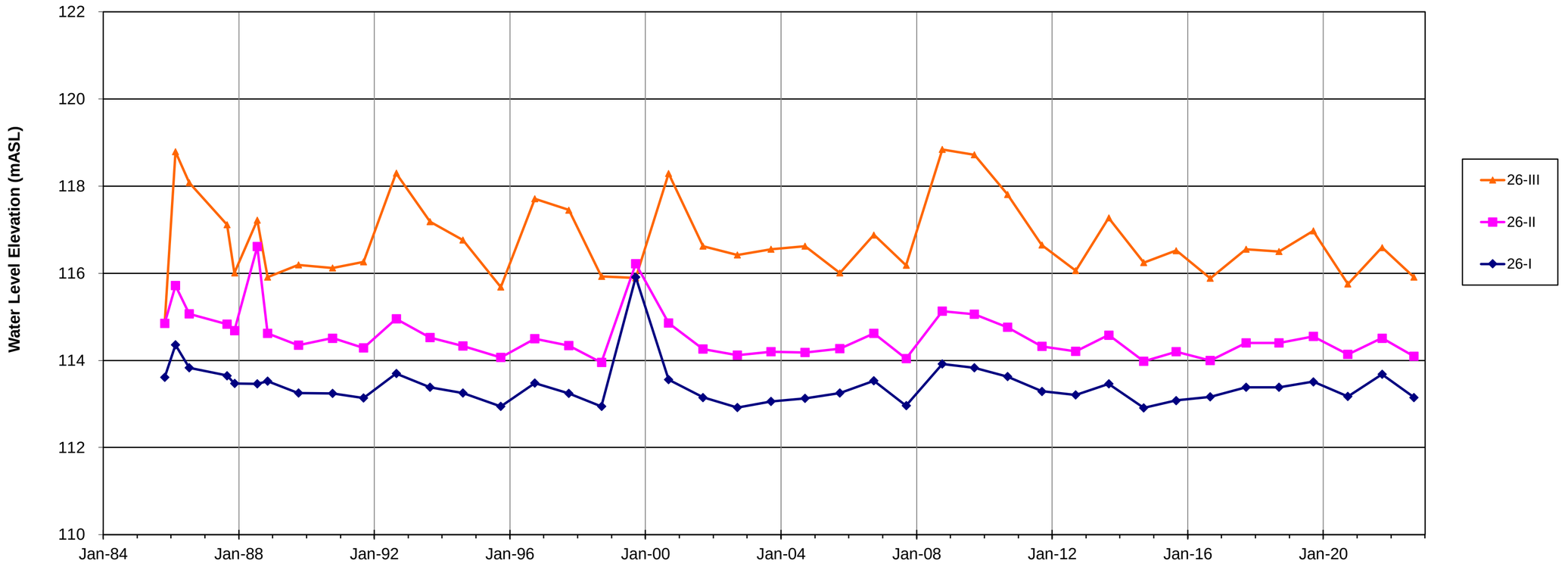


FIGURE A-11
GROUNDWATER HYDROGRAPH - Monitor Location 27

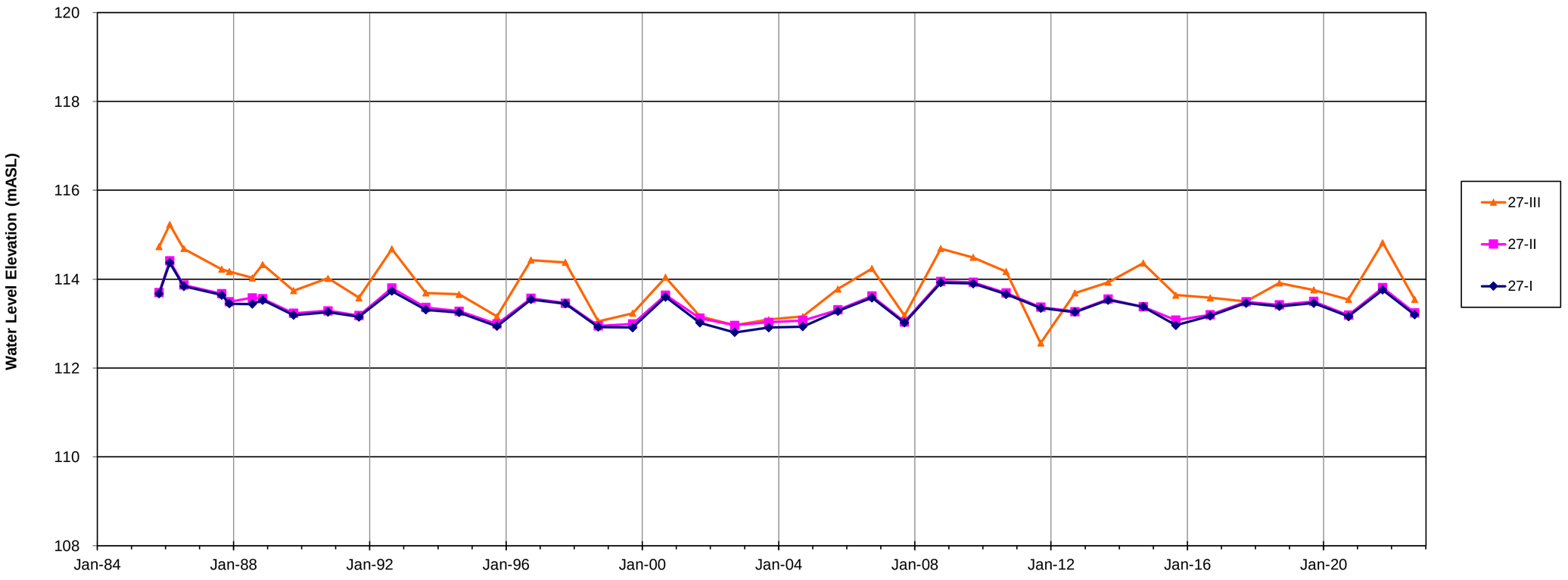


FIGURE A-12
GROUNDWATER HYDROGRAPH - Monitor Location 28

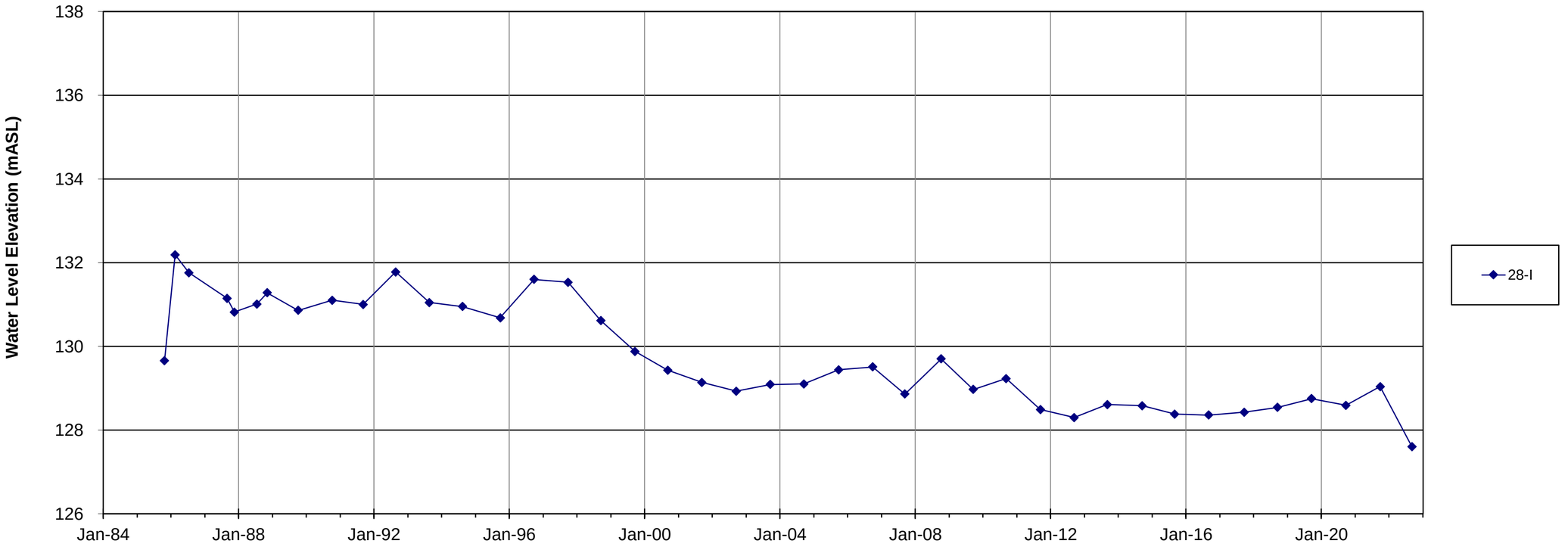


FIGURE A-13
GROUNDWATER HYDROGRAPH - Monitor Locations 29 - 31

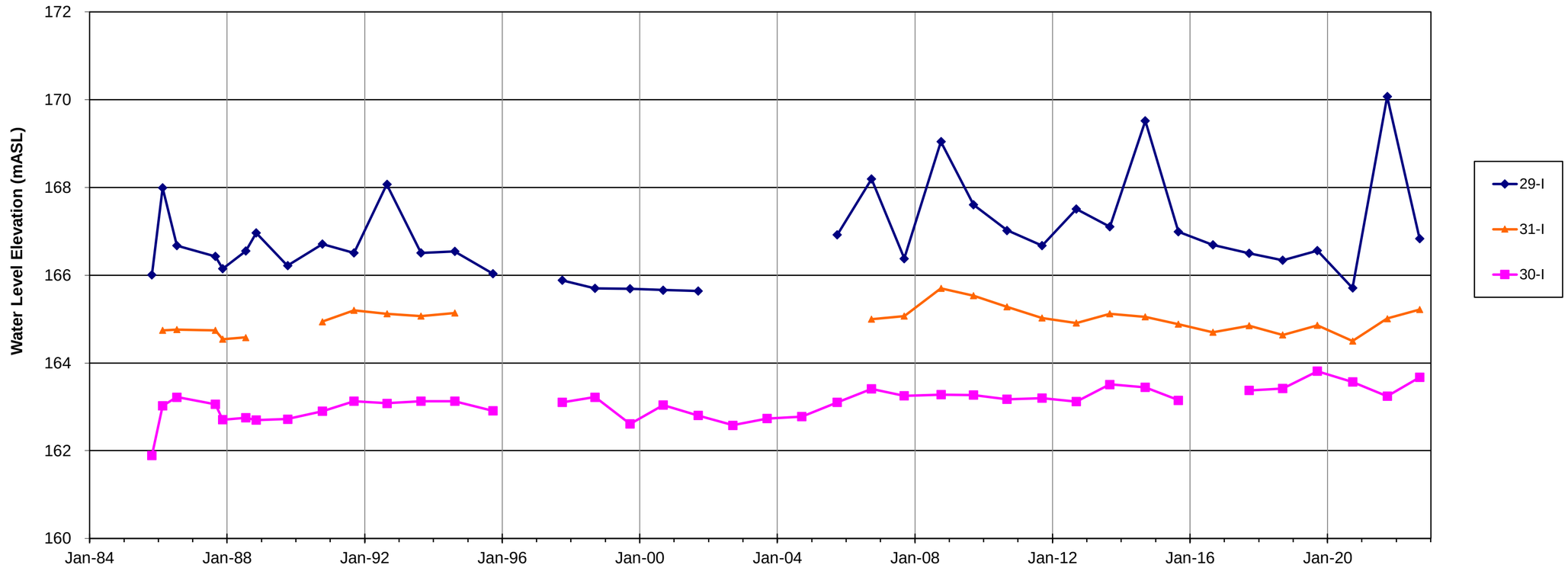


FIGURE A-14
GROUNDWATER HYDROGRAPH - Monitor Location 32

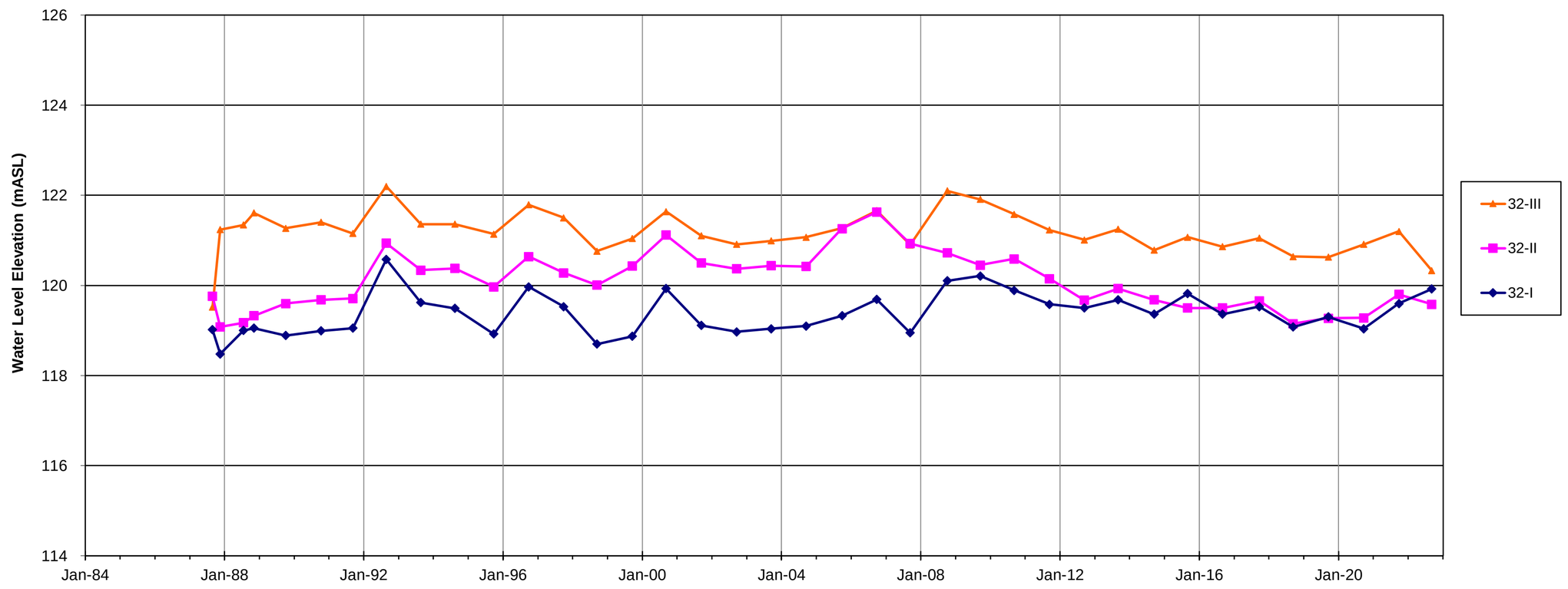


FIGURE A-15
GROUNDWATER HYDROGRAPH - Monitor Location 33

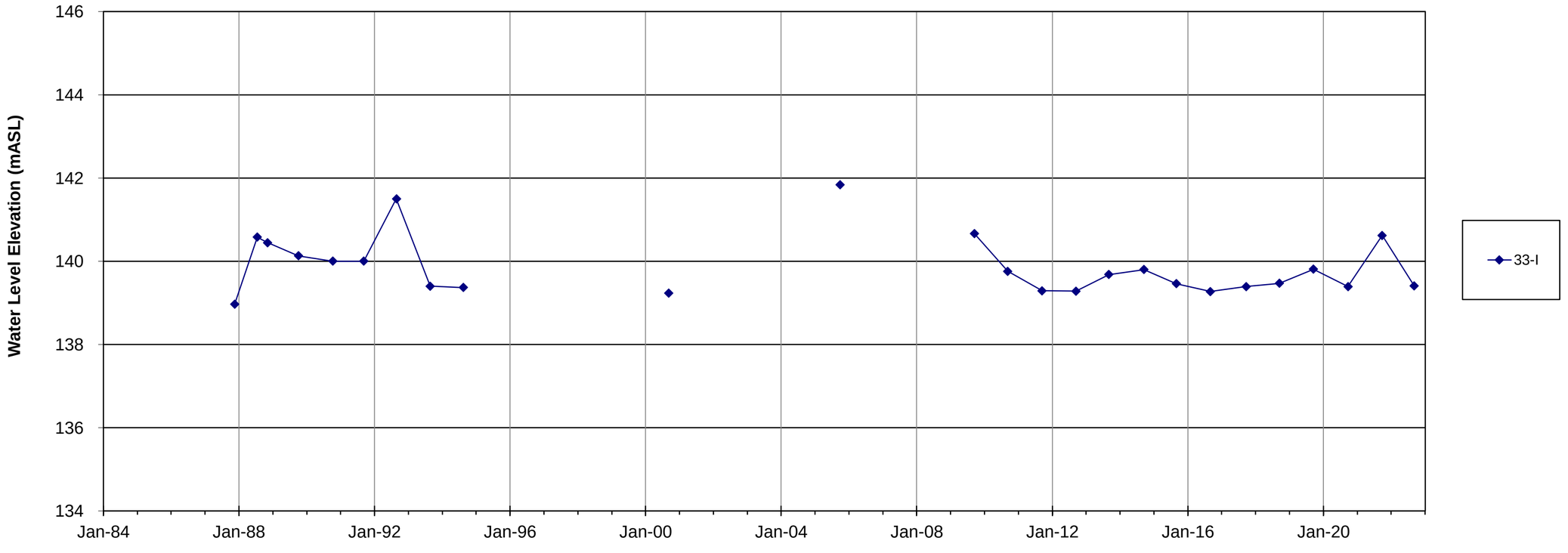


FIGURE A-16
GROUNDWATER HYDROGRAPH - Monitor Location 34 & 38

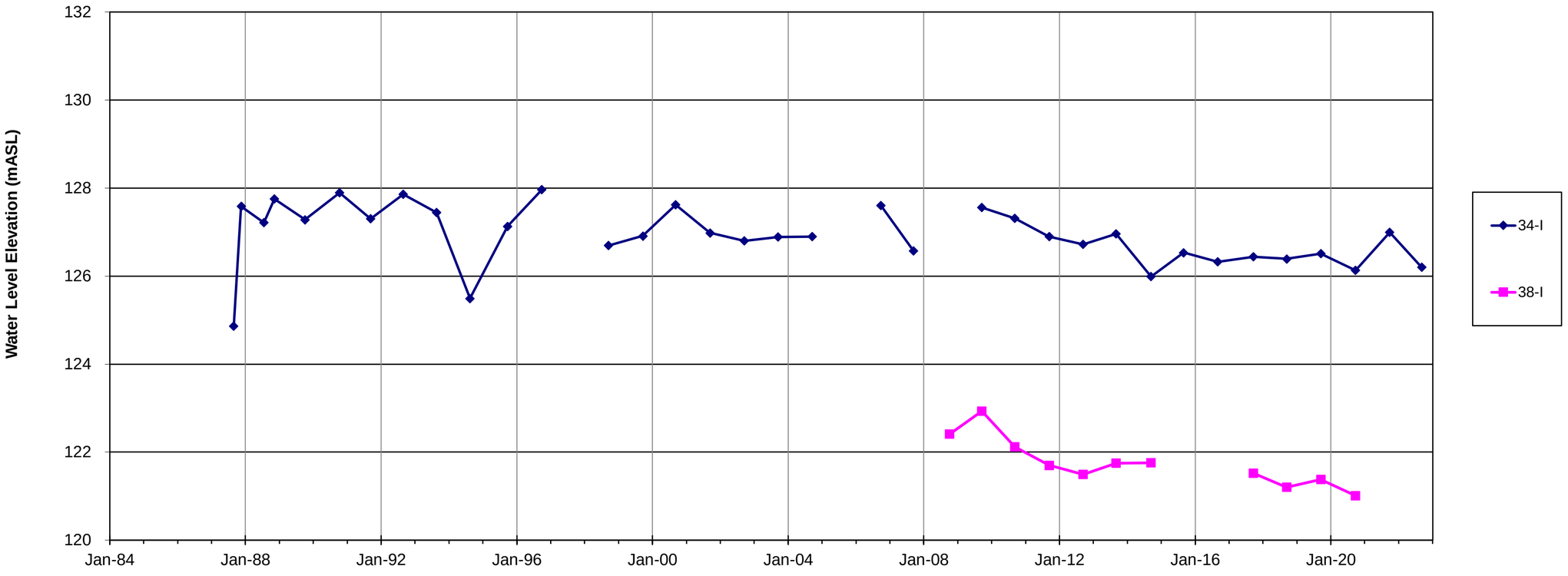


FIGURE A-17
GROUNDWATER HYDROGRAPH - Monitor Location 35/35R



FIGURE A-18
LEACHATE HYDROGRAPH - Monitor Location 37

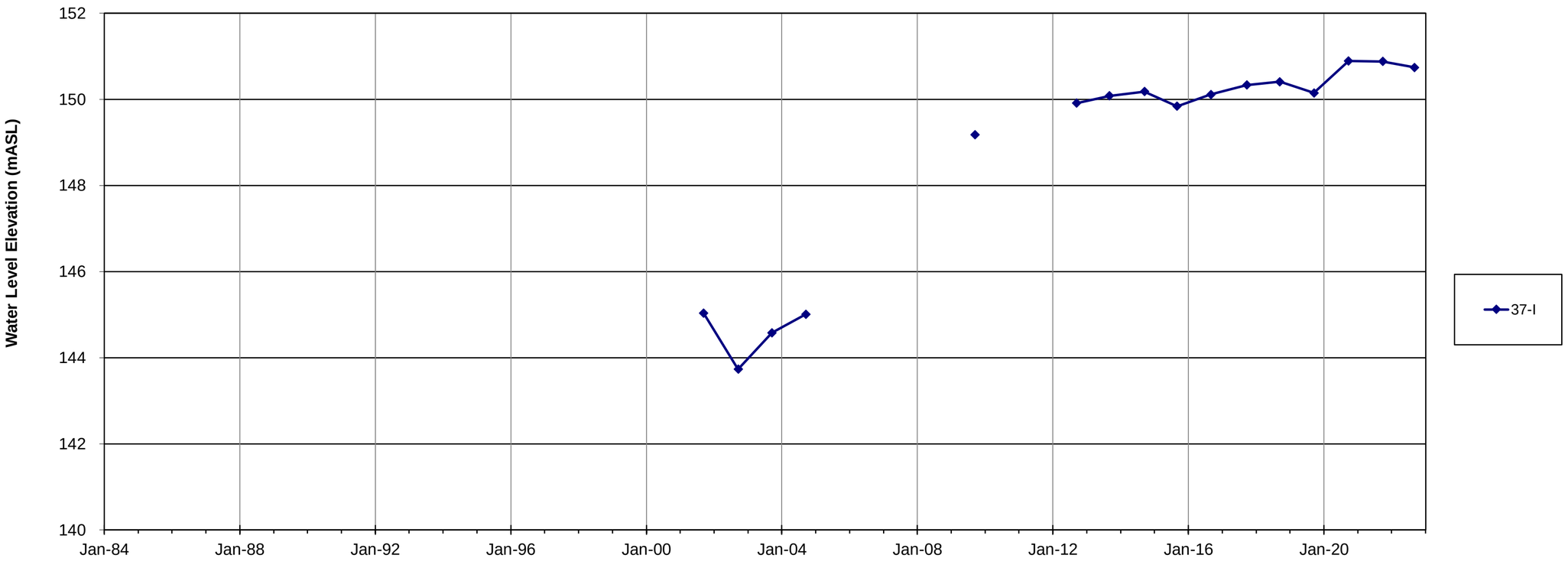


FIGURE A-19

GROUNDWATER HYDROGRAPH - Meridian Brick Borehole Locations 5 & 6

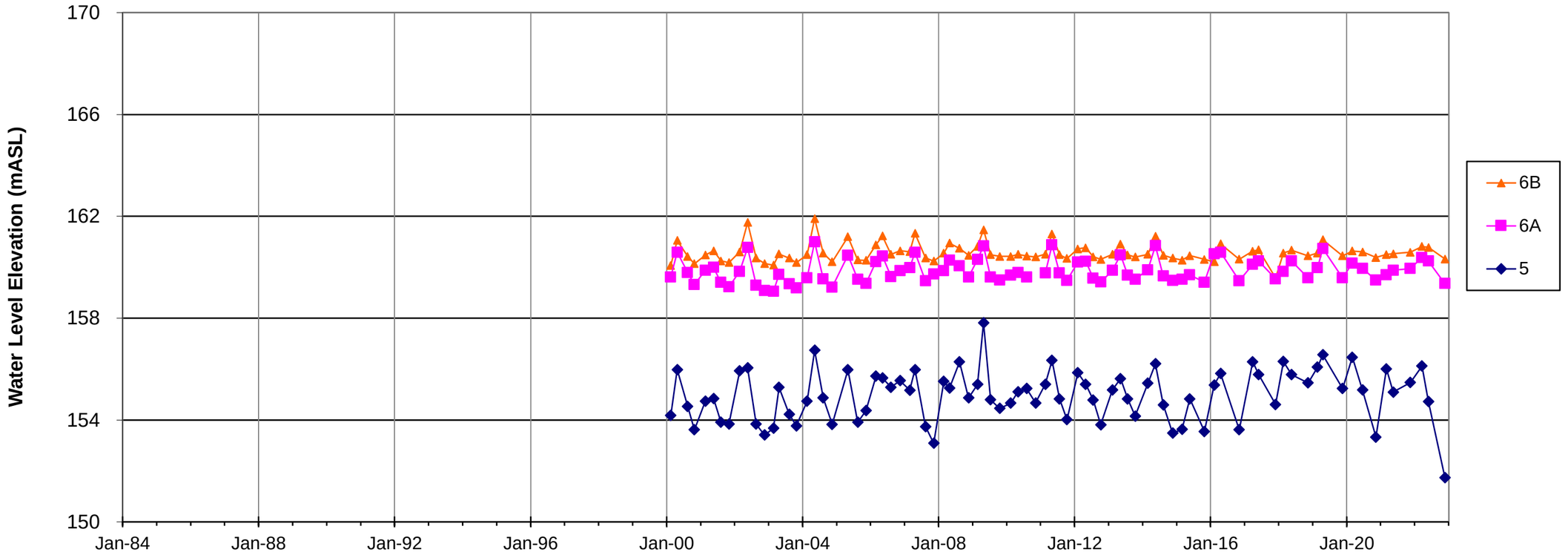


FIGURE A-20

GROUNDWATER HYDROGRAPH - Meridian Brick Borehole Locations 7 & 8

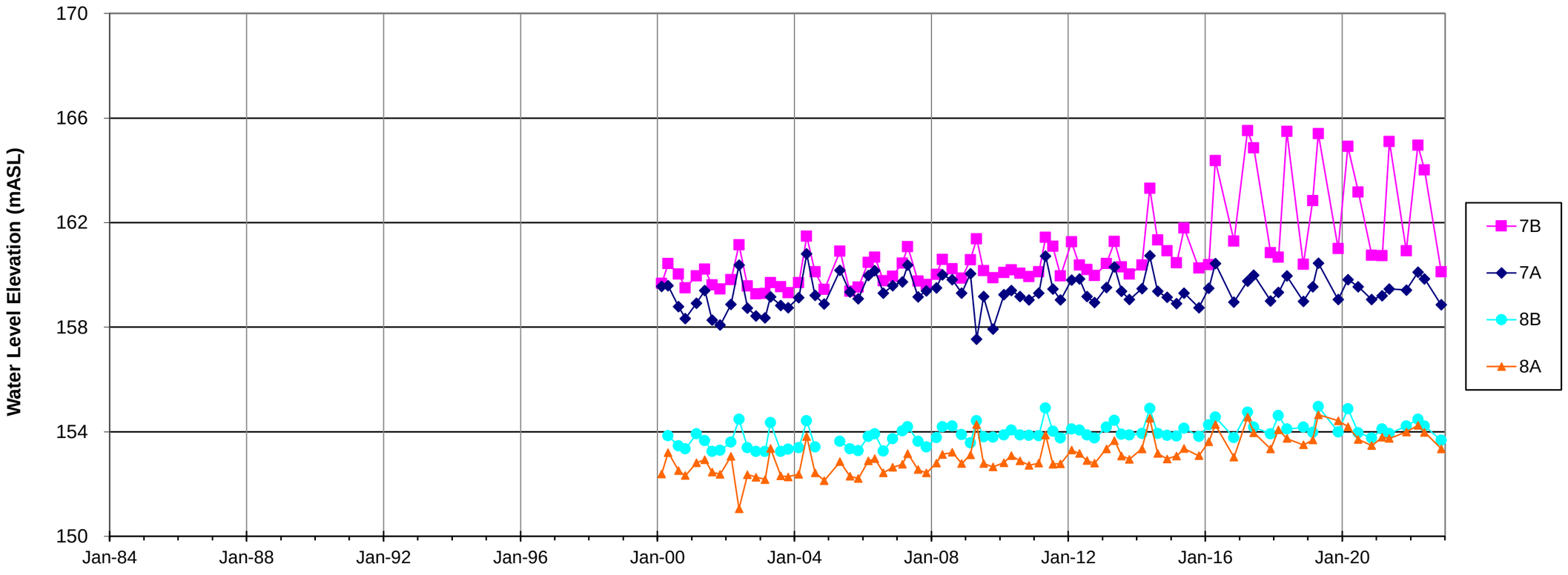


FIGURE A-21

GROUNDWATER HYDROGRAPH - Meridian Brick Borehole Locations 9 & 10

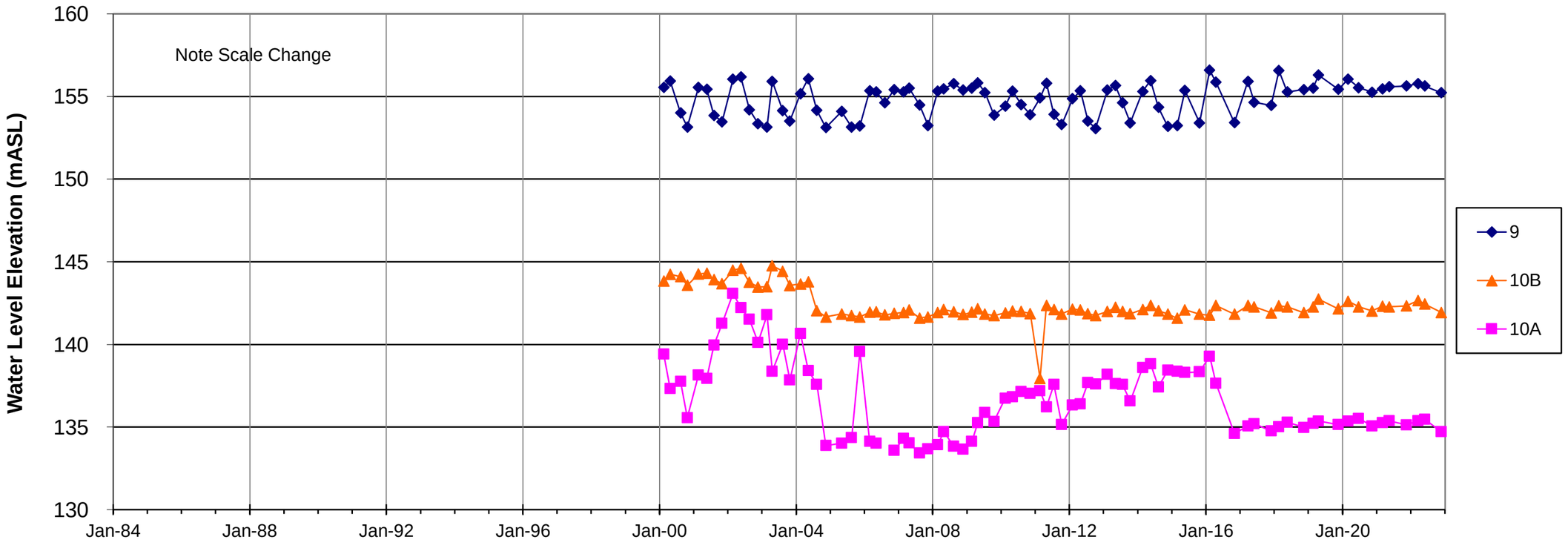


FIGURE A-22

GROUNDWATER HYDROGRAPH - Meridian Brick Borehole Locations 11 & 12

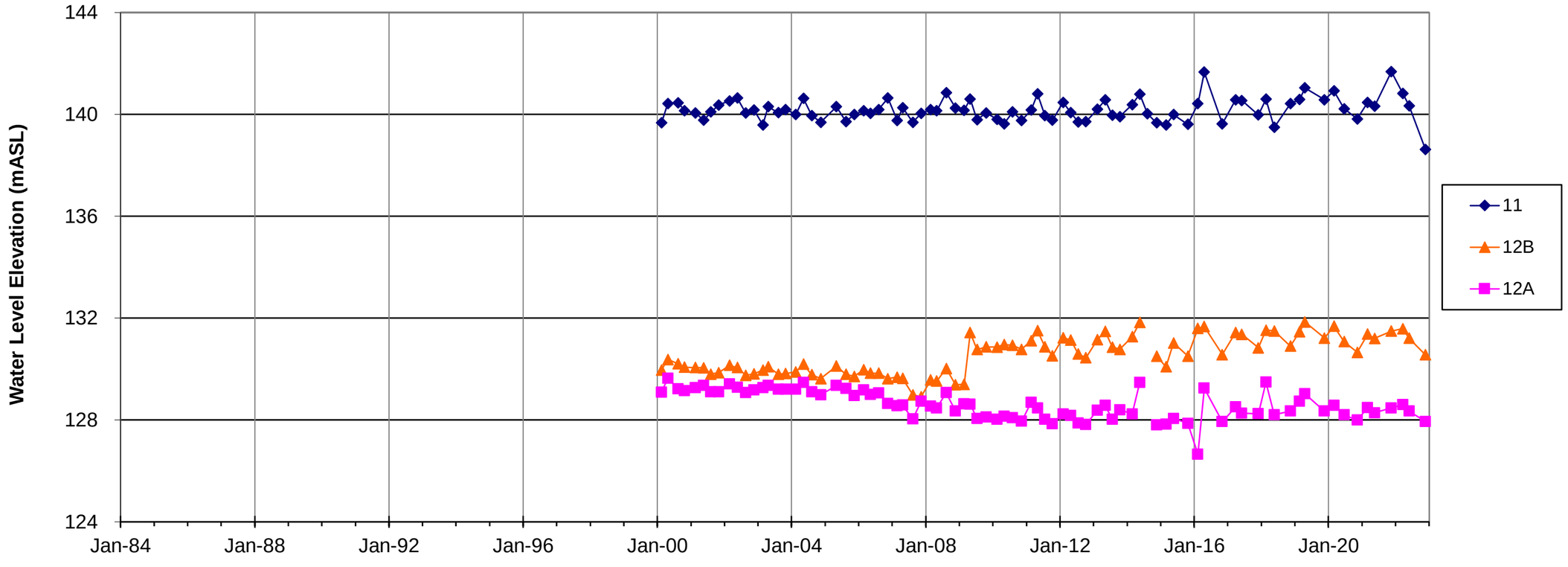


TABLE A-1
GROUNDWATER MONITOR DETAILS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR NO.	MONITOR NO.	TYPE	DIAMETER (mm)	(T.O.P.) (mASL)	SCREENED INTERVAL (mASL)	FILTER PACK (mASL)	SEAL (mASL)	BACKFILL (mASL)
11A	**II**	S	31	135.14	132.2 - 128.1	132.8 - 128.1	129.2 - 128.1	
							134.2 - 133.0	
	I	P	31	134.97	121.6 - 121.1	122.2 - 121.1	123.2 - 122.2	
12	**III**	S	19	127.9	126.3 - 124.9	126.3 - 124.9	127.4 - 126.3	
	II	P	32	127.7	120.4 - 120.1	120.4 - 120.1	121.4 - 120.4	
	I	P	32	127.9	115.2 - 114.7	115.4 - 114.7	116.4 - 115.4	
13	**II**	S	19	122.6	119.0 - 115.9	119.0 - 115.9	115.9 - 114.4	
							122.0 - 120.9	
	I	P	19	122.6	112.7 - 112.2	112.9 - 112.2	113.1 - 112.1	
14	**II**	S	31	125.74	124.17 - 119.17	124.17 - 119.17	119.2 - 117.7	
							125.3 - 124.2	
	I	P	31	125.73	114.77 - 114.27	115.37 - 114.27	116.4 - 115.4	
15	**II**	S	31	121.81	119.60 - 114.90	119.60 - 114.90	114.9 - 113.4	
							121.0 - 119.6	
	I	P	31	121.39	110.60 - 110.10	111.10 - 110.10	112.1 - 111.1	
16	**IV**	S	31	123.91	121.50 - 116.90	121.50 - 116.90	116.9 - 116.5	
							123.0 - 121.5	
	III	P	31	123.92	113.60 - 113.10	114.20 - 113.10	115.2 - 114.2	
	II	P	31	124.03	105.90 - 105.40	106.90 - 105.40	105.4 - 104.9	
							107.9 - 106.9	
	I	P	31	123.61	94.70 - 94.20	96.10 - 94.20	97.1 - 96.1	
18	**III**	S	31	157.75	155.45 - 149.65	155.45 - 149.65	156.4 - 155.5	
	II	P	31	157.75	146.35 - 145.85	147.05 - 145.85	151.4 - 150.4	
18	**III R**	S	51	158.15				157.15
	II R	P	51	158.29				157.15
	I R	P	51	158.05				157.15
21	**III**	S	31	185.30	183.65 - 174.85	183.65 - 174.85	184.5 - 183.7	
	II	P	31	185.03	170.15 - 169.65	170.65 - 169.65	171.7 - 170.7	
	I	P	31	185.90	167.26 - 166.76	167.66 - 166.76	168.7 - 167.7	

NOTES: 1) T.O.P. - Top Of Pipe
mASL - Metres Above Sea Level
2) P - Indicates piezometer.
S - Indicates standpipe.
3) Details of monitor construction for Borehole Locations 14 to 34 are based on data contained in the "Halton Regional Landfill - Burlington: 1987 Monitoring Report", March, 1988, prepared by Gartner Lee Limited.

TABLE A-1
GROUNDWATER MONITOR DETAILS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR NO.	MONITOR NO.	TYPE	DIAMETER (mm)	(T.O.P.) (mASL)	SCREENED INTERVAL (mASL)	FILTER PACK (mASL)	SEAL (mASL)	BACKFILL (mASL)
21	**III R**	S	51	185.16				184.30
	II R	P	51	185.11				184.30
	I R	P	51	185.17				184.30
22	**III**	S	31	182.93	181.28 - 175.08	181.78 - 175.08	182.3 - 181.8	
	II	P	31	182.84	170.98 - 170.48	171.48 - 170.48	172.5 - 171.5	
	I	P	31	183.26	166.08 - 165.58	166.48 - 165.58	167.5 - 166.5	
22	**III R**	S	51	183.42				182.51
	II R	P	51	183.44				182.51
	I R	P	51	183.40				182.51
23	**III**	S	51	185.60	178.59 - 177.39	183.49 - 177.39	185.0 - 183.5	
	II	P	51	185.54	173.23 - 172.63	173.83 - 172.63	184.9 - 173.8	
	I	P	51	185.77	167.34 - 166.74	168.24 - 166.74	184.9 - 168.2	
24	**III**	S	51	128.16	122.49 - 121.29	125.39 - 121.29	127.5 - 125.4	
	II	P	51	128.10	115.69 - 115.09	116.29 - 115.09	127.5 - 116.3	
	I	P	51	127.96	109.66 - 109.06	110.26 - 109.06	127.4 - 110.3	
25	**I**	P	51	183.29	165.28 - 164.08	170.18 - 164.08	181.2 - 170.2	
26	**III**	S	51	120.44	114.83 - 113.63	118.93 - 113.63	119.8 - 118.9	
	II	P	51	120.51	108.10 - 107.50	108.70 - 107.50	119.9 - 108.7	
	I	P	51	120.46	101.95 - 101.35	102.55 - 101.35	119.9 - 102.6	
27	**III**	S	51	116.35	110.84 - 109.64	114.24 - 109.64	115.7 - 114.2	
	II	P	51	116.36	103.95 - 103.35	104.55 - 103.35	115.8 - 104.6	
	I	P	51	116.31	97.80 - 97.20	98.40 - 97.20	115.7 - 98.4	
28	**I**	S	51	134.48	128.38 - 127.18	133.18 - 127.18	134.2 - 133.2	
29	**I**	S	51	174.41	166.49 - 165.29	173.49 - 165.29	174.1 - 173.5	
30	**I**	S	51	170.75	162.35 - 161.15	169.55 - 161.15	170.2 - 169.6	
31	**I**	S	51	173.10	165.74 - 164.54	171.64 - 164.54	172.6 - 171.6	

NOTES: 1) T.O.P. - Top Of Pipe
mASL - Metres Above Sea Level
2) P - Indicates piezometer.
S - Indicates standpipe.
GP - Indicates gas probe.
3) Details of monitor construction for Borehole Locations 14 to 34 are based on data contained in the "Halton Regional Landfill - Burlington: 1987 Monitoring Report", March, 1988, prepared by Gartner Lee Limited.

TABLE A-1
GROUNDWATER MONITOR DETAILS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR NO.	MONITOR NO.	TYPE	DIAMETER (mm)	(T.O.P.) (mASL)	SCREENED INTERVAL (mASL)	FILTER PACK (mASL)	SEAL (mASL)	BACKFILL (mASL)
32	**III**	S	51	123.29	117.15 - 116.55	121.15 - 117.15	122.1 - 121.2	122.7 - 122.1
	II	P	51	123.16	111.25 - 110.65	114.15 - 110.35	115.4 - 114.2	121.1 - 115.4
	I	P	51	122.90	104.94 - 104.34	107.94 - 102.74	109.2 - 107.9	122.2 - 109.2
33	**I**	S	51	143.80	139.33 - 138.73	141.83 - 138.13	142.4 - 141.8	143.3 - 142.4
34	**I**	S	51	129.12	124.68 - 124.08	127.18 - 123.48	127.8 - 127.2	128.7 - 127.8
35	**IV**	S	51	115.39	112.35 - 109.30	113.32 - 109.30	114.2 - 113.3	
	III	P	51	115.41	106.21 - 104.69	107.43 - 104.69	113.7 - 107.4	114.3 - 113.7
	II	P	51	115.35	100.67 - 98.38	101.53 - 98.38	113.4 - 101.5	114.3 - 113.4
	I	P	51	115.30	85.96 - 82.91	86.60 - 82.91	113.6 - 86.6	114.1 - 113.6
35R	**IV**	S	51	115.76	113.19 - 110.15	114.05 - 110.00	114.92 - 114.05	
	III	P	51	115.70	106.99 - 105.47	107.91 - 105.62	108.82 - 107.91	113.70 - 108.82
	II	P	51	115.80	101.05 - 98.92	102.12 - 98.92	103.34 - 102.12	113.70 - 103.34
	I	P	51	115.71	86.87 - 83.83	87.43 - 83.68	88.10 - 87.49	113.70 - 88.10
36	**I**	S	51	181.19	170.32 - 162.70	171.54 - 162.70	180.53 - 179.31	179.31 - 171.54
37	**I**	S	51	161.43	149.41 - 141.79	150.63 - 141.79	160.68 - 159.46	159.46 - 150.63
38	**I**	S	51	129.26				
39	**I**	S	51	179.35				178.53
GP1	**I**	GP	51	179.21				
GP2	**I**	GP	51	167.47				
GP3	**I**	GP	51	147.24				
GP4	**I**	GP	51	134.89				

NOTES: 1) T.O.P. - Top Of Pipe
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S - Indicates standpipe.
GP - Indicates gas probe.
3) Details of monitor construction for Borehole Locations 14 to 34 are based on data contained in the "Halton Regional Landfill - Burlington: 1987 Monitoring Report", March, 1988, prepared by Gartner Lee Limited.

TABLE A-2
GROUNDWATER ELEVATIONS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR			TOP OF																
LOCATION	NO.	TYPE	PIPE	Oct-85	Feb-86	Jul-86	Aug-87	Nov-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98
14	II	S	125.74	124.39	124.88	124.66	124.29	124.49	124.22	124.67	124.25	124.48	124.08	124.61	124.28	124.39	124.12	124.82		123.87
	I	P	125.73	123.95	124.27	124.21	123.91	123.97	123.82	124.03	123.75	124.02	123.58	123.96	123.76	123.71	123.50	123.93	^ 124.32	123.29
15	II	S	121.81	120.25	Frozen	120.41	120.09	120.27	119.99	120.30	119.86	120.20	119.79	120.78	120.06	120.09	119.88	120.41	^ 120.16	119.73
	I	P	121.39	119.78	120.31	119.96	119.71	119.87	119.55	119.87	119.53	119.85	119.49	120.09	119.51	119.60	119.45	119.89	^ 119.68	119.29
16	IV	S	123.91	123.91	121.88	121.47	121.29	121.24	121.24	121.35	121.22	121.33	121.18	121.94	121.28	121.24	121.01	121.53	120.96	120.43
	III	P	123.92	118.55	119.28	118.96	118.80	118.42	118.65	118.70	118.58	118.70	118.63	119.54	122.08	118.80	118.49	118.97	118.47	117.70
	II	P	124.03	113.98	114.84	114.38	114.22	114.09	114.10	114.05	113.86	113.88	113.71	114.38	114.52	114.35	114.44	115.08	114.40	113.86
	I	P	123.61	113.52	114.24	113.73	113.56	113.39	113.31	113.38	113.12	113.13	112.71	119.61	113.27	113.15	112.77	113.26	112.72	111.95
18	III	S	157.75						152.98	152.94	152.27	152.64	155.05	153.83	152.92	153.00	152.23	154.75	154.57	153.42
	II	P	157.75						153.40	152.92	152.87	153.28	153.65	154.48	153.98	153.65	152.87	154.22	153.97	152.90
18	III R	S	158.15																	
	II R	P	158.29																	
	I R	P	158.05																	
21	III	S	185.30				181.03	180.07	182.09	181.67	180.77	181.00	damaged	damaged	damaged	damaged	damaged	damaged	damaged	damaged
	II	P	185.03				177.20	177.05	178.11	177.57	177.96	178.07	177.91	178.40	177.75	177.84	177.13	177.88	177.76	177.75
	I	P	185.09				175.46	175.77	176.24	175.64	175.56	175.64	175.76	177.02	175.84	175.90	175.48	175.68	175.54	175.44
21	III R	S	185.16																	
	II R	P	185.11																	
	I R	P	185.17																	
22	III	S	182.93		Bent		177.29	175.98	177.70	177.47	176.42	179.23	176.96	179.44	Dry	Dry	176.38	181.06	175.94	175.96
	II	P	182.84		Bent		177.25	175.99	177.70	177.38	176.39	179.23	178.04	179.46	177.49	177.66	175.75	181.05	179.85	176.26
	I	P	183.26		Bent		178.66	172.26	177.86	176.36	177.61	177.93	177.56	178.95	179.55	177.94	174.36	178.31	176.97	177.09
22	III R	S	183.42																	
	II R	P	183.44																	
	I R	P	183.40																	
23	III	S	185.60	180.08	183.98	182.38	180.91	179.98	181.77	180.68	180.45	180.63	180.79	183.64	181.51	181.36	180.53	183.32	182.79	182.81
	II	P	185.54	178.05	182.85	182.52	181.06	179.48	182.13	180.09	180.54	180.98	181.10	182.23	181.57	181.70	180.74	181.53	180.99	181.11
	I	P	185.77	176.00	177.46	177.19	177.77	176.47	177.31	176.53	176.63	176.64	176.79	177.15	177.15	177.12	176.64	176.79	176.66	176.59
24	III	S	128.16	122.57	124.13	123.64	123.96	123.25	123.77	123.46	124.26	124.28	124.22	125.76	124.39	124.29	124.11	125.43	124.68	124.00
	II	P	128.10	119.85	120.71	120.29	120.04	119.77	119.96	120.01	119.79	119.95	119.88	119.65	120.05	120.03	119.74	120.10	119.89	119.12
	I	P	127.96	116.87	117.10	116.92	116.73	116.68	116.76	116.63	116.50	116.44	116.50	116.66	116.81	116.71	116.53	116.76	116.57	115.94
25	I	S **	183.29	Dry	Dry	Dry	168.10	166.83	166.67	167.07	165.97	165.90	166.12	165.33	165.06	165.04	165.41	165.76	165.61	165.92

NOTES: 1) All elevations are Metres Above Sea Level (mASL).
2) Blank indicates water levels were not taken.
3) ^ - Water levels were obtained in December of corresponding year.
4) * - Indicates associated value is suspected to be anomalous.
P - Indicates Piezometer
S - Indicates Standpipe ** - Indicates Leachate monitor

TABLE A-2
GROUNDWATER ELEVATIONS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR			TOP OF															
LOCATION	NO.	TYPE	PIPE	Sep-99	Sep-00	Sep-01	Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14
14	II	S	125.74	125.10	124.43	124.93	124.77	124.84	124.87	124.17	124.47	123.89	124.65	124.40	124.23	123.92	123.92	124.03	123.98
	I	P	125.73	123.66	123.48	123.56	123.33	123.48	123.55	123.42	123.63	123.29	123.68	123.66	123.61	123.47	123.46	123.47	123.26
15	II	S	121.81	119.94	120.28	119.88	119.80	119.84	119.87	120.17	120.27	119.90	120.66	120.37	120.22	120.36	120.36	120.37	120.07
	I	P	121.39	119.42	119.81	119.51	119.40	119.47	119.49	119.64	119.80	119.27	120.01	119.93	119.86	119.80	119.68	119.68	119.57
16	IV	S	123.91	121.06	121.24	120.99	120.85	120.95	120.98	121.23	121.36	120.97	121.64	121.61	121.31	121.04	121.13	121.13	120.76
	III	P	123.92	118.47	118.84	118.53	118.41	118.47	118.46	118.65	118.87	118.42	119.31	119.33	119.00	118.80	118.72	118.82	118.19
	II	P	124.03	114.58	115.38	114.51	114.31	114.42	114.46	115.53	115.94	115.82	116.61	116.61	116.56	116.38	116.25	116.56	115.90
	I	P	123.61	112.81	113.31	112.72	112.42	112.69	112.73	113.11	113.35	112.89	113.72	113.68	113.47	112.96	113.07	113.36	113.11
18	III	S	157.75	153.32	153.54	153.19	152.98	152.81	152.88	153.35	154.00	153.59	154.47	155.18	156.25	154.68	Dry	Dry	Dry
	II	P	157.75	152.80	153.87	152.88	152.68	152.81	152.86	153.71	154.28	153.24	154.81	155.13	154.19	153.29	153.15	153.42	152.86
18	III R	S	158.15																
	II R	P	158.29																
	I R	P	158.05																
21	III	S	185.30	damaged	damaged	damaged	damaged	damaged	damaged	181.06	182.26	181.28	183.76	181.53	182.78	180.60	180.23	180.96	180.34
	II	P	185.03	177.72	177.94	178.06	177.86	177.99	178.03	177.37	177.82	177.79	178.91	178.23	178.56	177.71	177.21	177.84	177.25
	I	P	185.09	175.37	176.09	175.73	175.60	175.65	175.70	175.39	175.65	175.57	176.11	175.82	176.80	175.71	175.33	175.68	175.15
21	III R	S	185.16																
	II R	P	185.11																
	I R	P	185.17																
22	III	S	182.93	Dry	178.67	Dry	Dry	Dry	Dry	175.26	177.89	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked
	II	P	182.84	176.29	178.69	176.72	176.55	176.64	176.63	176.31	177.79	176.37	179.23	178.53	177.75	176.64	176.07	177.26	175.90
	I	P	183.26	177.28	179.72	177.10	176.97	177.05	177.09	177.08	177.71	177.01	178.76	175.11	175.81	175.82	175.42	175.86	176.73
22	III R	S	183.42																
	II R	P	183.44																
	I R	P	183.40																
23	III	S	185.60	180.20	182.40	180.71	180.49	180.61	180.67			180.52	183.12	182.67	181.55	180.74	180.40	181.25	180.82
	II	P	185.54	180.94	182.58	181.41	181.28	181.36	181.33			181.20	182.28		181.77	181.53	180.94	181.81	181.36
	I	P	185.77	176.43	177.36	176.83	176.59	176.76	176.79			176.77	177.38	177.31	177.24	176.91	176.69	177.14	176.85
24	III	S	128.16	123.96	124.76	123.72	123.54	123.63	123.66	124.32	123.81	124.09	125.13	125.35	124.05	124.03	125.04	124.44	124.28
	II	P	128.10	119.65	120.11	119.77	119.60	119.69	119.75	119.73	120.02	119.58	120.38	120.34	120.08	119.81	119.78	119.97	119.96
	I	P	127.96	116.06	116.97	116.25	115.97	116.13	116.18	116.65	117.08	116.69	116.96	117.11	117.00	116.90	116.73	116.93	116.82
25	I	S **	183.29	165.21	165.17	165.09	165.00	165.04	165.08	165.17	165.23	165.85	168.91	166.97	166.46	170.35		170.21	169.47

NOTES: 1) All elevations are Metres Above Sea Level (mASL).
2) Blank indicates water levels were not taken.
3) ^ - Water levels were obtained in December of corresponding year.
4) * - Indicates associated value is suspected to be anomalous.
P - Indicates Piezometer
S - Indicates Standpipe ** - Indicates Leachate monitor

TABLE A-2
GROUNDWATER ELEVATIONS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR			TOP OF								
LOCATION	NO.	TYPE	PIPE	Sep-15	Sep-16	Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
14	II	S	125.74	123.83	123.71	123.82	123.87	124.02	123.64	124.63	^ 123.97
	I	P	125.73	123.44	123.35	123.44	123.45	123.50	123.44	123.69	^ 123.46
15	II	S	121.81	120.19	120.23	120.29	120.40	120.35	120.19	120.89	120.22
	I	P	121.39	119.77	119.41	119.38	119.59	119.61	119.49	119.98	119.48
16	IV	S	123.91	121.00	121.03	119.00	121.08	121.06	120.54	121.53	120.90
	III	P	123.92	118.78	118.63	118.73	118.72	118.83	117.61	119.19	118.59
	II	P	124.03	116.23	116.26	116.44	116.31	116.61	114.17	116.71	116.36
	I	P	123.61	112.95	113.06	113.23	113.17	113.25	112.99	113.56	112.90
18	III	S	157.75	Dry	Dry	decomm					
	II	P	157.75	153.16	153.24	decomm					
18	III R	S	158.15			153.44	153.99	153.71	153.06	154.90	153.20
	II R	P	158.29			153.18	150.88	153.31	152.75	154.51	152.75
	I R	P	158.05			154.10	154.37	154.22	154.00	155.32	154.09
21	III	S	185.30	180.76	180.16	decomm					
	II	P	185.03	177.55	177.30	decomm					
	I	P	185.09	174.04	175.31	decomm					
21	III R	S	185.16			180.80	180.96	181.23	180.43	180.83	180.68
	II R	P	185.11			177.76	178.49	179.35	178.42	178.69	179.45
	I R	P	185.17			175.45	175.57	175.66	175.32	175.45	175.38
22	III	S	182.93	blocked	blocked	decomm					
	II	P	182.84	176.71	176.24	decomm					
	I	P	183.26	175.14	176.58	decomm					
22	III R	S	183.42			177.09	177.72	177.93	177.13	178.01	177.02
	II R	P	183.44			176.05	176.77	177.14	176.37	178.33	176.57
	I R	P	183.40			176.85	176.76	177.09	176.29	177.92	177.00
23	III	S	185.60	180.95	180.32	180.70	180.72	180.78	180.20	182.07	^ 179.15
	II	P	185.54	181.21	181.03	181.33	181.33	181.52	181.02	181.18	^ 179.70
	I	P	185.77	177.01	176.65	176.92	176.93	177.03	176.59	176.78	^ 175.91
24	III	S	128.16	124.31	124.27	124.29	124.67	124.26	124.13	125.93	124.13
	II	P	128.10	121.20	119.66	119.85	119.81	120.06	116.93	120.00	119.77
	I	P	127.96	116.48	116.66	116.82	116.86	117.17	117.14	116.81	116.72
25	I	S **	183.29	169.59	169.79	169.53	169.74	169.70	170.06	170.02	170.10

NOTES: 1) All elevations are Metres Above Sea Level (mASL).
2) Blank indicates water levels were not taken.
3) ^ - Water levels were obtained in December of corresponding year.
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TABLE A-2
GROUNDWATER ELEVATIONS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR			TOP OF																
LOCATION	NO.	TYPE	PIPE	Oct-85	Feb-86	Jul-86	Aug-87	Nov-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98
26	III	S	120.44	114.84	118.79	118.08	117.11	116.01	117.22	115.91	116.19	116.12	116.26	118.30	117.18	116.76	115.68	117.71	117.45	115.93
	II	P	120.51	114.85	115.72	115.07	114.83	114.68	116.61	114.62	114.35	114.51	114.29	114.95	114.52	114.33	114.07	114.50	114.34	113.95
	I	P	120.46	113.61	114.36	113.83	113.65	113.47	113.46	113.52	113.25	113.24	113.14	113.70	113.38	113.25	112.94	113.48	113.24	112.94
27	III	S	116.35	114.73	115.23	114.69	114.22	114.17	114.03	114.33	113.74	114.02	113.58	114.68	113.69	113.66	113.16	114.43	114.38	113.05
	II	P	116.36	113.70	114.41	113.87	113.67	113.49	113.58	113.56	113.23	113.29	113.18	113.80	113.36	113.28	112.99	113.57	113.46	112.95
	I	P	116.31	113.67	114.37	113.84	113.64	113.45	113.44	113.53	113.19	113.26	113.15	113.73	113.31	113.25	112.94	113.54	113.45	112.92
28	I	S	134.48	129.66	132.19	131.76	131.15	130.82	131.01	131.28	130.86	131.10	131.00	131.78	131.05	130.95	130.68	131.60	131.53	130.62
29	I	S	174.41	166.01	167.99	166.67	166.43	166.15	166.55	166.96	166.22	166.71	166.51	168.07	166.51	166.54	166.03		165.88	165.70
30	I	S	170.75	161.89	163.02	163.22	163.06	162.71	162.75	162.70	162.72	162.90	163.13	163.08	163.13	163.13	162.91		163.10	163.22
31	I	S	173.10	Dry	164.74	164.76	164.74	164.54	164.58	Dry	Dry	164.94	165.20	165.12	165.07	165.14	Dry	Dry	Dry	Dry
32	III	S	123.29				119.52	121.24	121.34	121.61	121.27	121.40	121.15	122.20	121.36	121.36	121.14	121.79	121.50	120.76
	II	P	123.16				119.76	119.08	119.17	119.33	119.60	119.68	119.71	120.94	120.34	120.38	119.97	120.64	120.28	120.01
	I	P	122.90				119.02	118.48	119.00	119.05	118.89	118.99	119.05	120.58	119.62	119.49	118.92	119.97	119.53	118.70
33	I	S	143.80				Dry	138.97	140.58	140.44	140.13	140.00	140.00	141.50	139.40	139.37	Dry	Dry	Dry	Dry
34	I	S	129.12				124.86	127.58	127.21	127.75	127.28	127.89	127.30	127.86	127.44	125.49	127.13	127.96		126.69
35	IV	S	115.39																	
	III	P	115.41																	
	II	P	115.35																	
	I	P	115.30																	
35R	IV	S	115.76																	
	III	P	115.70																	
	II	P	115.80																	
	I	P	115.71																	
36	I	S **	181.19																	
37	I	S **	161.43																	
38	I	S	129.26																	
39	I	S **	179.35																	

NOTES: 1) All elevations are Metres Above Sea Level (mASL).
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3) ^ - Water levels were obtained in December of corresponding year.
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TABLE A-2
GROUNDWATER ELEVATIONS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR			TOP OF															
LOCATION	NO.	TYPE	PIPE	Sep-99	Sep-00	Sep-01	Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14
26	III	S	120.44	115.89	118.29	116.62	116.42	116.55	116.62	116.01	116.88	116.18	118.84	118.72	117.81	116.65	116.06	117.27	116.24
	II	P	120.51	116.22	114.86	114.26	114.12	114.20	114.18	114.27	114.62	114.04	115.13	115.06	114.76	114.32	114.21	114.58	113.98
	I	P	120.46	115.91	113.56	113.15	112.92	113.06	113.13	113.25	113.53	112.96	113.92	113.83	113.63	113.29	113.21	113.46	112.91
27	III	S	116.35	113.23	114.04	113.16	112.96	113.09	113.16	113.78	114.24	113.18	114.69	114.49	114.17	112.56	113.69	113.93	114.36
	II	P	116.36	112.99	113.64	113.12	112.96	113.03	113.07	113.31	113.62	113.04	113.95	113.93	113.69	113.37	113.27	113.55	113.38
	I	P	116.31	112.91	113.60	113.02	112.80	112.91	112.93	113.28	113.58	113.02	113.92	113.90	113.66	113.35	113.26	113.53	113.38
28	I	S	134.48	129.88	129.43	129.14	128.93	129.09	129.10	129.44	129.51	128.86	129.70	128.97	129.23	128.49	128.30	128.61	128.58
29	I	S	174.41	165.69	165.66	165.64	Dry	Dry	Dry	166.92	168.19	166.38	169.04	167.60	167.02	166.67	167.51	167.10	169.52
30	I	S	170.75	162.61	163.04	162.80	162.58	162.73	162.78	163.10	163.41	163.25	163.28	163.27	163.17	163.20	163.12	163.51	163.44
31	I	S	173.10	Dry	Dry	Dry	Dry	Dry	Dry	Dry	165.00	165.07	165.70	165.53	165.28	165.02	164.91	165.12	165.05
32	III	S	123.29	121.04	121.64	121.10	120.91	120.99	121.07	121.27	121.66	120.90	122.10	121.91	121.58	121.23	121.01	121.25	120.78
	II	P	123.16	120.43	121.12	120.50	120.37	120.44	120.42	121.26	121.63	120.93	120.72	120.45	120.59	120.15	119.67	119.93	119.68
	I	P	122.90	118.87	119.93	119.11	118.97	119.04	119.10	119.33	119.69	118.95	120.10	120.21	119.89	119.58	119.50	119.68	119.36
33	I	S	143.80	Dry	139.23	Dry	Dry	Dry	Dry	141.84				140.66	139.76	139.29	139.28	139.68	139.80
34	I	S	129.12	126.91	127.62	126.98	126.80	126.89	126.90		127.60	126.57		127.56	127.31	126.90	126.72	126.96	125.99
35	IV	S	115.39			112.55	113.72	113.51	113.37	113.46	113.70	113.75	113.89	113.93		decomm			
	III	P	115.41			111.43	112.92	112.86	112.78	112.95	113.24	112.66	113.59	113.53	113.38	decomm			
	II	P	115.35			110.86	112.93	112.97	113.08	113.12	113.43	112.88	113.81	113.70	113.51	decomm			
	I	P	115.30			110.77	104.89	107.15	107.35		blocked	blocked	blocked	blocked	114.15	decomm			
35R	IV	S	115.76														113.18	113.84	113.18
	III	P	115.70														112.99	113.66	113.17
	II	P	115.80														113.10	113.40	113.03
	I	P	115.71														114.19	110.08	109.63
36	I	S **	181.19			Dry	Dry	Dry	Dry					170.02		170.47	170.31	170.32	blocked
37	I	S **	161.43			145.03	143.73	144.58	145.01				149.50	149.18		150.01	149.91	150.08	150.18
38	I	S	129.26										122.41	122.93	122.12	121.70	121.49	121.75	121.76
39	I	S **	179.35																

NOTES: 1) All elevations are Metres Above Sea Level (mASL).
2) Blank indicates water levels were not taken.
3) ^ - Water levels were obtained in December of corresponding year.
4) * - Indicates associated value is suspected to be anomalous.
P - Indicates Piezometer
S - Indicates Standpipe ** - Indicates Leachate monitor

TABLE A-2
GROUNDWATER ELEVATIONS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR			TOP OF								
LOCATION	NO.	TYPE	PIPE	Sep-15	Sep-16	Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
26	III	S	120.44	116.52	115.88	116.55	116.50	116.97	115.75	116.59	115.91
	II	P	120.51	114.20	114.00	114.40	114.40	114.55	114.14	114.51	114.10
	I	P	120.46	113.08	113.16	113.38	113.38	113.51	113.17	113.68	113.15
27	III	S	116.35	113.64	113.58	113.50	113.91	113.76	113.54	114.82	113.54
	II	P	116.36	113.08	113.20	113.49	113.42	113.50	113.19	113.81	113.24
	I	P	116.31	112.96	113.17	113.46	113.39	113.46	113.16	113.76	113.20
28	I	S	134.48	128.38	128.36	128.43	128.54	128.75	128.59	129.04	127.60
29	I	S	174.41	166.99	166.69	166.50	166.34	166.56	165.71	170.07	166.83
30	I	S	170.75	163.15		163.37	163.42	163.81	163.57	163.24	163.67
31	I	S	173.10	164.88	164.70	164.85	164.64	164.86	164.50	165.01	165.22
32	III	S	123.29	121.07	120.86	121.05	120.64	120.63	120.91	121.20	120.33
	II	P	123.16	119.50	119.50	119.66	119.15	119.27	119.28	119.80	119.58
	I	P	122.90	119.82	119.36	119.53	119.08	119.30	119.04	119.60	119.92
33	I	S	143.80	139.46	139.27	139.39	139.47	139.81	139.39	140.62	139.41
34	I	S	129.12	126.53	126.32	126.44	126.39	126.51	126.13	126.99	126.20
35	IV	S	115.39								
	III	P	115.41								
	II	P	115.35								
	I	P	115.30								
35R	IV	S	115.76	113.68	113.23	113.55	113.52	113.75	112.95	113.86	113.30
	III	P	115.70	113.43	113.29	113.56	113.52	113.67	113.30	113.91	113.22
	II	P	115.80	113.20	113.04	113.34	113.29	113.44	113.08	113.64	113.07
	I	P	115.71	110.21	109.90	110.13	110.12	109.87	109.90	109.27	109.22
36	I	S **	181.19	170.76	blocked	174.99	Dry		171.50	175.04	171.84
37	I	S **	161.43	149.84	150.11	150.33	150.41	150.15	150.89	150.88	150.74
38	I	S	129.26	125.95	blocked	121.52	121.20	121.38	121.01	blocked	blocked
39	I	S **	179.35							173.60	169.95

NOTES: 1) All elevations are Metres Above Sea Level (mASL).
2) Blank indicates water levels were not taken.
3) ^ - Water levels were obtained in December of corresponding year.
4) * - Indicates associated value is suspected to be anomalous.
P - Indicates Piezometer
S - Indicates Standpipe ** - Indicates Leachate monitor

TABLE A-3
WATER LEVEL ELEVATIONS - Meridian Brick Property
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

Monitoring Well Designation	Relative Depth	Ground Surface (m.a.s.l.)	Bottom (m.a.s.l.)	Screen		Water Level Elevations (mASL)											
				Bottom (m.a.s.l.)	Top (m.a.s.l.)	Feb-00	Apr-00	Aug-00	Oct-00	Feb-01	May-01	Aug-01	Nov-01	Feb-02	May-02	Aug-02	Nov-02
MW 5	Deep	168.34	149.01	149.01	158.13	154.18	155.98	154.54	153.62	154.74	154.85	153.91	153.84	155.93	156.05	153.84	153.41
MW 6A	Deep	168.65	150.08	150.08	156.18	159.62	160.59	159.79	159.32	159.88	159.99	159.40	159.23	159.84	160.77	159.29	159.08
MW 6B	Shallow	168.83	158.65	158.65	164.72	160.07	161.05	160.43	160.14	160.48	160.65	160.25	160.18	160.60	161.76	160.36	160.15
MW 7A	Deep	167.79	150.80	150.80	156.89	159.56	159.58	158.78	158.33	158.91	159.40	158.27	158.08	158.87	160.38	158.73	158.42
MW 7B	Shallow	167.57	158.27	158.27	164.37	159.67	160.43	160.03	159.50	159.96	160.21	159.61	159.46	159.81	161.15	159.57	159.27
MW 8A	Deep	164.78	148.02	148.02	152.59	152.39	153.20	152.51	152.32	152.81	152.93	152.45	152.37	153.06	151.05	152.36	152.26
MW 8B	Shallow	164.64	153.21	153.21	157.78	<153.29	153.84	153.46	153.34	153.91	153.66	153.24	153.29	153.60	154.47	153.39	153.24
MW 9	Shallow	160.82	151.98	151.98	156.55	155.55	155.94	154.01	153.16	155.56	155.44	153.86	153.47	156.05	156.18	154.20	153.36
MW 10A	Deep	146.00	133.12	133.12	137.70	139.41	137.33	137.75	135.56	138.15	137.94	139.95	141.27	143.08	142.23	141.51	140.12
MW 10B	Shallow	145.44	139.27	139.27	143.84	143.83	144.25	144.10	143.58	144.26	144.32	143.92	143.68	144.48	144.61	143.76	143.48
MW 11	Shallow	144.32	135.76	135.76	138.81	139.67	140.43	140.45	140.15	140.05	139.77	140.10	140.37	140.53	140.64	140.06	140.18
MW 12A	Deep	135.12	122.55	122.55	127.12	129.09	129.63	129.22	129.15	129.27	129.35	129.11	129.10	129.42	129.28	129.08	129.18
MW 12B	Shallow	134.97	127.96	127.96	131.01	129.96	130.38	130.21	130.08	130.06	130.05	129.80	129.86	130.15	130.06	129.76	129.81
GP 00-1	Shallow	131.96	122.82	122.82	128.91	129.06	129.56	129.25	131.22	129.25	129.50	129.08	129.04	129.34	129.24	129.02	129.10
GP 00-2	Shallow	131.76	125.82	125.82	128.86	129.09	129.57	129.11	129.94	129.18	129.29	129.01	129.02	129.31	129.10	128.95	129.01
GP 00-3	Shallow	131.93	125.99	125.99	129.03	129.46	130.00	129.85	130.26	129.29	129.32	129.09	129.04	129.52	129.30	129.05	129.18
**MW 99-03	Shallow	132.31	125.00	125.00	131.10	127.56	128.33	128.43	127.99	128.28	128.32	128.19	128.04	128.33	128.47	128.08	127.84
GP 00-04	Shallow	131.59	127.02	127.02	130.83	n.a	<127.02	n.m.	129.11	129.23	129.25	129.09	129.21	129.24	129.28	129.19	129.16
GP 00-05	Shallow	131.80	126.01	126.01	131.04	n.a	129.53	129.20	129.17	129.25	129.36	129.07	129.07	129.39	129.26	129.03	129.19
GP 00-06	Shallow	131.81	127.24	127.24	131.05	n.a	<127.24	129.92	130.26	130.39	130.48	130.47	130.58	130.61	130.65	130.70	130.59
GP 00-07	Shallow	131.54	126.97	126.97	130.78	n.a	<126.97	129.14	129.85	130.02	130.02	129.90	129.98	129.49	129.06	129.78	129.64
GP 00-08	Shallow	131.57	127.00	127.00	130.81	n.a	129.67	129.42	129.21	129.38	129.45	129.15	129.14	130.27	129.37	129.10	129.34
GP 00-09	Shallow	131.83	127.26	127.26	131.07	n.a	128.05	129.84	n.m.	129.46	129.52	129.13	129.11	129.56	130.84	129.18	129.25
GP 00-10	Shallow	131.78	127.21	127.21	131.02	n.a	130.52	129.21	129.18	129.40	129.49	129.08	129.08	129.43	129.33	129.05	129.22
**GP 08-1	Shallow																

NOTES: 1) mASL - metres Above Sea Level
n.m.= Not measured
n.a. - Not applicable
2) * - Indicates measurement obtained in January 2008.
3) ** - GP 08-1 installed on Aug 19, 2008 to replace MW 99-03 (damaged in January 2008)

TABLE A-3
WATER LEVEL ELEVATIONS - Meridian Brick Property
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

Monitoring Well Designation	Relative Depth	Ground Surface (m.a.s.l.)	Bottom (m.a.s.l.)	Screen		Water Level Elevations (mASL)										
				Bottom (m.a.s.l.)	Top (m.a.s.l.)	Feb-03	Apr-03	Aug-03	Oct-03	Feb-04	May-04	Aug-04	Nov-04	May-05	Aug-05	Nov-05
MW 5	Deep	168.34	149.01	149.01	158.13	153.68	155.28	154.23	153.77	154.74	156.74	154.87	153.83	155.97	153.91	154.37
MW 6A	Deep	168.65	150.08	150.08	156.18	159.05	159.72	159.35	159.19	159.59	160.99	159.54	159.22	160.47	159.53	159.36
MW 6B	Shallow	168.83	158.65	158.65	164.72	160.08	160.52	160.36	160.19	160.49	161.91	160.55	160.21	161.20	160.29	160.27
MW 7A	Deep	167.79	150.80	150.80	156.89	158.36	159.16	158.83	158.75	159.13	160.80	159.21	158.88	160.18	159.34	159.09
MW 7B	Shallow	167.57	158.27	158.27	164.37	159.29	159.70	159.54	159.32	159.70	161.47	160.11	159.44	160.91	159.37	159.53
MW 8A	Deep	164.78	148.02	148.02	152.59	152.17	153.36	152.31	152.27	152.37	153.82	152.43	152.13	152.85	152.30	152.21
MW 8B	Shallow	164.64	153.21	153.21	157.78	153.24	154.35	153.24	153.33	153.38	154.42	153.42	Dry	153.63	153.35	153.27
MW 9	Shallow	160.82	151.98	151.98	156.55	153.16	155.92	154.14	153.52	155.18	156.08	154.17	153.12	154.10	153.14	153.23
MW 10A	Deep	146.00	133.12	133.12	137.70	141.79	138.38	140.01	137.85	140.67	138.42	137.58	133.88	134.02	134.35	139.57
MW 10B	Shallow	145.44	139.27	139.27	143.84	143.49	144.76	144.43	143.57	143.66	143.79	142.04	141.66	141.84	141.74	141.66
MW 11	Shallow	144.32	135.76	135.76	138.81	139.59	140.30	140.07	140.19	140.00	140.63	139.96	139.69	140.30	139.72	139.99
MW 12A	Deep	135.12	122.55	122.55	127.12	129.27	129.35	129.21	129.20	129.21	129.47	129.10	128.99	129.35	129.23	128.95
MW 12B	Shallow	134.97	127.96	127.96	131.01	129.96	130.09	129.80	129.82	129.89	130.19	129.78	129.62	130.12	129.79	129.71
GP 00-1	Shallow	131.96	122.82	122.82	128.91	129.08	129.32	129.12	129.14	129.10	129.37	129.05	128.80	129.23	129.13	128.99
GP 00-2	Shallow	131.76	125.82	125.82	128.86	129.19	129.22	129.02	129.12	129.05	129.29	128.91	128.86	129.12	129.09	128.79
GP 00-3	Shallow	131.93	125.99	125.99	129.03	129.30	129.39	129.19	129.24	129.07	129.45	129.09	129.02	129.37	129.19	128.97
**MW 99-03	Shallow	132.31	125.00	125.00	131.10	127.89	128.33	128.05	127.90	128.03	128.46	128.07	127.54	128.27	127.85	128.70
GP 00-04	Shallow	131.59	127.02	127.02	130.83	129.36	129.33	129.15	129.22	129.22	129.35	130.10	128.99	129.29	129.17	129.09
GP 00-05	Shallow	131.80	126.01	126.01	131.04	129.15	129.40	129.19	129.21	129.15	129.47	129.07	128.98	129.40	129.30	129.06
GP 00-06	Shallow	131.81	127.24	127.24	131.05	130.41	131.16	130.81	130.83	130.74	130.78	130.73	130.57	130.72	130.66	130.62
GP 00-07	Shallow	131.54	126.97	126.97	130.78	130.75	130.69	129.77	129.89	129.94	130.28	129.95	129.66	130.24	129.79	129.96
GP 00-08	Shallow	131.57	127.00	127.00	130.81	129.56	129.78	129.27	129.92	nm	129.69	129.10	129.03	129.79	129.39	129.13
GP 00-09	Shallow	131.83	127.26	127.26	131.07	129.61	129.64	129.33	129.26	nm	129.57	129.10	129.02	129.60	129.37	129.12
GP 00-10	Shallow	131.78	127.21	127.21	131.02	129.27	129.55	129.23	129.16	129.36	129.59	129.28	129.03	129.71	129.33	129.16
**GP 08-1	Shallow															

NOTES: 1) mASL - metres Above Sea Level
n.m.= Not measured
n.a. - Not applicable
2) * - Indicates measurement obtained in January 2008.
3) ** - GP 08-1 installed on Aug 19, 2008 to replace MW 99-03 (damaged in January 2008)

TABLE A-3
WATER LEVEL ELEVATIONS - Meridian Brick Property
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

Monitoring Well Designation	Relative Depth	Ground Surface (m.a.s.l.)	Bottom (m.a.s.l.)	Screen		Water Level Elevations (mASL)											
				Bottom (m.a.s.l.)	Top (m.a.s.l.)	Feb-06	May-06	Aug-06	Nov-06	Feb-07	Apr-07	Aug-07	Nov-07	Feb-08	Apr-08	Aug-08	Nov-08
MW 5	Deep	168.34	149.01	149.01	158.13	155.72	155.65	155.29	155.55	155.17	155.98	153.74	153.09	155.52	155.25	156.28	154.87
MW 6A	Deep	168.65	150.08	150.08	156.18	160.22	160.44	159.63	159.87	159.98	160.59	159.46	*159.73	159.87	160.27	160.05	159.61
MW 6B	Shallow	168.83	158.65	158.65	164.72	160.88	161.23	160.51	160.65	160.61	161.33	160.37	160.24	160.55	160.95	160.74	160.47
MW 7A	Deep	167.79	150.80	150.80	156.89	159.97	160.16	159.30	159.58	159.73	160.38	159.16	*159.39	159.50	160.00	159.81	159.30
MW 7B	Shallow	167.57	158.27	158.27	164.37	160.47	160.68	159.77	159.95	160.45	161.07	159.76	159.63	160.01	160.59	160.23	159.87
MW 8A	Deep	164.78	148.02	148.02	152.59	152.88	152.97	152.43	152.64	152.75	153.16	152.55	152.42	152.80	153.13	153.21	152.78
MW 8B	Shallow	164.64	153.21	153.21	157.78	153.82	153.91	153.25	153.73	154.03	154.19	153.63	153.42	153.77	154.19	154.22	153.88
MW 9	Shallow	160.82	151.98	151.98	156.55	155.36	155.28	154.62	155.41	155.28	155.52	154.49	153.25	155.33	155.46	155.79	155.39
MW 10A	Deep	146.00	133.12	133.12	137.70	134.12	134.02	nm	133.58	134.31	134.05	133.42	*133.68	133.92	134.72	133.84	133.65
MW 10B	Shallow	145.44	139.27	139.27	143.84	141.95	141.97	141.79	141.88	141.94	142.08	141.60	141.67	141.92	142.11	141.98	141.81
MW 11	Shallow	144.32	135.76	135.76	138.81	140.15	140.04	140.19	140.64	139.76	140.27	139.69	*140.04	140.19	140.14	140.86	140.25
MW 12A	Deep	135.12	122.55	122.55	127.12	129.18	129.00	129.06	128.65	128.56	128.58	128.04	*128.73	128.54	128.47	129.07	128.35
MW 12B	Shallow	134.97	127.96	127.96	131.01	129.98	129.84	129.84	129.62	129.68	129.63	128.99	128.91	129.57	129.53	130.02	129.38
GP 00-1	Shallow	131.96	122.82	122.82	128.91	129.08	128.96	129.03	128.64	128.56	128.45	128.07	128.01	128.44	128.47	129.06	128.40
GP 00-2	Shallow	131.76	125.82	125.82	128.86	129.01	128.85	128.95	128.47	128.34	128.39	127.86	127.83	128.39	128.29	128.94	128.18
GP 00-3	Shallow	131.93	125.99	125.99	129.03	129.17	128.97	129.05	128.56	128.44	128.59	127.95	127.92	128.62	128.38	129.03	128.27
**MW 99-03	Shallow	132.31	125.00	125.00	131.10	128.27	128.28	128.11	128.18	127.88	128.15	127.30	126.92	n.a.	n.a.	n.a.	n.a.
GP 00-04	Shallow	131.59	127.02	127.02	130.83	129.18	129.25	129.14	128.75	128.99	128.54	128.01	128.13	128.79	128.62	129.24	128.57
GP 00-05	Shallow	131.80	126.01	126.01	131.04	129.15	129.12	129.05	128.47	128.85	128.36	127.86	128.03	n.a.	128.48	129.20	128.34
GP 00-06	Shallow	131.81	127.24	127.24	131.05	130.65	130.88	130.73	129.88	129.85	129.78	129.78	130.05	n.a.	129.99	130.03	129.99
GP 00-07	Shallow	131.54	126.97	126.97	130.78	130.01	130.17	129.97	129.87	129.92	129.82	129.53	129.86	n.a.	130.03	130.33	130.09
GP 00-08	Shallow	131.57	127.00	127.00	130.81	129.23	129.12	129.09	128.32	128.92	128.23	127.75	127.91	128.33	128.31	129.23	128.18
GP 00-09	Shallow	131.83	127.26	127.26	131.07	129.30	129.07	129.11	128.27	128.74	128.16	127.73	127.93	130.13	128.31	129.22	128.06
GP 00-10	Shallow	131.78	127.21	127.21	131.02	129.36	129.07	129.31	128.31	128.33	128.14	127.69	127.88	128.40	128.29	128.99	128.11
**GP 08-1	Shallow																

NOTES: 1) mASL - metres Above Sea Level
n.m.= Not measured
n.a. - Not applicable
2) * - Indicates measurement obtained in January 2008.
3) ** - GP 08-1 installed on Aug 19, 2008 to replace MW 99-03 (damaged in January 2008)

TABLE A-3
WATER LEVEL ELEVATIONS - Meridian Brick Property
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

Monitoring Well Designation	Relative Depth	Ground Surface (m.a.s.l.)	Bottom (m.a.s.l.)	Screen		Water Level Elevations (mASL)											
				Bottom (m.a.s.l.)	Top (m.a.s.l.)	Feb-09	Apr-09	Jul-09	Oct-09	Feb-10	May-10	Aug-10	Nov-10	Feb-11	May-11	Jul-11	Oct-11
MW 5	Deep	168.34	149.01	149.01	158.13	155.40	157.82	154.80	154.46	154.66	155.11	155.23	154.67	155.41	156.34	154.84	154.02
MW 6A	Deep	168.65	150.08	150.08	156.18	160.31	160.83	159.61	159.50	159.69	159.79	159.61		159.78	160.88	159.78	159.48
MW 6B	Shallow	168.83	158.65	158.65	164.72	160.82	161.47	160.49	160.43	160.43	160.51	160.44	160.41	160.52	161.31	160.49	160.35
MW 7A	Deep	167.79	150.80	150.80	156.89	160.05	157.54	159.17	157.93	159.25	159.40	159.18	159.05	159.30	160.72	159.46	159.04
MW 7B	Shallow	167.57	158.27	158.27	164.37	160.58	161.38	160.16	159.88	160.09	160.18	160.06	159.93	160.12	161.44	161.09	159.96
MW 8A	Deep	164.78	148.02	148.02	152.59	153.12	154.28	152.79	152.65	152.82	153.09	152.88	152.72	152.79	153.87	152.76	152.77
MW 8B	Shallow	164.64	153.21	153.21	157.78	153.57	154.42	153.81	153.79	153.87	154.06	153.87	153.86	153.85	154.91	154.02	153.76
MW 9	Shallow	160.82	151.98	151.98	156.55	155.51	155.83	155.25	153.87	154.42	155.34	154.52	153.91	154.91	155.81	153.92	153.30
MW 10A	Deep	146.00	133.12	133.12	137.70	134.13	135.28	135.87	135.34	136.75	136.84	137.16	137.04	137.19	136.21	137.58	135.16
MW 10B	Shallow	145.44	139.27	139.27	143.84	141.95	142.16	141.84	141.74	141.91	142.02	141.99	141.87	137.94	142.35	142.12	141.84
MW 11	Shallow	144.32	135.76	135.76	138.81	140.16	140.61	139.79	140.06	139.81	139.63	140.10	139.77	140.17	140.81	139.95	139.77
MW 12A	Deep	135.12	122.55	122.55	127.12	128.63	128.62	128.05	128.12	128.03	128.15	128.09	127.95	128.69	128.47	128.03	127.85
MW 12B	Shallow	134.97	127.96	127.96	131.01	129.40	131.44	130.77	130.87	130.86	130.96	130.93	130.77	131.11	131.51	130.87	130.52
GP 00-1	Shallow	131.96	122.82	122.82	128.91	128.60	128.69	128.18	128.21	128.14	128.23	128.19	128.03	128.28	128.56	128.17	127.89
GP 00-2	Shallow	131.76	125.82	125.82	128.86	128.41	128.48	127.92	127.95	127.87	127.18	127.91	127.82	128.13	128.33	127.97	127.73
GP 00-3	Shallow	131.93	125.99	125.99	129.03	128.60	128.56	127.99	128.02	127.95	128.07	128.00	128.50	128.34	128.41	128.09	127.98
**MW 99-03	Shallow	132.31	125.00	125.00	131.10	n.a.	n.a.	n.a.	n.a.	n.a.	n.a	n.a	n.a	n.a.	n.a	n.a	n.a
GP 00-04	Shallow	131.59	127.02	127.02	130.83	n.m.	128.74	128.19	128.24	128.20	126.77	128.21	128.16	129.12	128.52	127.95	127.00
GP 00-05	Shallow	131.80	126.01	126.01	131.04	118.70	128.64	128.06	128.09	128.00	128.50	128.03	127.96	128.03	128.48	127.90	127.86
GP 00-06	Shallow	131.81	127.24	127.24	131.05	129.98	129.99	130.05	130.07	129.96	128.14	130.03	129.97	129.83	129.98	129.83	130.00
GP 00-07	Shallow	131.54	126.97	126.97	130.78	130.20	130.39	129.86	129.31	128.63	129.71	129.36	129.31	131.40	129.58	129.11	129.31
GP 00-08	Shallow	131.57	127.00	127.00	130.81	n.m.	128.59	127.90	127.94	127.87	129.37	128.89	127.82	127.94	129.56	127.89	127.77
GP 00-09	Shallow	131.83	127.26	127.26	131.07	n.m.	128.39	127.80	127.82	127.74	128.25	127.74	127.70	127.75	129.54	127.63	127.70
GP 00-10	Shallow	131.78	127.21	127.21	131.02	128.66	128.47	127.89	127.91	127.79	127.82	127.90	127.76	127.90	128.25	127.59	127.68
**GP 08-1	Shallow					127.05	127.34	126.96	126.95	126.82	128.04	127.15	126.77	126.71	127.49	127.42	126.47

NOTES: 1) mASL - metres Above Sea Level
n.m.= Not measured
n.a. - Not applicable
2) * - Indicates measurement obtained in January 2008.
3) ** - GP 08-1 installed on Aug 19, 2008 to replace MW 99-03 (damaged in January 2008)

TABLE A-3
WATER LEVEL ELEVATIONS - Meridian Brick Property
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

Monitoring Well Designation	Relative Depth	Ground Surface (m.a.s.l.)	Bottom (m.a.s.l.)	Screen		Water Level Elevations (mASL)											
				Bottom (m.a.s.l.)	Top (m.a.s.l.)	Feb-12	Apr-12	Jul-12	Oct-12	Feb-13	May-13	Jul-13	Oct-13	Feb-14	May-14	Jul-14	Oct-14
MW 5	Deep	168.34	149.01	149.01	158.13	155.86	155.41	154.79	153.82	155.18	155.63	154.83	154.16	155.45	156.21	154.60	153.49
MW 6A	Deep	168.65	150.08	150.08	156.18	160.20	160.23	159.57	159.42	159.88	160.48	159.69	159.53	159.90	160.84	159.66	159.48
MW 6B	Shallow	168.83	158.65	158.65	164.72	160.72	160.77	160.41	160.31	160.51	160.91	160.48	160.40	160.51	161.22	160.47	160.36
MW 7A	Deep	167.79	150.80	150.80	156.89	159.80	159.85	159.17	158.94	159.52	160.30	159.37	159.05	159.47	160.73	159.37	159.14
MW 7B	Shallow	167.57	158.27	158.27	164.37	161.26	160.37	160.20	159.97	160.43	161.27	160.30	160.03	160.37	163.31	161.33	160.92
MW 8A	Deep	164.78	148.02	148.02	152.59	153.30	153.16	152.90	152.79	153.35	153.66	153.08	152.95	153.35	154.52	153.17	152.96
MW 8B	Shallow	164.64	153.21	153.21	157.78	154.10	154.07	153.88	153.76	154.17	154.43	153.90	153.87	153.94	154.89	153.93	153.87
MW 9	Shallow	160.82	151.98	151.98	156.55	154.87	155.34	153.52	153.06	155.39	155.66	154.64	153.41	155.31	155.97	154.34	153.19
MW 10A	Deep	146.00	133.12	133.12	137.70	136.34	136.40	137.68	137.60	138.18	137.63	137.57	136.57	138.60	138.83	137.42	138.43
MW 10B	Shallow	145.44	139.27	139.27	143.84	142.14	142.09	141.86	141.75	141.99	142.24	142.00	141.85	142.11	142.35	142.04	141.84
MW 11	Shallow	144.32	135.76	135.76	138.81	140.47	140.07	139.71	139.72	140.20	140.57	139.96	139.91	140.38	140.80	140.02	139.67
MW 12A	Deep	135.12	122.55	122.55	127.12	128.23	128.17	127.88	127.82	128.39	128.57	128.03	128.40	128.24	129.47	n.m.	127.81
MW 12B	Shallow	134.97	127.96	127.96	131.01	131.23	131.14	130.60	130.44	131.15	131.49	130.86	130.78	131.27	131.83	n.m.	130.51
GP 00-1	Shallow	131.96	122.82	122.82	128.91	128.38	128.26	127.97	127.85	128.42	128.56	128.20	128.38	128.30	129.26	128.05	127.85
GP 00-2	Shallow	131.76	125.82	125.82	128.86	128.88	128.06	127.67	127.61	128.20	128.36	127.87	128.21	128.03	129.30	127.76	127.62
GP 00-3	Shallow	131.93	125.99	125.99	129.03	128.23	128.13	127.82	127.76	128.35	128.52	128.01	128.36	128.19	129.50	127.82	127.76
**MW 99-03	Shallow	132.31	125.00	125.00	131.10	n.a	n.a	n.a	n.a	132.80	132.80	132.80	132.80	n.a.	n.a.	n.a.	n.a.
GP 00-04	Shallow	131.59	127.02	127.02	130.83	128.22	128.18	128.04	127.94	128.55	128.66	128.02	128.55	131.59	129.62	128.09	127.95
GP 00-05	Shallow	131.80	126.01	126.01	131.04	128.23	127.96	127.90	127.85	128.42	128.59	127.88	129.66	131.80	129.69	127.99	127.85
GP 00-06	Shallow	131.81	127.24	127.24	131.05	129.86	129.88	130.05	130.04	130.04	130.03	129.94	130.08	130.11	130.39	130.04	130.02
GP 00-07	Shallow	131.54	126.97	126.97	130.78	129.22	129.50	129.36	129.39	129.67	129.75	129.32	129.52	129.73	130.40	129.38	129.78
GP 00-08	Shallow	131.57	127.00	127.00	130.81	129.18	127.90	127.76	127.73	128.76	128.71	127.79	128.42	128.12	129.62	127.91	128.08
GP 00-09	Shallow	131.83	127.26	127.26	131.07	127.77	127.71	127.64	127.63	128.18	128.41	127.64	128.30	127.93	130.84	127.77	127.68
GP 00-10	Shallow	131.78	127.21	127.21	131.02	127.82	127.72	127.66	127.65	128.23	128.44	127.65	128.15	127.97	129.82	127.79	127.71
**GP 08-1	Shallow					127.36	127.17	126.68	126.36	127.14	127.55	127.20	126.91	127.00	127.73	n.a.	126.43

NOTES: 1) mASL - metres Above Sea Level
n.m.= Not measured
n.a. - Not applicable
2) * - Indicates measurement obtained in January 2008.
3) ** - GP 08-1 installed on Aug 19, 2008 to replace MW 99-03 (damaged in January 2008)

TABLE A-3
WATER LEVEL ELEVATIONS - Meridian Brick Property
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

Monitoring Well Designation	Relative Depth	Ground Surface (m.a.s.l.)	Bottom (m.a.s.l.)	Screen		Water Level Elevations (mASL)								
				Bottom (m.a.s.l.)	Top (m.a.s.l.)	Mar-15	May-15	Oct-15	Feb-16	Apr-16	Nov-16	Mar-17	Jun-17	Nov-17
MW 5	Deep	168.34	149.01	149.01	158.13	153.64	154.83	153.55	155.38	155.83	153.62	156.29	155.78	154.61
MW 6A	Deep	168.65	150.08	150.08	156.18	159.52	159.70	159.41	160.53	160.59	159.47	160.11	160.24	159.54
MW 6B	Shallow	168.83	158.65	158.65	164.72	160.28	160.46	160.31	160.21	160.92	160.32	160.63	160.69	159.58
MW 7A	Deep	167.79	150.80	150.80	156.89	158.90	159.30	158.74	159.49	160.44	158.96	159.76	159.99	159.00
MW 7B	Shallow	167.57	158.27	158.27	164.37	160.46	161.79	160.25	160.39	164.38	161.30	165.52	164.85	160.84
MW 8A	Deep	164.78	148.02	148.02	152.59	153.07	153.35	153.08	153.62	154.27	153.03	154.55	153.96	153.34
MW 8B	Shallow	164.64	153.21	153.21	157.78	153.83	154.13	153.82	154.26	154.56	153.78	154.75	154.18	153.92
MW 9	Shallow	160.82	151.98	151.98	156.55	153.24	155.37	153.41	156.59	155.87	153.42	155.93	154.66	154.46
MW 10A	Deep	146.00	133.12	133.12	137.70	138.37	138.29	138.34	139.28	137.64	134.61	135.06	135.20	134.77
MW 10B	Shallow	145.44	139.27	139.27	143.84	141.59	142.09	141.83	141.76	142.35	141.84	142.35	142.28	141.92
MW 11	Shallow	144.32	135.76	135.76	138.81	139.59	139.99	139.61	140.43	141.66	139.63	140.57	140.55	139.98
MW 12A	Deep	135.12	122.55	122.55	127.12	127.84	128.06	127.87	126.66	129.25	127.94	128.51	128.26	128.24
MW 12B	Shallow	134.97	127.96	127.96	131.01	130.09	131.03	130.51	131.60	131.67	130.57	131.43	131.37	130.84
GP 00-1	Shallow	131.96	122.82	122.82	128.91	127.81	128.13	127.89	n.a.	129.24	128.00	128.57	128.45	128.21
GP 00-2	Shallow	131.76	125.82	125.82	128.86	127.65	127.84	127.67	n.a.	129.09	127.74	128.25	128.16	127.90
GP 00-3	Shallow	131.93	125.99	125.99	129.03	127.15	128.01	127.83	n.a.	129.25	127.88	128.41	128.32	128.05
**MW 99-03	Shallow	132.31	125.00	125.00	131.10	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	132.80	132.80	
GP 00-04	Shallow	131.59	127.02	127.02	130.83	n.m.	128.17	127.80	n.a.	129.17	128.08	n.a.	128.44	130.09
GP 00-05	Shallow	131.80	126.01	126.01	131.04	128.67	128.07	127.73	n.a.	129.18	127.99	n.a.	128.35	128.15
GP 00-06	Shallow	131.81	127.24	127.24	131.05	129.83	130.07	129.87	n.a.	130.03	130.08	n.a.	130.05	130.07
GP 00-07	Shallow	131.54	126.97	126.97	130.78	129.96	129.71	129.41	128.32	130.06	129.94	130.14	130.12	128.68
GP 00-08	Shallow	131.57	127.00	127.00	130.81	131.26	127.99	127.72	128.20	129.98	127.84	130.42	128.88	n.a.
GP 00-09	Shallow	131.83	127.26	127.26	131.07	128.70	127.78	127.59	130.00	129.24	127.99	128.60	128.48	128.44
GP 00-10	Shallow	131.78	127.21	127.21	131.02	128.66	127.84	127.59	n.a.	129.18	127.80	128.27	128.20	127.99
**GP 08-1	Shallow					126.28	127.03	126.27	n.a.	127.73	126.46	128.41	128.54	127.81

NOTES: 1) mASL - metres Above Sea Level
n.m.= Not measured
n.a. - Not applicable
2) * - Indicates measurement obtained in January 2008.
3) ** - GP 08-1 installed on Aug 19, 2008 to replace MW 99-03 (damaged in January 2008)

TABLE A-3
WATER LEVEL ELEVATIONS - Meridian Brick Property
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

Monitoring Well Designation	Relative Depth	Ground Surface (m.a.s.l.)	Bottom (m.a.s.l.)	Screen		Water Level Elevations (mASL)								
				Bottom (m.a.s.l.)	Top (m.a.s.l.)	Feb-18	May-18	Nov-18	Feb-19	Apr-19	Nov-19	Mar-20	Jun-20	Nov-20
MW 5	Deep	168.34	149.01	149.01	158.13	156.30	155.78	155.46	156.08	156.56	155.24	156.47	155.18	153.33
MW 6A	Deep	168.65	150.08	150.08	156.18	159.83	160.24	159.58	159.98	160.74	159.58	160.16	159.96	159.49
MW 6B	Shallow	168.83	158.65	158.65	164.72	160.56	160.67	160.45	160.56	161.08	160.45	160.64	160.60	160.38
MW 7A	Deep	167.79	150.80	150.80	156.89	159.33	159.96	158.99	159.55	160.45	159.05	159.82	159.55	159.05
MW 7B	Shallow	167.57	158.27	158.27	164.37	160.67	165.48	160.40	162.83	165.40	161.01	164.91	163.17	160.75
MW 8A	Deep	164.78	148.02	148.02	152.59	154.08	153.74	153.50	153.68	154.65	154.42	154.19	153.71	153.47
MW 8B	Shallow	164.64	153.21	153.21	157.78	154.62	154.10	154.17	153.97	154.97	153.99	154.88	153.96	153.76
MW 9	Shallow	160.82	151.98	151.98	156.55	156.57	155.28	155.42	155.51	156.30	155.44	156.06	155.54	155.27
MW 10A	Deep	146.00	133.12	133.12	137.70	135.02	135.30	134.97	135.22	135.36	135.15	135.36	135.52	135.07
MW 10B	Shallow	145.44	139.27	139.27	143.84	142.33	142.27	141.92	142.28	142.74	142.16	142.62	142.27	142.03
MW 11	Shallow	144.32	135.76	135.76	138.81	140.60	139.50	140.42	140.59	141.04	140.58	140.92	140.22	139.82
MW 12A	Deep	135.12	122.55	122.55	127.12	129.48	128.20	128.35	128.74	129.02	128.35	128.57	128.20	127.99
MW 12B	Shallow	134.97	127.96	127.96	131.01	131.53	131.50	130.90	131.47	131.85	131.22	131.68	131.08	130.66
GP 00-1	Shallow	131.96	122.82	122.82	128.91	129.22	128.32	128.41	128.78	128.82	128.38	128.67	128.26	128.04
GP 00-2	Shallow	131.76	125.82	125.82	128.86	129.15	128.12	128.18	128.56	128.78	128.16	128.45	127.96	127.80
GP 00-3	Shallow	131.93	125.99	125.99	129.03	129.31	128.16	128.29	128.69	128.90	128.30	128.58	128.10	127.94
**MW 99-03	Shallow	132.31	125.00	125.00	131.10				-	-	-	-	-	-
GP 00-04	Shallow	131.59	127.02	127.02	130.83	129.46	n.a.	128.77	n.a.	129.06	n.a.	n.a.	n.a.	n.a.
GP 00-05	Shallow	131.80	126.01	126.01	131.04	129.51	128.38	128.45	128.85	129.11	n.a.	128.78	128.21	128.07
GP 00-06	Shallow	131.81	127.24	127.24	131.05	131.20	127.98	130.02	130.97	130.55	n.a.	130.62	130.07	130.05
GP 00-07	Shallow	131.54	126.97	126.97	130.78	131.07	130.13	129.29	n.a.	130.70	n.a.	n.a.	n.a.	n.a.
GP 00-08	Shallow	131.57	127.00	127.00	130.81	131.05	128.74	130.02	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
GP 00-09	Shallow	131.83	127.26	127.26	131.07	n.a.	n.a.	130.77	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
GP 00-10	Shallow	131.78	127.21	127.21	131.02	129.49	128.10	128.21	n.a.	128.92	n.a.	128.53	127.98	127.84
**GP 08-1	Shallow					128.25	128.51	127.79	128.16	128.65	132.91	128.31	127.81	127.67

NOTES: 1) mASL - metres Above Sea Level
n.m.= Not measured
n.a. - Not applicable
2) * - Indicates measurement obtained in January 2008.
3) ** - GP 08-1 installed on Aug 19, 2008 to replace MW 99-03 (damaged in January 2008)

TABLE A-3
WATER LEVEL ELEVATIONS - Meridian Brick Property
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

Monitoring Well Designation	Relative Depth	Ground Surface (m.a.s.l.)	Bottom (m.a.s.l.)	Screen		Water Level Elevations (mASL)					
				Bottom (m.a.s.l.)	Top (m.a.s.l.)	Mar-21	May-21	Nov-21	Mar-22	May-22	Nov-22
MW 5	Deep	168.34	149.01	149.01	158.13	156.01	155.10	155.47	156.12	154.73	151.74
MW 6A	Deep	168.65	150.08	150.08	156.18	159.70	159.88	159.95	160.38	160.24	159.36
MW 6B	Shallow	168.83	158.65	158.65	164.72	160.50	160.53	160.59	160.82	160.78	160.32
MW 7A	Deep	167.79	150.80	150.80	156.89	159.20	159.46	159.42	160.10	159.85	158.85
MW 7B	Shallow	167.57	158.27	158.27	164.37	160.73	165.10	160.92	164.96	164.01	160.12
MW 8A	Deep	164.78	148.02	148.02	152.59	153.79	153.74	153.99	154.24	153.98	153.35
MW 8B	Shallow	164.64	153.21	153.21	157.78	154.10	153.93	154.22	154.47	154.22	153.67
MW 9	Shallow	160.82	151.98	151.98	156.55	155.47	155.59	155.64	155.79	155.64	155.23
MW 10A	Deep	146.00	133.12	133.12	137.70	135.26	135.37	135.13	135.37	135.47	134.71
MW 10B	Shallow	145.44	139.27	139.27	143.84	142.31	142.28	142.33	142.66	142.44	141.93
MW 11	Shallow	144.32	135.76	135.76	138.81	140.47	140.32	141.68	140.83	140.34	138.63
MW 12A	Deep	135.12	122.55	122.55	127.12	128.49	128.28	128.47	128.60	128.35	127.94
MW 12B	Shallow	134.97	127.96	127.96	131.01	131.37	131.20	131.49	131.59	131.21	130.56
GP 00-1	Shallow	131.96	122.82	122.82	128.91	128.55	128.33	128.50	128.68	128.41	128.00
GP 00-2	Shallow	131.76	125.82	125.82	128.86	128.33	128.04	128.25	128.41	128.09	127.77
GP 00-3	Shallow	131.93	125.99	125.99	129.03	128.48	128.19	128.40	128.56	128.25	127.94
**MW 99-03	Shallow	132.31	125.00	125.00	131.10	-	-	-	-	-	-
GP 00-04	Shallow	131.59	127.02	127.02	130.83	n.a	n.a	n.a	n.a	n.a	n.a
GP 00-05	Shallow	131.80	126.01	126.01	131.04	128.64	128.32	128.55	128.73	128.37	128.47
GP 00-06	Shallow	131.81	127.24	127.24	131.05	130.77	130.09	130.48	130.88	130.08	130.40
GP 00-07	Shallow	131.54	126.97	126.97	130.78	n.a	n.a	n.a	n.a	n.a	n.a
GP 00-08	Shallow	131.57	127.00	127.00	130.81	n.a	n.a	130.34	130.90	129.77	129.73
GP 00-09	Shallow	131.83	127.26	127.26	131.07	n.a	n.a	n.a	n.a	n.a	n.a
GP 00-10	Shallow	131.78	127.21	127.21	131.02	n.a	128.04	128.56	128.46	128.10	127.82
**GP 08-1	Shallow					127.85	128.07	128.42	128.39	128.37	127.18

NOTES: 1) mASL - metres Above Sea Level
n.m.= Not measured
n.a. - Not applicable
2) * - Indicates measurement obtained in January 2008.
3) ** - GP 08-1 installed on Aug 19, 2008 to replace MW 99-03 (damaged in January 2008)

APPENDIX

B LEACHATE COLLECTION SYSTEM CHEMISTRY

FIGURE B-1
LEACHATE : MH 23 and 25-I

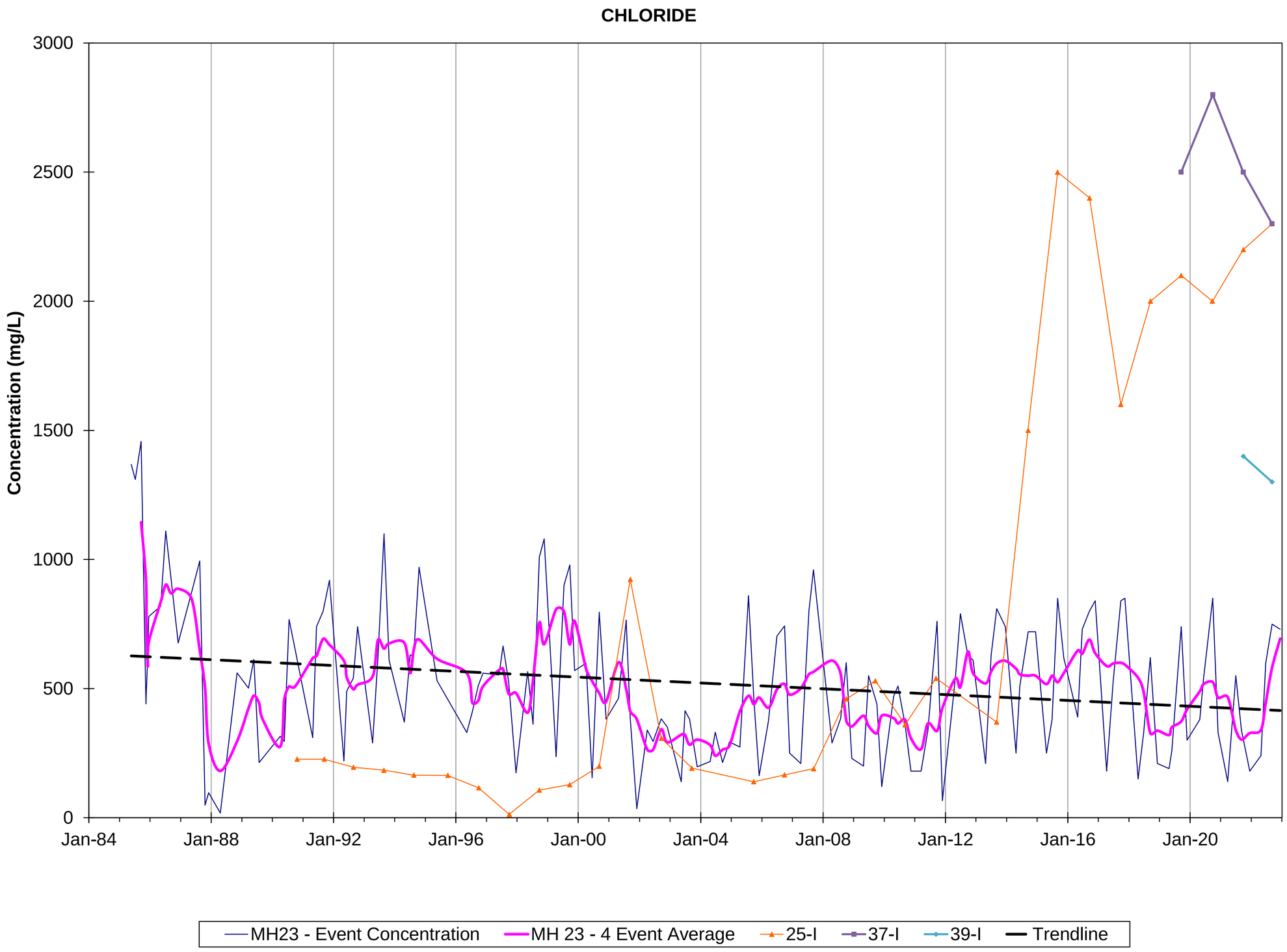


FIGURE B-2
LEACHATE : MH 23 and 25-I

ALKALINITY

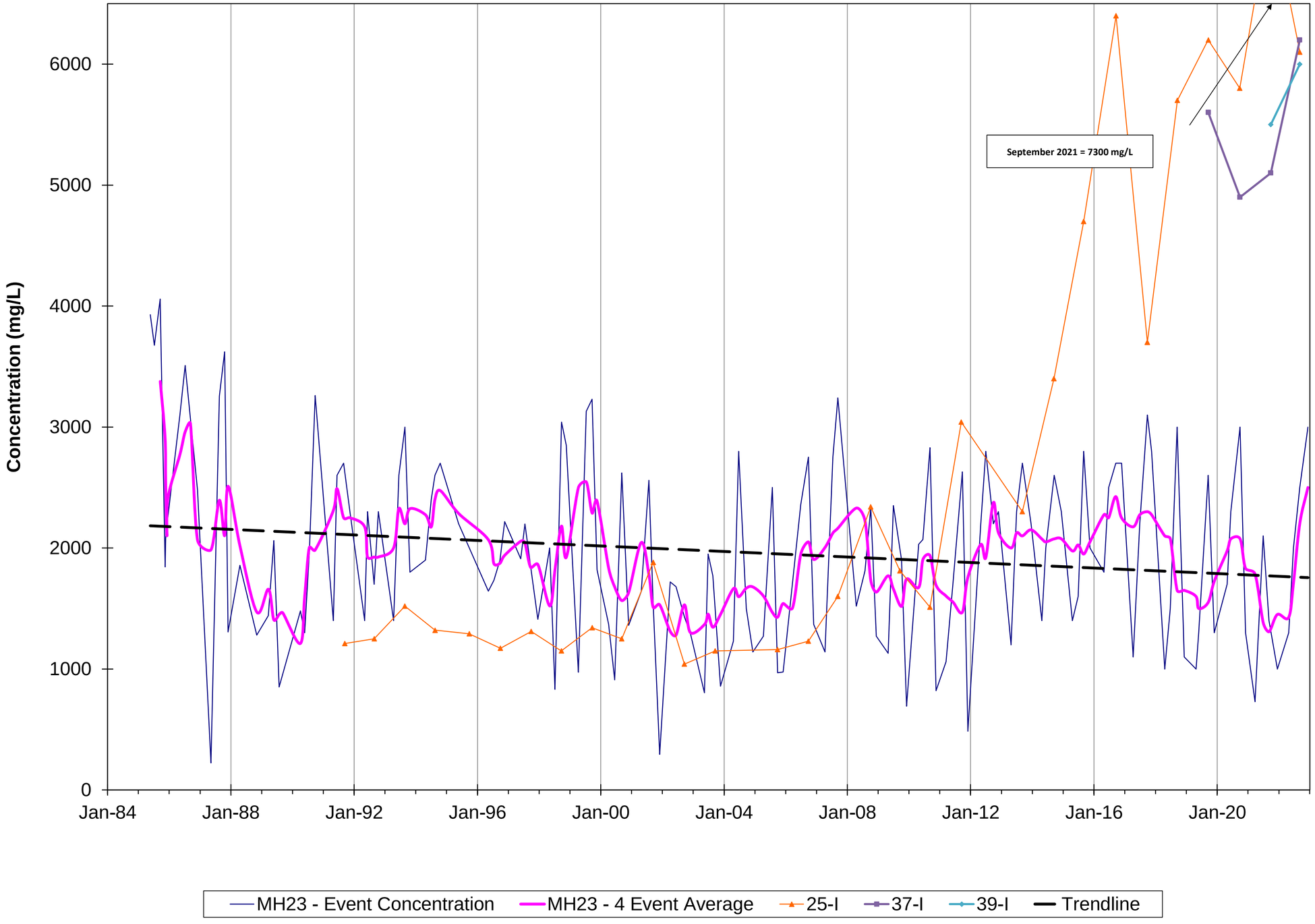


FIGURE B-3
LEACHATE : MH 23 and 25-I

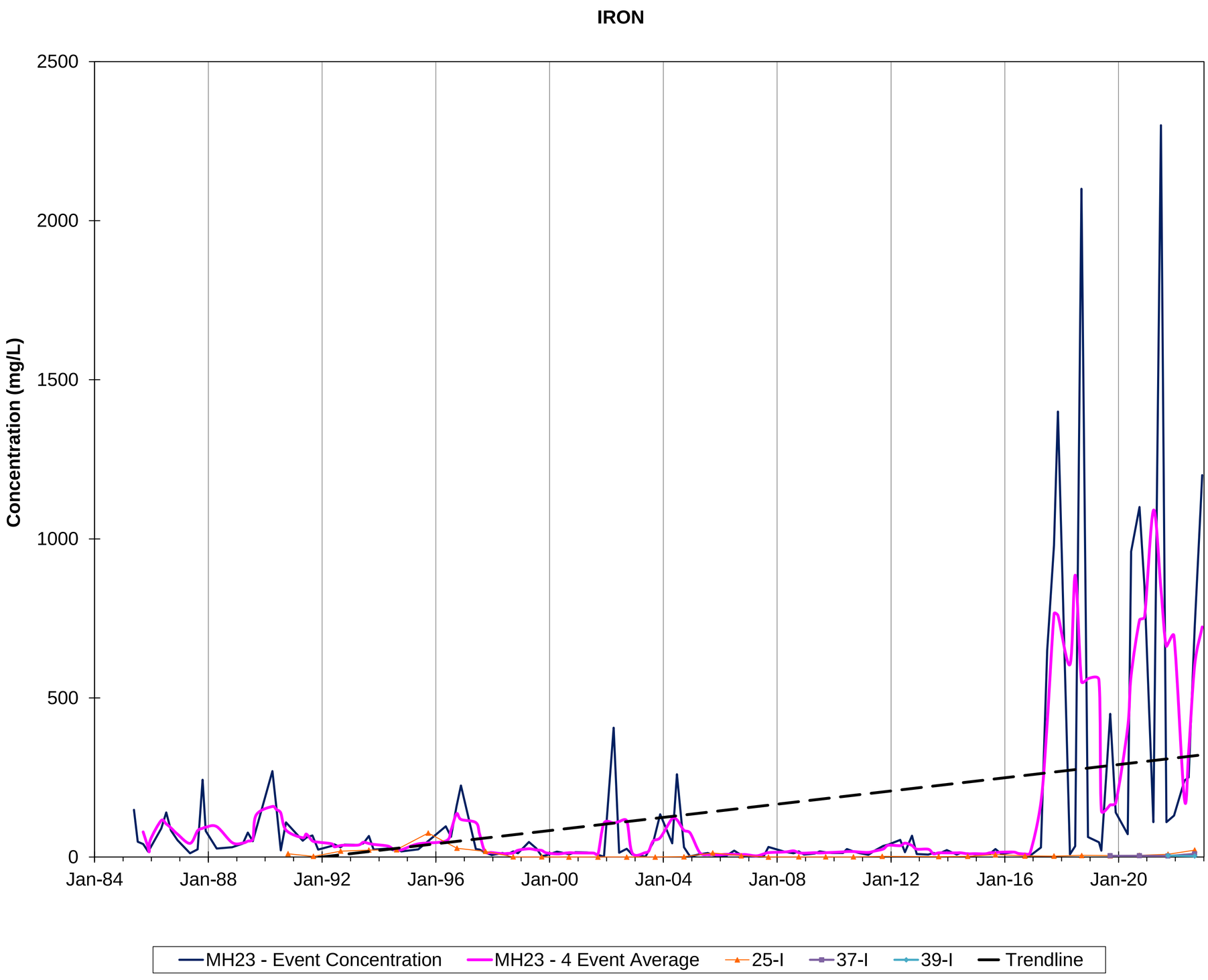


FIGURE B-4
LEACHATE : MH 23 and 25-I

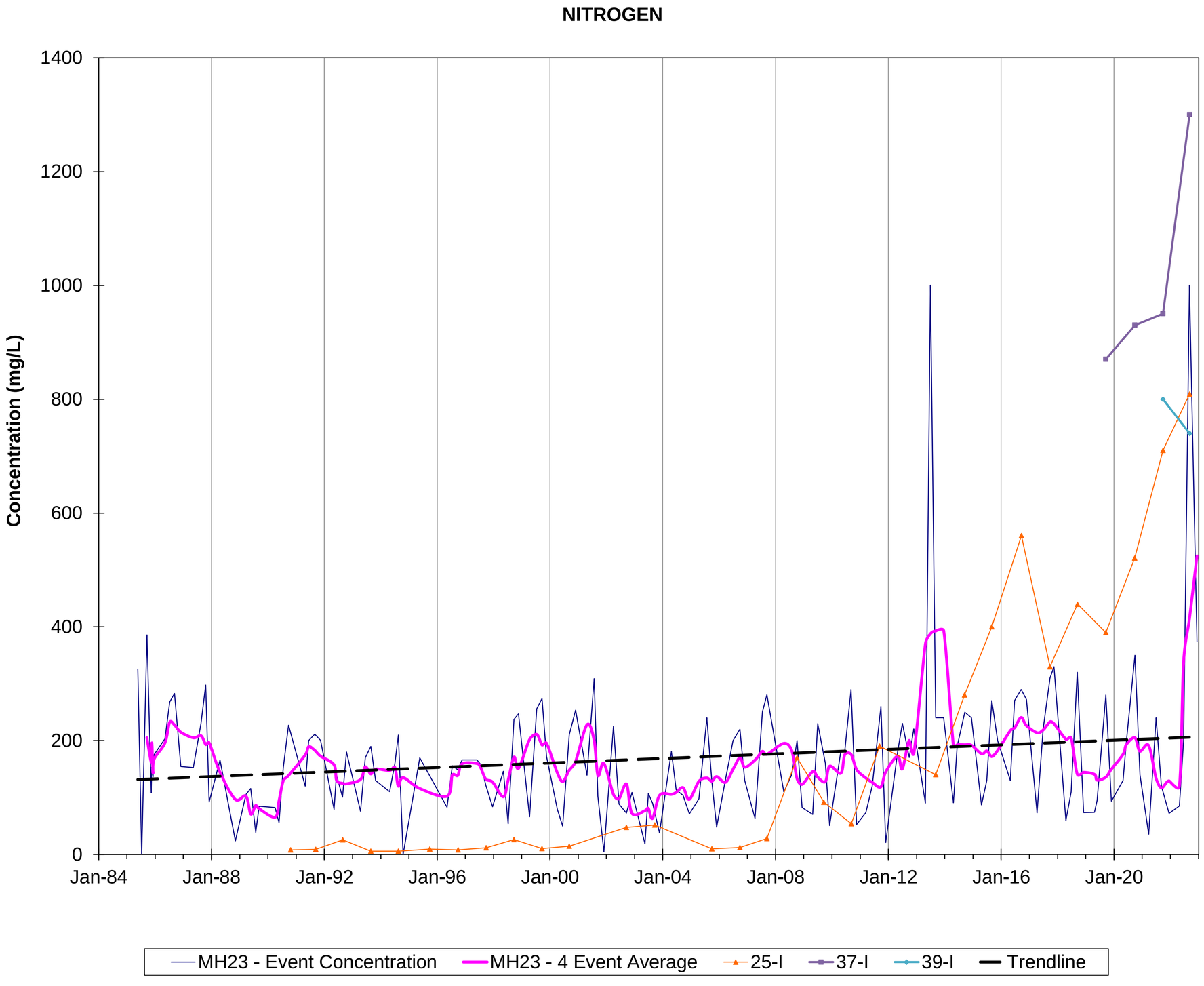


FIGURE B-5
LEACHATE : MH 23 and 25-I

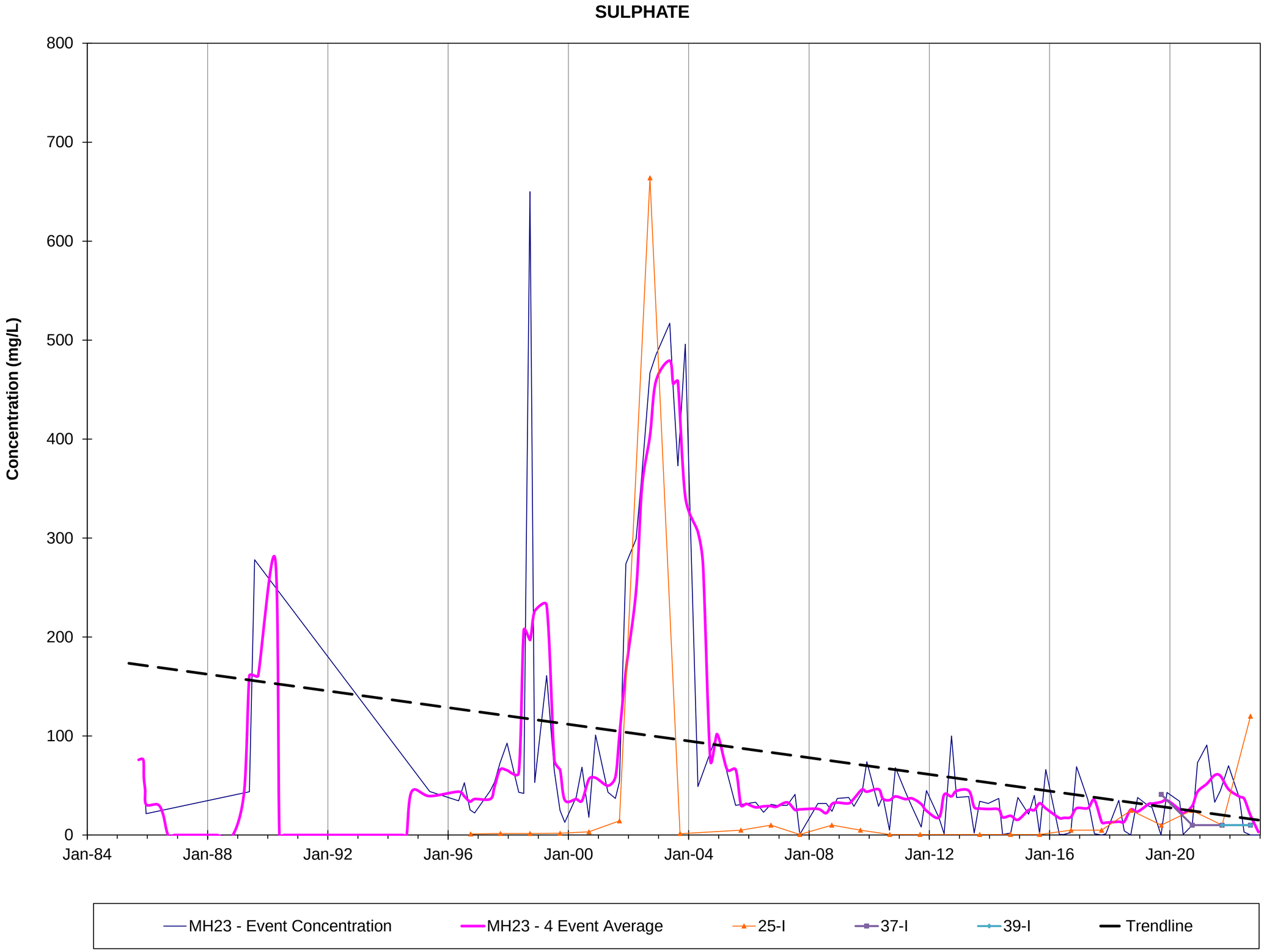


FIGURE B-6
LEACHATE : MH 23 and 25-I

POTASSIUM

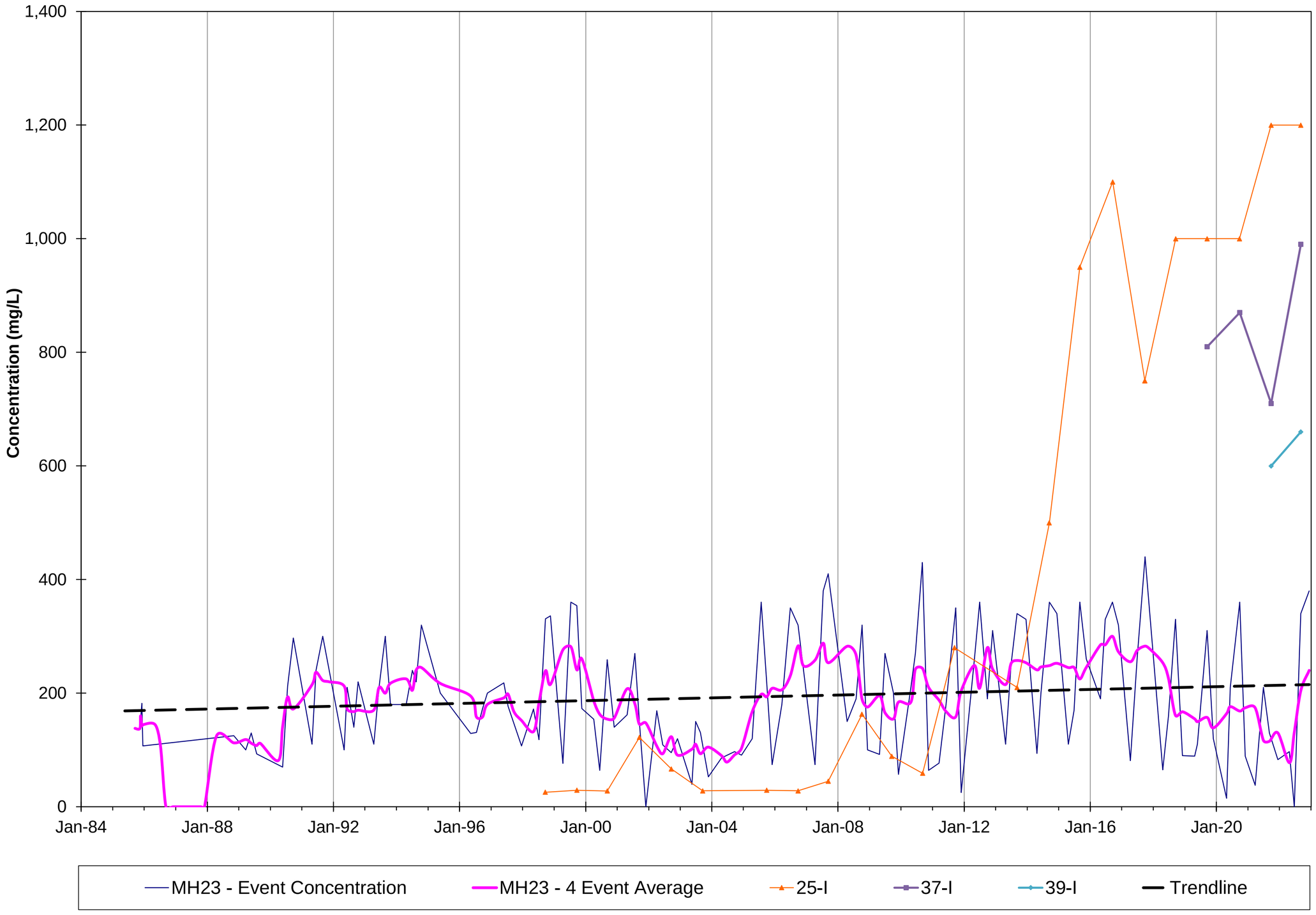


FIGURE B-7
LEACHATE : MH 23 and 25-I

SODIUM

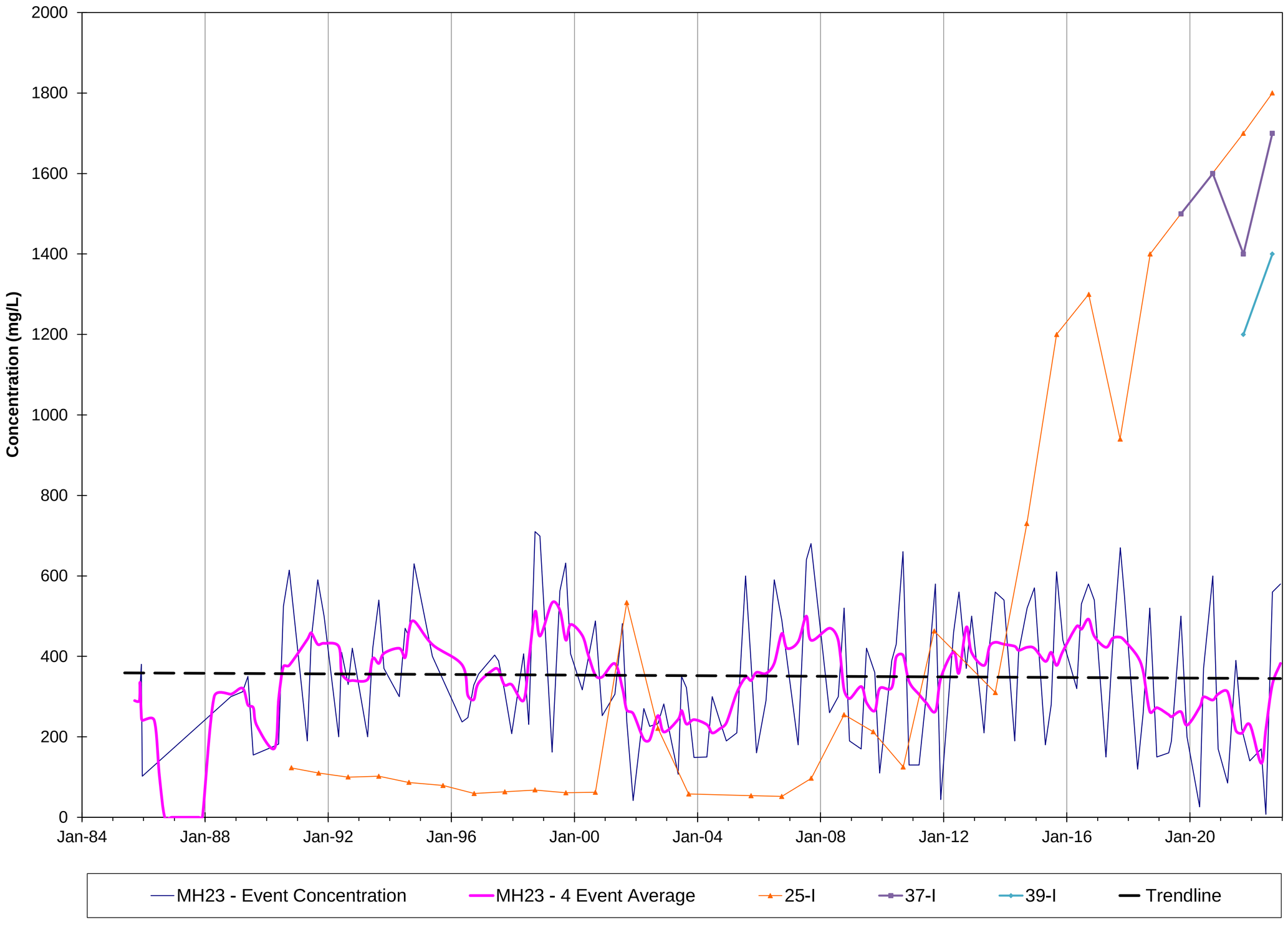


FIGURE B-8
LEACHATE : MH 23 and 25-I

HARDNESS

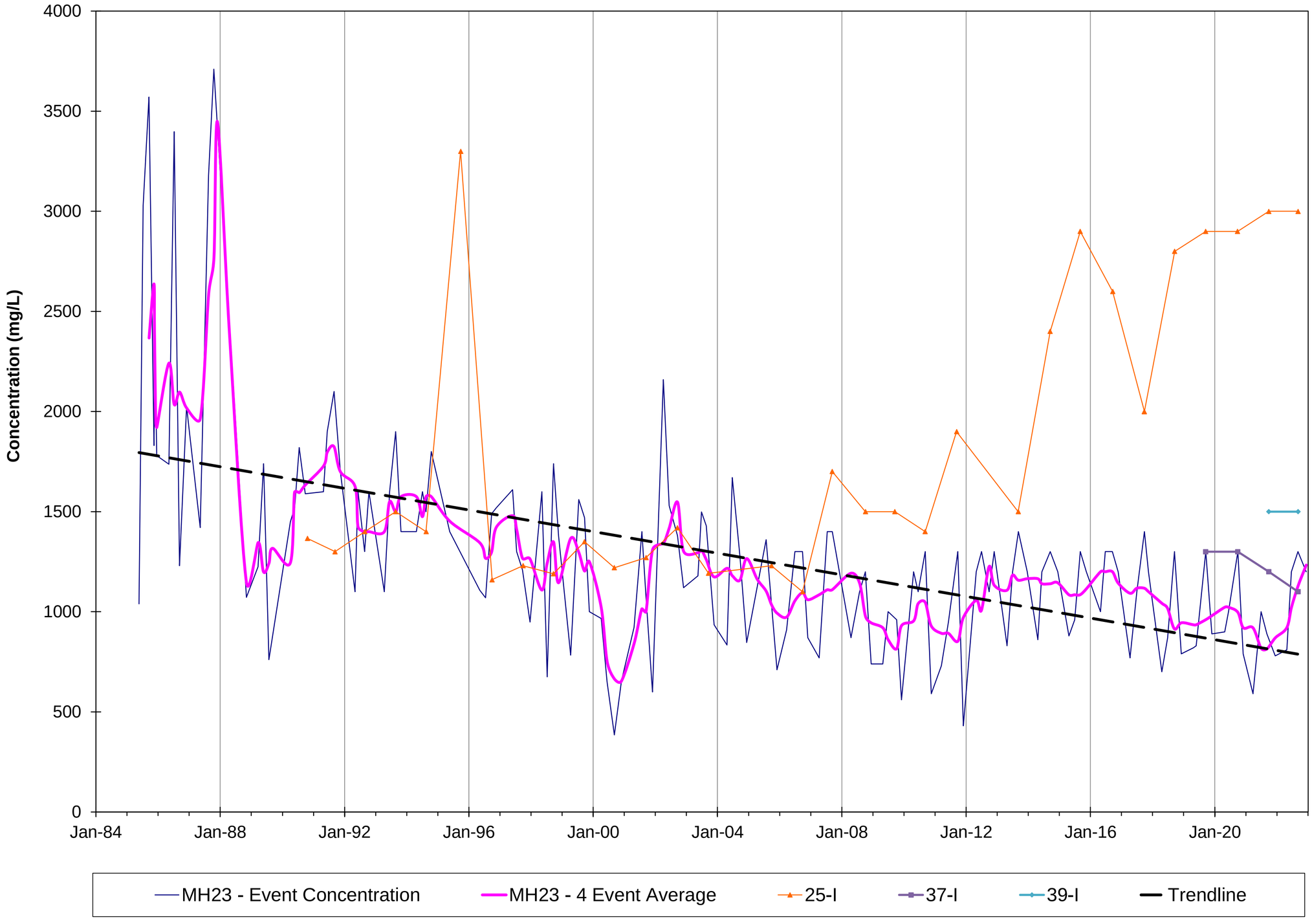


TABLE B-1
LEACHATE GENERAL CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	UNITS	SEWER USE BY-LAW	May-85	Jul-85	Sep-85	Nov-85	Nov-85	Dec-85	Dec-85	May-86	Jul-86	Sep-86	Dec-86	May-87	Aug-87	Oct-87
pH	units	6.0-10.0	6.8	6.8	6.7	6.3	7.3	6.8	7.3	7.7	7.0	6.8	7.6	7.2	6.5	7.0
Specific Conductance	µS/cm		10050	9020	11130	4920	5490	5940	6300	9050	8900	9140	6120	6720	7650	9850
Chloride	mg/L	1500	1368	1310	1457	441	497	631	779	819	1110		677	873	994	49
Sulphate	mg/L	1500				76		40	22							
Alkalinity	mg/L		3928	3676	4058	1844	2082	2210	2270	3100	3508		2476	223	3256	3622
Nitrate	mg/L		0.55	0.55	0.80	0.40	0.40	0.25	0.15	0.55	0.10	<0.05	0.75	0.45	0.70	0.55
Nitrite	mg/L		0.08	0.11	0.09	0.09	0.11	0.07	0.04	0.07	0.17	<0.005	0.03	0.05	0.12	0.10
Ammonia	mg/L			300	328	100	120	130	143	178	237	5	140	152	198	280
Total Kjeldahl Nitrogen	mg/L	100	325		385	108	153	136	175	203	268	283	154	152	229	297
Organic Nitrogen	mg/L				57	8	33	6	33	25	31	278	14	<0.05	31	17
Calcium	mg/L					432		432	250							
Magnesium	mg/L					182		235	280							
Hardness	mg/L		1040	3028	3571	1830	2120	2050	1780	1737	3398	1230	2024	1421	3180	3710
Sodium	mg/L					290		380	102							
Potassium	mg/L					138		182	107							
Phosphorus - total	mg/L	10	2.88	1.00	1.10	0.90	1.25	3.50	1.00		1.50	2.00	0.20	0.25	0.80	1.05
Biochemical Oxygen Demand	mg/L	300	>3835	3000	9860	2830	18	1925	2360	4330	1440	4500			1500	6000
Chemical Oxygen Demand	mg/L		7560	4900		3718	4726	2160				114	16330	<2	4830	5376
Dissolved Organic Carbon	mg/L		1950	1700	1990	730	1450	910		1690	2250		1160	260	1480	2500
Suspended Solids	mg/L	350	351	124	204		497			450	329	165			563	8130
Aluminum	mg/L	50								0.97	0.56	0.49	<0.15		0.960	7.600
Barium	mg/L															
Beryllium	mg/L															
Boron	mg/L															
Cadmium	mg/L	1								0.0050	0.0030	<0.015	<0.015	<0.0020	0.0100	0.0260
Chromium	mg/L	3								0.260	0.280	0.270	0.330	0.044	0.390	0.760
Cobalt	mg/L	5														
Copper	mg/L	3								0.530	0.024	<0.05	<0.050	<0.005	<0.005	0.170
Iron	mg/L	50	148	48	41		17			90	140	83	53	12	24	243
Lead	mg/L	3								<0.03	0.041	<0.15	<0.150	<0.015	0.072	0.490
Manganese	mg/L	5								8.00	9.90	8.80	5.60	1.40	5.90	9.80
Molybdenum	mg/L	5														
Nickel	mg/L	3								0.080	0.089	0.100	<0.050	0.031	0.092	0.160
Silicon	mg/L															
Silver	mg/L	5														
Strontium	mg/L															
Thallium	mg/L															
Tin	mg/L	5														
Titanium	mg/L	5														
Vanadium	mg/L	5														
Zinc	mg/L	3								5.4	6.1	4.4	1.6	0.08	1.70	12.00
Phenolics	µg/L	1000	2140	1600	18		1440	810	775	1980	2360	3	1290	400	1540	

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
** - Indicates the associated values is an estimated quantity.
2) Blank indicates the parameter was not analysed.

TABLE B-1
LEACHATE GENERAL CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	UNITS	SEWER USE BY-LAW	Dec-87	Apr-88	Nov-88	Mar-89	May-89	Jul-89	Sep-89	Apr-90	May-90	Jul-90	Sep-90	Apr-91	Jun-91	Aug-91	Nov-91
pH	units	6.0-10.0	7.2	7.3	7.8	7.7	7.5	7.2		6.72	6.92	7.37	7.5	6.71	7.05	7.14	7.55
Specific Conductance	µS/cm		3480	3900	5670	5013	6450	3360		3130	3080	5590	6580	3700	6600	7900	6400
Chloride	mg/L	1500	97	18	561	502	613	214		315	295	767	655	310	740	800	920
Sulphate	mg/L	1500					43.8	278									
Alkalinity	mg/L		1306	1856	1280	1440	2060	851		1480	1300	1970	3260	1400	2600	2700	2300
Nitrate	mg/L		1.15	1.39		<0.07		<0.07	<0.07	<1	<0.1	<0.1	<0.1	0.026	0.034	1.1	0.85
Nitrite	mg/L		0.13	0.02	0.05	<0.08		<0.08	<0.08	<1	<1	0.4	<0.1	<0.009	<0.009	0.019	<0.009
Ammonia	mg/L		82	140	100	82	104	66.6		74.4	2.23	172	233	100	190	240	200
Total Kjeldahl Nitrogen	mg/L	100	91	165	23.6	105	116	38.7	84.6	82.5	56	152	227	120	200	210	200
Organic Nitrogen	mg/L		9	25	<0.05	23	12	<0.05		8	54	<0.05	<0.05	20	10	<0.05	<0.05
Calcium	mg/L				210	190	274	160			229	330	395	280	320	370	290
Magnesium	mg/L				175	180	255	88			231	243	316	120	240	300	250
Hardness	mg/L				1072	1225	1740	761		1450	1520	1820	1590	1600	1900	2100	1700
Sodium	mg/L				300	312	350	155		177	182	525	614	190	440	590	500
Potassium	mg/L				125	100	130	93			69.7	212	297	110	240	300	240
Phosphorus - total	mg/L	10	6.73	0.62	0.88	0.65	0.05	0.39	1.01	1.45	<0.005	0.51	0.93	0.70	0.93	42.00	1.50
Biochemical Oxygen Demand	mg/L	300	16	20		260	250	1600	59	>900	140	852	2700	740	1000	1200	1700
Chemical Oxygen Demand	mg/L		3460	860	290												
Dissolved Organic Carbon	mg/L					52	138	25									
Suspended Solids	mg/L	350	521	108		86	22	806	376		26	79	43	120	190	130	390
Aluminum	mg/L	50		0.500	0.400						<0.025	<0.025	0.597	0.200	0.640	0.230	0.091
Barium	mg/L				1.02	0.10	1.90	0.80	1.10	8.58	1.05	0.83	0.83	0.73	1.00	1.00	0.63
Beryllium	mg/L				<0.001						<0.003	<0.003	<0.003	<0.001	<0.001	<0.001	<0.001
Boron	mg/L											3.02		1.70	3.60	4.70	4.20
Cadmium	mg/L	1		0.0500	<0.001	0.0010	<0.001	0.0100	0.0100	<0.003	<0.003	<0.003	<0.003	<0.002	0.0020	<0.002	0.0040
Chromium	mg/L	3		0.070	0.004		0.010	<0.1	0.100	<0.005	<0.005	0.010	0.045	0.024	0.038	0.037	0.020
Cobalt	mg/L	5		0.060	0.016						<0.005	0.007	0.013	<0.01	<0.01	0.014	<0.01
Copper	mg/L	3		0.050	0.002		<0.01	<0.01			<0.003	<0.003	0.029	0.048	0.043	0.031	0.016
Iron	mg/L	50	82	26	31	42	77	50		270	157	21	109	51	61	68	23
Lead	mg/L	3		0.220	<0.004	0.022	0.030	0.100	0.200	0.002	<0.01	0.030	0.060	<0.02	<0.02	<0.02	0.027
Manganese	mg/L	5			0.79		0.27	3.30			1.37	2.75	4.00	2.40	2.40	2.80	2.00
Molybdenum	mg/L	5		0.300	0.000						<0.006	<0.006	<0.006	<0.02	<0.02	<0.02	<0.02
Nickel	mg/L	3		0.070	0.006						0.012	0.029	0.057	0.013	0.034	0.056	0.030
Silicon	mg/L													7.6	8.7	11.0	8.8
Silver	mg/L	5			<0.001	0.010	0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Strontium	mg/L				5.80						4.15	6.91	6.56	3.20	4.90	5.70	4.80
Thallium	mg/L													<0.06	<0.06	<0.06	<0.06
Tin	mg/L	5															
Titanium	mg/L	5			<0.2						<0.003	<0.003	0.01	0.015	0.02	0.018	
Vanadium	mg/L	5			<0.002						<0.003	0.0050	0.0240	<0.005	<0.005	0.0060	<0.005
Zinc	mg/L	3		0.14	0.18		0.68	1.90			0.02	<0.003	1.590	0.640	0.930	0.690	0.330
Phenolics	µg/L	1000	3400		36	31	150	149	39	310		390		660	590	360	460

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
** - Indicates the associated values is an estimated quantity.
2) Blank indicates the parameter was not analysed.

TABLE B-1
LEACHATE GENERAL CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	UNITS	SEWER USE BY-LAW	May-92	Jun-92	Aug-92	Oct-92	Apr-93	Jun-93	Aug-93	Oct-93	Apr-94	Jul-94	Aug-94	Oct-94	May-95	May-96
pH	units	6.0-10.0	7.61	7.59	7.29	7.86	8.17	7.45	7.33	7.53	7.40	7.77	7.54	7.78	7.56	7.09
Specific Conductance	µS/cm		3400	5100	4500	6000	3400	5700	7300	5200	4400	5800	620	** 9800	5100	3944
Chloride	mg/L	1500	220	490	540	740	290	620	1100	610	370	630	630	970	530	330
Sulphate	mg/L	1500													44.0	34.6
Alkalinity	mg/L		1400	2300	1700	2300	1400	2600	3000	1800	1900	2400	2600	2700	2200	1644
Nitrate	mg/L		0.15	0.11	0.56						0.1	0.011	<0.02	** 0.064	0.027	<0.1
Nitrite	mg/L				0.009		<0.100	<0.100	0.018	<0.100	** 0.26	0.024	<0.090	0.019	0.01	<0.2
Ammonia	mg/L		77	150	120	170	69	150	190	130	130	170	180	130	110	84
Total Kjeldahl Nitrogen	mg/L	100	79	140	100	180	76	170	190	130	110	160	210	** 430	170	83
Organic Nitrogen	mg/L		2	<0.05	<0.05	10	7	20	<0.05	<0.05	<0.05	<0.05	30	300	60	<0.05
Calcium	mg/L		240	280	230	260	230	260	300	230	230	250	230	230	230	224
Magnesium	mg/L		130	220	180	230	130	230	270	190	200	240	220	310	210	132
Hardness	mg/L		1100	1600	1300	1600	1100	1600	1900	1400	1400	1600	1500	1800	1400	1108
Sodium	mg/L		200	410	330	420	200	420	540	370	300	470	450	630	400	237
Potassium	mg/L		100	210	140	220	110	210	300	180	180	240	220	320	200	129
Phosphorus - total	mg/L	10	0.45	0.45	0.33	0.43	0.40	0.64	0.56	0.33	0.33	0.60	0.17	** 0.16	0.54	1.19
Biochemical Oxygen Demand	mg/L	300	520	450	32	570	230	410	950	410	210	290	580	360	83	96
Chemical Oxygen Demand	mg/L															
Dissolved Organic Carbon	mg/L															
Suspended Solids	mg/L	350	96	150	90	110	110	120	170	90	74	87	68	** 140	57	379
Aluminum	mg/L	50	0.140			0.130	<0.05	0.058	0.280	0.054	0.055	0.067	** 0.21	<0.030	0.044	1.97
Barium	mg/L		0.57	0.72	1.10	0.72	0.61	0.86	0.39	0.58	0.69	0.68	0.63	0.72	0.71	1.02
Beryllium	mg/L						<0.020	<0.020	<0.020	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005
Boron	mg/L		1.80	3.50	2.60	3.70	1.80	4.10	5.00	3.30	3.20	4.40	4.40	5.90	3.90	2.38
Cadmium	mg/L	1	0.0030				<0.004	<0.004	<0.004	0.0130	<0.002	<0.002	<0.002	<0.002	0.0030	<0.005
Chromium	mg/L	3	0.012	0.021	0.013	0.022	0.013	0.022	0.035	0.031	0.015	0.022	0.020	0.027	0.019	0.020
Cobalt	mg/L	5		0.024	0.019	0.015	<0.020	<0.020	<0.020	0.012	<0.010	<0.010	<0.010	0.011	<0.010	<0.01
Copper	mg/L	3			0.008		<0.009	<0.010	<0.010	0.059	** <0.006	0.013	<0.006	<0.006	0.008	<0.01
Iron	mg/L	50	35	40	31	39	38	43	66	23	27	22	27	18	24	97
Lead	mg/L	3					<0.040	<0.040	<0.040	0.037	<0.020	<0.020	<0.020	<0.020	<0.020	<0.05
Manganese	mg/L	5	1.80	1.50	0.90	1.80	1.80	1.40	2.60	1.20	1.30	1.00	1.00	0.58	1.00	1.44
Molybdenum	mg/L	5					<0.010	<0.010	<0.010	0.014	<0.010	<0.010	<0.010	<0.010	<0.010	<0.05
Nickel	mg/L	3	0.015	0.021	0.010	0.030	<0.050	0.016	0.043	0.032	0.037	0.051	0.041	0.063	0.029	<0.05
Silicon	mg/L		8.8	9.6	10.0	10.0	8.5	11.0		9.7	11.0	11.0	9.9	11.0	11.0	10.0
Silver	mg/L	5					<0.010	<0.010	<0.010	0.160	<0.010	<0.010	<0.010	<0.010	<0.010	<0.005
Strontium	mg/L		3.00	4.40	4.50	4.30	3.00	4.60	4.90	4.00	3.60	4.20	4.10	4.70	3.80	3.13
Thallium	mg/L						<0.10	<0.10	<0.10	<0.10	<0.060	<0.060	<0.060	<0.060	<0.060	
Tin	mg/L	5													<0.050	<0.1
Titanium	mg/L	5		0.012		0.010	<0.020	<0.020	<0.020	0.012	0.014	<0.010	<0.010	0.012	<0.010	0.012
Vanadium	mg/L	5					<0.020	<0.020	<0.020	nd	<0.005	<0.005	<0.005	<0.005	<0.005	0.0150
Zinc	mg/L	3	0.330	0.390	0.061	0.730	0.160	0.140	0.270	0.170	0.140	0.140	0.180	0.170	0.110	0.490
Phenolics	µg/L	1000	150	230	73	220	320	160	370	170	430	** 250	210	** 210	52	36

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
** - Indicates the associated values is an estimated quantity.
2) Blank indicates the parameter was not analysed.

TABLE B-1
LEACHATE GENERAL CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	UNITS	SEWER USE BY-LAW	Jul-96	Sep-96	Nov-96	May-97	Jul-97	Sep-97	Dec-97	May-98	Jul-98	Sep-98	Nov-98	Apr-99	Jul-99	Sep-99
pH	units	6.0-10.0	6.76	7.36	7.61	7.21	7.2	7.38	7.61	7.33	7.08	7.75	7.96	7.43	7.69	7.85
Specific Conductance	µS/cm		4282	4640	5398	4980	5620	4140	3130	4820	2590	7155	7108	2248	6809	7220
Chloride	mg/L	1500	410	511	560	553	665	526	174	566	362	1010	1080	236	900	979
Sulphate	mg/L	1500	52.8	25.3	22.3	45	53.2	72.3	92.9	43.3	41.9	650	53	161	65	25
Alkalinity	mg/L		1732	1899	2219	1910	2198	1841	1410	2000	832	3040	2850	973	3130	3230
Nitrate	mg/L		<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	0.6	<0.2	<0.2	<0.2	<0.2	2.8	<0.2	<2.0
Nitrite	mg/L		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<2.0	<2.0
Ammonia	mg/L		116	126	143	150	153	118	81.7	119	54	224	232	56	254	279
Total Kjeldahl Nitrogen	mg/L	100	156	149	166	166	158	121	83	146	54	237	247	64	256	274
Organic Nitrogen	mg/L		40	23	23	16	5	3	1	27	<0.05	13	15	8	2	<0.05
Calcium	mg/L		201	296	284	278	225		180	306	134	227	149	195	233	182
Magnesium	mg/L		137	182	198	222	180		120	205	82.2	285	292	90.4	269	264
Hardness	mg/L		1070	1490	1520	1610	1300	1210	949	1600	675	1740	1380	784	1560	1470
Sodium	mg/L		248	328	356	403	389	316	208	406	231	710	699	162	562	632
Potassium	mg/L		131	172	200	218	177		107	172	118	331	336	76.6	360	354
Phosphorus - total	mg/L	10	0.60	2.00	6.36	0.80	0.39		0.23	0.03	0.22	0.52	0.41	0.89	0.66	7.60
Biochemical Oxygen Demand	mg/L	300	660	122	253	88	88	151	17	34	11	4	354	22	348	228
Chemical Oxygen Demand	mg/L															
Dissolved Organic Carbon	mg/L															
Suspended Solids	mg/L	350	634	564	588	26	49	29	29	118	46	66	99	157	96	1050
Aluminum	mg/L	50	0.36	1.1	1.15	0.23	0.549		0.06	0.28	0.55	0.09	0.106	0.241	0.155	0.115
Barium	mg/L		0.69	1.11	2.29	0.71	1.00		0.47	0.86	0.35	0.75	0.54	0.89	0.74	0.75
Beryllium	mg/L		<0.0005	<0.0005	<0.001	<0.01	<0.001		<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron	mg/L		2.50	3.00	3.52	4.30	3.75		2.33	3.92	1.76	5.80			5.90	
Cadmium	mg/L	1	<0.005	<0.05	0.0012	<0.001	0.0003		0.0005	<0.001	0.0003	0.0007	0.0004	0.0004	0.0007	<0.0001
Chromium	mg/L	3	0.010	<0.1	0.121	0.070	0.030		0.013	<0.05	0.006	<0.05	0.031	0.012	0.049	0.039
Cobalt	mg/L	5	<0.01	<0.1	0.009	0.008	0.019		0.003	0.005	0.003	0.010	0.008	0.004	0.008	0.008
Copper	mg/L	3	<0.01	<0.1	0.0151	0.0080	0.0186		0.0021	0.0180	0.0095	0.0290	0.0119	0.0160	0.0099	0.0058
Iron	mg/L	50	63	159	225	25	23	14	6	13	8	18	12	47	27	3
Lead	mg/L	3	<0.05	<0.5	0.046	0.008	0.004		0.002	<0.005	0.003	0.006	0.005	0.006	0.005	<0.0005
Manganese	mg/L	5	1.02	1.50	1.84	1.09	0.95		0.71	1.15	0.51	0.71	0.23	0.61	0.91	0.38
Molybdenum	mg/L	5	<0.05	<0.5	0.002	<0.01	0.001		0.001	<0.01	<0.001	0.003	0.002	0.005	0.002	0.002
Nickel	mg/L	3	<0.05	<0.5	0.044	0.030	0.037		0.017	0.030	0.019	0.054	0.052	0.015	0.058	0.055
Silicon	mg/L		9.2	11.4	15.1	13.5			10.0	13.5	7.6	14.0			13.9	
Silver	mg/L	5	<0.005	<0.05	<0.00005	<0.0007	<0.00007		<0.0001	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Strontium	mg/L		2.59	3.47	4.04	3.58			2.55	4.04	2.35	3.88	3.47	2.41	3.57	2.91
Thallium	mg/L													<0.00005		
Tin	mg/L	5	<0.1	<1	0.006	<0.01	0.005		0.003	<0.005	0.003	0.008		0.001	0.008	
Titanium	mg/L	5	0.013	<0.05	0.055	<0.05	0.014		0.005	<0.05	0.016	0.015	0.014	0.013	0.014	0.014
Vanadium	mg/L	5	0.0100	<0.05	0.0372	0.0170	0.0052		0.0031	<0.01	0.0068	<0.005	0.0024	0.0025	0.0050	0.0041
Zinc	mg/L	3	0.360	1.200	1.600	0.130	0.106		0.077	0.060	0.035	0.134	0.170	0.287	0.216	0.010
Phenolics	µg/L	1000	79	62	70	70	53	60	22	25	3	107	112	8	5	80

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
** - Indicates the associated values is an estimated quantity.
2) Blank indicates the parameter was not analysed.

TABLE B-1
LEACHATE GENERAL CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	UNITS	SEWER USE BY-LAW	Nov-99	Apr-00	Jun-00	Sep-00	Nov-00	Apr-01	Jul-01	Sep-01	Nov-01	Apr-02	Jun-02	Sep-02	Nov-02	May-03
pH	units	6.0-10.0	7.76	7.07	7.23	7.93	7.73	7.45	7.41	8.32	8.06	5.88	7.5	7.64	7.36	7.5
Specific Conductance	µS/cm		5002	4170	1787	5552	3045	3799	5921	3700	1094	4940	4032	3737	3305	2361
Chloride	mg/L	1500	570	598	155	796	382	463	765	386	35	340	295	383	351	139
Sulphate	mg/L	1500	12.9	38.4	68.6	18	101	43.3	37	53.9	274	299	364	467	485	517
Alkalinity	mg/L		1820	1370	910	2620	1360	1640	2560	1550	293	1720	1680	1430	1290	802
Nitrate	mg/L		0.3	<0.2	0.4	<0.2	2.8	<0.2	<2.0	1.2	1.7	<2.0	<2.0	1.7	<2.0	6.3
Nitrite	mg/L		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<0.2	<0.4	<2.0	<2.0	1.9	<2.0	1.7
Ammonia	mg/L		168	82	50	213	103	139	215	97.9	1.36	190	76.3	55.1	105	9.8
Total Kjeldahl Nitrogen	mg/L	100	172	79	49.2	210	251	139	307	101	2.8	223	86.4	69	107	10.9
Organic Nitrogen	mg/L		4	<0.05	<0.05	<0.05	148	<0.05	92	3	1	33	10	14	2	1
Calcium	mg/L		200	218		201	214	189	192	241	113	669	189	178	137	157
Magnesium	mg/L		174	123		206	142	156	213	147	68.1	171	235	242	182	173
Hardness	mg/L		1000	967	651	385	654	922	1400	1080	600	2160	1530	1380	1120	1180
Sodium	mg/L		406	317		488	253	306	481	238	41.8	270	226	233	282	107
Potassium	mg/L		173	154	64.1	259	140	162	270	150	0.05	169	109	95.4	120	39.6
Phosphorus - total	mg/L	10	0.39	0.28	0.21	0.44	0.75	0.31	0.38	0.17	0.06	1.70	0.19	1.24	5.61	0.15
Biochemical Oxygen Demand	mg/L	300	23	7	13	35	18	55	141	<0.5	<0.5	4980	7	6	9	2.6
Chemical Oxygen Demand	mg/L															
Dissolved Organic Carbon	mg/L															
Suspended Solids	mg/L	350	59	49	45	48	836	45	38	17	13	935	49	104	70	25
Aluminum	mg/L	50	0.222	0.07		0.196	3.19	0.062	0.131	0.151	0.396	4.07	0.184	2.39	0.479	0.126
Barium	mg/L		0.88	0.48		0.91	0.50	0.56	0.70	0.35	0.06	0.27	0.24	0.41	0.20	0.098
Beryllium	mg/L		<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron	mg/L		3.70			4.81	2.40	3.01	4.68	0.69	0.20	0.84	1.93	1.90	1.77	1.11
Cadmium	mg/L	1	0.0003	0.0023		0.0019	0.0014	0.0006	0.0003	<0.0001	0.0004	0.0040	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	mg/L	3	0.012	0.007		0.028	0.016	0.026	0.031	0.011	<0.005	0.023	<0.005	0.007	0.046	<0.005
Cobalt	mg/L	5	0.008	0.004		0.008	0.007	0.0047	0.0065	0.0069	0.0004	0.0875	0.0055	0.0048	0.0065	0.0021
Copper	mg/L	3	0.0047	0.0036		0.0228	0.0231	0.0015	0.0020	0.0088	0.0075	0.0160	0.0056	0.0181	0.0581	0.0079
Iron	mg/L	50	6	17	14	9	15	14	13	7	1	406	13	26	8	1.59
Lead	mg/L	3	0.006	0.005		0.004	0.008	0.002	0.0036	0.0005	0.0013	0.0195	0.003	0.0168	0.014	0.0062
Manganese	mg/L	5	0.66	0.92		0.57	0.77	0.73	0.62	1.04	0.03	16.80	0.37	0.37	0.4	0.173
Molybdenum	mg/L	5	0.001	<0.001		0.001	0.002	0.001	0.001	0.002	0.001	0.004	0.003	0.003	0.003	0.004
Nickel	mg/L	3	0.026	0.027		0.039	0.027	0.024	0.039	0.030	0.003	0.090	0.012	0.011	0.014	0.01
Silicon	mg/L		11.4			11.0	11.6	9.7	11.3	11.4	6.4		9.1	8.2	8.4	
Silver	mg/L	5	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Strontium	mg/L		3.00	3.29		3.06	2.21	2.43	2.80	1.41	0.71	1.43	1.96	2.36	1.62	1.26
Thallium	mg/L			<0.00005		0.00007	0.0001	<0.00005	<0.00005	0.00008	<0.00005	<0.00005	0.00006	0.00007	<0.00005	0.0001
Tin	mg/L	5				0.005	0.003	0.004	0.005	0.003	<0.001	0.027	0.001	0.003	0.002	<0.001
Titanium	mg/L	5	0.01	0.005		0.012	0.069	<0.005	0.009	<0.005	0.009	0.091	0.008	0.055	0.014	<0.005
Vanadium	mg/L	5	0.0012	0.0012		<0.0050	0.0076	<0.0005	<0.005	0.0016	0.0012	0.0087	0.0022	0.0082	0.0027	0.0007
Zinc	mg/L	3	0.318	0.045		0.262	0.135	0.089	0.064	0.094	0.023	17.100	0.032	0.030	0.013	0.01
Phenolics	µg/L	1000	6	8	8	17	8	30	30	1	<1	74	2	1	2	<1

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
** - Indicates the associated values is an estimated quantity.
2) Blank indicates the parameter was not analysed.

TABLE B-1
LEACHATE GENERAL CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	UNITS	SEWER USE BY-LAW	Jun-03	Aug-03	Nov-03	Apr-04	Jun-04	Sep-04	Dec-04	Apr-05	Jul-05	Sep-05	Dec-05	Mar-06	Jun-06	Sep-06	Nov-06
pH	units	6.0-10.0	7.41	7.29	7.51	7.54	7.51	7.95	7.79	7.86	7.7	7.7	8	7.9	7.9	7.5	7.7
Specific Conductance	µS/cm		4986	4209	2165	2920	4370	3090	2820	3190	5800	4320	2260	4040	6810	6470	3070
Chloride	mg/L	1500	414	381	197	218	331	214	293	274	860	461	163	377	703	743	250
Sulphate	mg/L	1500	448	373	496	49.1			102		30			33	23	31	30
Alkalinity	mg/L		1950	1770	858	1230	2800	1500	1140	1270	2500	968	974	1720	2360	2750	1370
Nitrate	mg/L		<0.2	<2.0	0.8	<0.1	<1	<0.1	3.7	0.9	<0.2	<0.2	1	0.7	<0.1	<0.1	0.3
Nitrite	mg/L		<0.2	<2.0	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.3	<0.3	0.04	0.01	<0.01	<0.01	0.01
Ammonia	mg/L		98	82.7	36.1	78.1	105	85.6	68.4	91.6	243	125	54	139	233	239	127
Total Kjeldahl Nitrogen	mg/L	100	107	88	37	181	113	104	67.4	97.1	240	128	47	130	200	220	130
Organic Nitrogen	mg/L		9	5	1	103	8	18	<0.05	6	<0.05	3	<0.05	<0.05	<0.05	<0.05	3
Calcium	mg/L		218	270	382	170			170	200	210	190	200	210	220	190	
Magnesium	mg/L		268	242	183	92			100	120	280	180	94	150	250	210	
Hardness	mg/L		1498	1429	935.5	834	1670	1280	847		1360		710	910	1300	1300	870
Sodium	mg/L		350	322	149	150	300	240	190	210	600	390	160	290	590	490	
Potassium	mg/L		150	131	52.9	86		97	91	120	360	220	74	180	350	320	
Phosphorus - total	mg/L	10	1.4	1.28	1.39	0.37	11.4	2.6	0.23	0.2	0.4	0.22	0.13	0.4	0.59	0.7	0.3
Biochemical Oxygen Demand	mg/L	300	41	22	6.3	124	80	294	20	27	110	30	7	20	42	37	7
Chemical Oxygen Demand	mg/L																
Dissolved Organic Carbon	mg/L																
Suspended Solids	mg/L	350	580	974	3660	219	34200	6930	29	100	30	26	17	38	56	32	7
Aluminum	mg/L	50	5.8	13	57.1	1.3			0.042	0.069	0.084	0.02	0.015	0.016	0.19	0.028	0.013
Barium	mg/L		0.23	0.43	0.59	0.73			0.47	0.51	0.67	0.54	0.52	0.41	0.75	0.57	0.63
Beryllium	mg/L		<0.001	<0.001	0.003	<0.0035			<0.000014	<0.0014	<0.0005	<0.0005	<0.0005	<0.0005	<0.003	<0.0005	<0.0005
Boron	mg/L		2.64	2.33	0.85	1.9			1.90	2.2	5.6	3.5	1.4	3	5.6	4.8	1.9
Cadmium	mg/L	1	0.0005	0.0003	0.0008	<0.0025			<0.01	<0.001	0.0001	<0.0001	<0.0001	<0.0001	<0.0005	0.0001	<0.0001
Chromium	mg/L	3	0.02	0.041	0.105	0.019			<0.016	0.012	0.027	0.022	<0.005	0.017	0.032	0.022	<0.005
Cobalt	mg/L	5	0.0094	0.0139	0.0437	0.0029			<0.01	0.003	0.0074	0.0053	0.0027	0.0041	0.009	0.0067	0.0037
Copper	mg/L	3	0.0236	0.038	0.159	<0.0075			0.21	0.005	0.002	0.004	0.004	0.006	<0.005	0.002	0.003
Iron	mg/L	50	20.5	45.9	134	43	260	31	2.4	8.8	13	6.4	3.9	4.1	20	6.5	0.73
Lead	mg/L	3	0.03	0.047	0.0873	0.0078			<0.022	<0.0022	0.0025	<0.0005	<0.0005	<0.0005	0.004	<0.0005	<0.0005
Manganese	mg/L	5	1.11	1.58	3.07	0.73			0.46	0.81	0.56	0.42	0.63	0.69	0.7	0.5	0.71
Molybdenum	mg/L	5	0.007	0.003	0.008	<0.0035			<0.014	<0.0014	0.001	0.001	0.001	<0.001	<0.005	0.001	<0.001
Nickel	mg/L	3	0.03	0.04	0.11	0.02			0.04	0.019	0.048	0.032	0.01	0.025	0.049	0.04	0.012
Silicon	mg/L					8.4			8.2	8.7	16	12	9.3	11	14	12	9.6
Silver	mg/L	5	0.0002	<0.0001	0.0003	<0.0015			<0.006	<0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0001	<0.0001
Strontium	mg/L		1.77	2.42	1.64	2.1			2	2.1	3.2	2.4	2.1	2.2	2.9	2.5	2.4
Thallium	mg/L		0.00019	0.00019	0.00063	<0.0025			<0.01	<0.001	<0.00005	<0.00005	<0.00005	<0.00005	<0.0003	<0.00005	<0.00005
Tin	mg/L	5	0.003	0.003	0.003	0.003			<0.008	0.0026	0.008	<0.004	0.001	0.003	0.008	0.004	0.001
Titanium	mg/L	5	0.116	0.261	0.74	0.037			<0.02	0.005	0.01	<0.005	<0.005	<0.005	<0.030	0.006	<0.005
Vanadium	mg/L	5	0.0202	0.0462	0.125	<0.0025			<0.01	0.001	0.001	<0.005	<0.001	<0.001	<0.005	0.002	<0.001
Zinc	mg/L	3	0.243	0.171	0.454	0.34			<0.05	0.21	0.056	0.052	0.014	0.15	0.14	0.032	0.032
Phenolics	µg/L	1000	1	4	2	10	1	1	4	16	45	27	1	14	40	37	15

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
** - Indicates the associated values is an estimated quantity.
2) Blank indicates the parameter was not analysed.

TABLE B-1
LEACHATE GENERAL CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	UNITS	SEWER USE BY-LAW	Apr-07	Jul-07	Sep-07	Apr-08	Jul-08	Oct-08	Dec-08	Apr-09	Jun-09	Oct-09	Dec-09	Apr-10	Jun-10	Sep-10
pH	units	6.0-10.0	7.9	7.6	7.6	7.5	7.6	7.5	7.8	7.3	7.4	7.6	7.4	7.8	7.5	7.6
Specific Conductance	µS/cm		2680	6420	8040	3650	4560	5750	3050	2730	5980	4850	1790	5020	5240	7440
Chloride	mg/L	1500	210	800	960	290	384	600	230	200	550	440	120	470	510	360
Sulphate	mg/L	1500	30	41	* <1	32	32	24	37	38	29	43	74	29	39	<10
Alkalinity	mg/L		1140	2750	3240	1520	1810	2330	1270	1130	2350	1900	691	2030	2070	2830
Nitrate	mg/L		0.5	<1	<1	<0.1	<0.1	<0.1	0.4	1.4	<0.1	0.3	1.5	<0.1	<0.1	0.1
Nitrite	mg/L		<0.01	<0.1	<0.1	<0.01	<0.01	<0.01	0.02	0.02	<0.01	0.02	0.15	<0.01	<0.01	0.02
Ammonia	mg/L		72	263	297	110	140	210	86	75	230	160	46	160	170	290
Total Kjeldahl Nitrogen	mg/L	100	63	250	280	110	140	200	82	69	230	160	49	180	180	290
Organic Nitrogen	mg/L		<0.05	<0.05	<0.05	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	3	20	10	<0.05
Calcium	mg/L		190	210	200	200	180	210	170	170	200	190	160	200	230	210
Magnesium	mg/L		100	260	270	140	150	210	110	98	200	160	67	190	210	260
Hardness	mg/L		770	1400	1400	870	1100	1200	740	740	1000	960	560	1200	1100	1300
Sodium	mg/L		180	640	680	260	300	520	190	170	420	360	110	390	430	660
Potassium	mg/L		74	380	410	150	190	320	100	92	270	200	57	210	270	430
Phosphorus - total	mg/L	10	0.18	0.8	0.6	0.3	0.3	0.7	0.4	0.28	0.3	0.4	0.27	0.33	0.54	0.7
Biochemical Oxygen Demand	mg/L	300	7	85	240	13	19	25	10	7	52	21	6	22	19	28
Chemical Oxygen Demand	mg/L															
Dissolved Organic Carbon	mg/L															
Suspended Solids	mg/L	350	28	30	52	37	22	56	22	30	70	30	38	32	52	42
Aluminum	mg/L	50	0.012	0.036	0.2	0.042	0.047	0.18	0.038	0.14	0.11	0.34	0.21	0.048	0.068	0.087
Barium	mg/L		0.51	0.57	0.78	0.48	0.52	0.69	0.48	0.44	0.7	0.67	0.48	0.57	0.74	0.80
Beryllium	mg/L		<0.0005	<0.0005	<0.003	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Boron	mg/L		1.5	5.5	6.2	2.9	3.2	4.8	1.8	1.7	4.9	3.2	1.1	3.8	4.6	8.0
Cadmium	mg/L	1	<0.0001	<0.0001	<0.0005	0.0004	0.0002	0.0004	0.0004	<0.0001	<0.0001	<0.0001	0.0001	0.0001	<0.0001	0.0003
Chromium	mg/L	3	<0.005	0.028	0.043	0.014	0.015	0.025	0.008	0.006	0.023	0.013	<0.005	0.014	0.018	0.035
Cobalt	mg/L	5	0.0031	0.0091	0.011	0.0038	0.0049	0.0078	0.0033	0.003	0.007	0.0058	0.0022	0.006	0.0069	0.0097
Copper	mg/L	3	0.002	0.002	0.006	0.003	0.002	0.002	0.002	0.003	0.002	0.003	0.005	0.003	0.001	0.002
Iron	mg/L	50	3.3	4.4	32	16	12	18	7.8	11	18	14	13	13	25	18
Lead	mg/L	3	<0.0005	<0.0005	0.009	0.0016	0.0022	0.0028	0.001	0.0011	0.0024	0.0018	0.0013	0.0016	0.0019	0.0030
Manganese	mg/L	5	0.71	0.6	0.59	0.77	0.7	0.67	0.68	0.69	0.61	0.56	0.51	0.77	0.84	0.57
Molybdenum	mg/L	5	<0.001	0.001	<0.005	<0.001	<0.001	0.002	<0.001	<0.001	0.001	0.001	0.002	0.001	0.001	0.002
Nickel	mg/L	3	0.009	0.053	0.06	0.021	0.025	0.04	0.015	0.013	0.036	0.026	0.01	0.029	0.036	0.060
Silicon	mg/L		9.1	14	13	11	11	14	8.9	9.1	13	12	7.1	13	15	16
Silver	mg/L	5	<0.0001	<0.0001	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Strontium	mg/L		2.1	2.8	2.8	2.1	2.3	2.6	2	1.8	2.6	2.4	1.6	2.7	2.9	3.0
Thallium	mg/L		<0.00005	<0.00005	<0.0003	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin	mg/L	5	<0.001	0.006	0.01	0.004	0.004	0.007	0.002	0.002	0.008	0.005	0.001	0.005	0.006	0.010
Titanium	mg/L	5	<0.005	0.008	<0.030	0.006	0.005	0.01	<0.005	<0.005	0.01	0.006	0.007	0.006	0.008	0.014
Vanadium	mg/L	5	<0.001	<0.005	0.006	0.001	0.002	0.003	0.002	<0.001	0.003	0.002	<0.001	0.002	0.003	0.003
Zinc	mg/L	3	0.034	0.033	0.18	0.091	0.047	0.074	0.048	0.054	0.068	0.062	0.099	0.056	0.046	0.035
Phenolics	µg/L	1000	21	70	70	29	22	17	7	6	23	13	3	9	41	17

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
** - Indicates the associated values is an estimated quantity.
2) Blank indicates the parameter was not analysed.

TABLE B-1
LEACHATE GENERAL CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	UNITS	SEWER USE BY-LAW	Nov-10	Mar-11	Jun-11	Sep-11	Nov-11	Apr-12	Jun-12	Sep-12	Nov-12	Apr-13	Jun-13	Sep-13	Dec-13	Apr-14
pH	units	6.0-10.0	7.54	7.48	7.5	7.71	7.14	7.72	7.5	7.62	7.91	7.51	7.64	7.37	7.89	7.66
Specific Conductance	µS/cm		2180	2570	4180	7110	1240	5600	7100	5800	6100	2900	5700	7300	6400	3400
Chloride	mg/L	1500	180	180	340	760	66	540	790	630	610	210	630	810	740	250
Sulphate	mg/L	1500	68	44	28	8	45	17	1	100	38	39	2	34	32	37
Alkalinity	mg/L		821	1060	1700	2630	485	2200	2800	2200	2300	1200	2300	2700	2200	1400
Nitrate	mg/L		1.6	0.7	<0.1	0.1	1.8	0.11	0.16	0.36	0.77	0.57	0.21	<0.1	0.2	0.79
Nitrite	mg/L		0.22	0.02	<0.01	0.01	0.11	<0.010	0.028	0.044	0.038	<0.01	0.014	<0.01	0.022	<0.01
Ammonia	mg/L		47	72	130	250	17	170	260	170	210	96	220	250	240	85
Total Kjeldahl Nitrogen	mg/L	100	51	73	120	260	19	180	230	170	220	90	1000	240	240	90
Organic Nitrogen	mg/L		4	1	<0.05	10	2	10	<0.05	<0.05	10	<0.05	780	<0.05	<0.05	5
Calcium	mg/L		150	180	200	200	120	210	180	160	180	190	220	180	210	180
Magnesium	mg/L		73	87	140	230	38	200	230	150	210	110	190	220	210	110
Hardness	mg/L		590	730	950	1300	430	1200	1300	1100	1300	830	1200	1400	1200	860
Sodium	mg/L		130	130	300	580	44	460	560	370	500	210	430	560	540	190
Potassium	mg/L		64	77	180	350	25	260	360	190	310	110	250	340	330	94
Phosphorus - total	mg/L	10	0.29	0.14	0.37	0.13	0.93	0.5	0.47	2.80	0.35	0.21	0.29	0.37	0.58	0.19
Biochemical Oxygen Demand	mg/L	300	14	10	18	49	13	30	21	43	23	9	25	29	24	12
Chemical Oxygen Demand	mg/L															
Dissolved Organic Carbon	mg/L															
Suspended Solids	mg/L	350	42	20	51	280	110	88	34	240	34	16	33	49	47	23
Aluminum	mg/L	50	0.085	0.042	0.059	0.46	0.4	0.11	0.22	0.93	0.077	0.035	0.085	0.06	0.17	0.053
Barium	mg/L		0.54	0.41	0.60	1.00	0.62	1.1	0.72	1.1	0.58	0.48	0.69	0.63	0.71	0.49
Beryllium	mg/L		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Boron	mg/L		1.2	1.4	3.4	6.2	0.46	4.7	5.3	3.3	4.8	2.2	4.4	5.4	5.1	2
Cadmium	mg/L	1	0.0002	<0.0001	<0.0001	0.0002	0.0004	0.00017	0.00019	0.00043	0.0002	0.00018	0.00016	0.00026	0.0005	<0.0001
Chromium	mg/L	3	<0.005	<0.005	0.017	0.036	<0.005	0.025	0.031	0.028	0.024	0.0098	0.019	0.028	0.03	0.0071
Cobalt	mg/L	5	0.0021	0.0024	0.0054	0.0095	0.0018	0.0074	0.009	0.0073	0.008	0.0033	0.0079	0.0084	0.0086	0.0033
Copper	mg/L	3	0.004	0.003	0.001	0.002	0.007	0.0031	0.0019	0.0079	0.0015	0.0025	0.0017	0.0013	0.0053	0.0031
Iron	mg/L	50	13	7.3	20	35	39	54	15	67	9.5	8.1	13	10	22	7.5
Lead	mg/L	3	0.0012	0.0009	0.0016	0.0034	0.0036	0.003	0.0025	0.012	0.0018	0.00096	0.0014	0.002	0.003	0.001
Manganese	mg/L	5	0.43	0.61	0.85	0.5	0.62	0.65	0.54	0.37	0.51	0.63	0.65	0.48	0.57	
Molybdenum	mg/L	5	0.002	<0.001	<0.001	0.0019	0.0015	0.0013	0.0015	0.0028	0.0013	0.00081	0.0011	0.0012	0.0014	0.00061
Nickel	mg/L	3	0.010	0.011	0.025	0.049	0.004	0.037	0.047	0.031	0.042	0.016	0.036	0.047	0.046	0.014
Silicon	mg/L		7.1	8.1	12	14	6.1	14	12	10	12	9.3	13	13	14	9.2
Silver	mg/L	5	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Strontium	mg/L		1.7	1.8	2.5	3.0	1.1	2.9	2.9	2.3	2.8	2	2.7	2.6	2.5	1.9
Thallium	mg/L		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin	mg/L	5	0.002	0.002	0.004	0.010	0.002	0.008	0.0076	0.012	0.0061	0.0022	0.0052	0.007	0.007	0.002
Titanium	mg/L	5	0.005	<0.005	0.006	0.016	0.02	0.014	0.0065	0.036	0.0088	<0.005	0.0065	0.0076	0.015	<0.005
Vanadium	mg/L	5	0.001	0.002	0.003	0.0036	0.0028	0.0038	0.0025	0.0058	0.0031	0.0013	0.0021	0.0026	0.0035	0.0011
Zinc	mg/L	3	0.05	0.088	0.07	0.05	0.077	0.1	0.033	0.21	0.027	0.074	0.02	0.019	0.029	0.044
Phenolics	µg/L	1000	13	3	12	59	8	37	13	32	37	15	9.6	7.8	79	1.4

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
** - Indicates the associated values is an estimated quantity.
2) Blank indicates the parameter was not analysed.

TABLE B-1
LEACHATE GENERAL CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	UNITS	SEWER USE BY-LAW	Jun-14	Sep-14	Dec-14	Apr-15	Jun-15	Sep-15	Nov-15	Apr-16	Jun-16	Sep-16	Nov-16	Apr-17	Jun-17	Sep-17	Nov-17
pH	units	6.0-10.0	7.65	7.73	7.85	7.37	7.66	7.84	7.90	7.69	7.77	7.56	8.05	7.59	7.67	7.59	7.87
Specific Conductance	µS/cm		5200	6500	6200	3400	4000	7300	5800	4400	6700	7200	6700	2700	5500	8000	7200
Chloride	mg/L	1500	510	720	720	250	380	850	620	390	730	800	840	180	530	840	850
Sulphate	mg/L	1500	<1	2	38	21	40	1.5	66	<1	<1	2.5	69	36	1.3	<20	1.3
Alkalinity	mg/L		2000	2600	2300	1400	1600	2800	2000	1800	2500	2700	2700	1100	2200	3100	2800
Nitrate	mg/L		0.14	<0.1	<0.5	<0.1	<0.1	<0.5	<0.5	<0.1	<0.5	<0.2	1.78	0.29	<0.10	<1.0	<0.10
Nitrite	mg/L		0.011	<0.01	<0.05	<0.010	<0.010	<0.050	<0.050	<0.01	<0.05	<0.02	0.439	0.017	<0.010	<0.10	0.08
Ammonia	mg/L		190	230	220	82	130	270	200	130	220	270	260	86	190	300	290
Total Kjeldahl Nitrogen	mg/L	100	190	250	240	87	130	270	200	130	270	290	270	73	220	310	330
Organic Nitrogen	mg/L		<0.05	20	20	5	<0.05	<0.05	<0.05	<0.05	50	20	10	<0.05	30	10	40
Calcium	mg/L		210	200	200	180	180	210	160	200	200	180	160	170	280	300	430
Magnesium	mg/L		180	220	220	99	130	240	180	150	210	220	210	89	190	270	240
Hardness	mg/L		1200	1300	1200	880	960	1300	1200	1000	1300	1300	1200	770	1100	1400	1200
Sodium	mg/L		410	520	570	180	280	610	440	320	530	580	540	150	420	670	550
Potassium	mg/L		200	360	340	110	170	360	260	190	330	360	320	81	260	440	350
Phosphorus - total	mg/L	10	0.32	0.35	0.41	0.18	0.17	0.62	0.4	0.39	0.35	0.29	0.31	0.46	46.00	12.00	75
Biochemical Oxygen Demand	mg/L	300	15	9	15	7	11	23	14	38	15	620	21	8	20	930	39
Chemical Oxygen Demand	mg/L																
Dissolved Organic Carbon	mg/L																
Suspended Solids	mg/L	350	30	26	15	13	26	62	26	30	40	24	21	130	14000	17000	2200
Aluminum	mg/L	50	0.16	0.071	0.13	0.066	0.063	0.097	0.18	0.13	0.086	0.054	0.071	0.16	1.2	14	8.7
Barium	mg/L		0.61	0.64	0.81	0.43	0.5	0.85	0.52	0.54	0.65	0.67	0.57	0.53	7.4	8.7	14
Beryllium	mg/L		<0.0005	<0.0005	<0.0025	<0.0005	<0.0005	<0.0005	<0.0025	<0.0005	<0.0025	<0.0025	<0.0005	<0.0005	<0.005	<0.005	<0.005
Boron	mg/L		4.5	6	5.8	2.1	3.2	7.3	5.6	3.5	5.9	6.7	6.2	1.7	5	7.7	7
Cadmium	mg/L	1	0.00016	0.00011	<0.0005	<0.0001	<0.0001	0.00012	<0.0005	<0.0001	<0.0005	<0.0005	<0.0001	0.00015	<0.001	0.0044	0.0027
Chromium	mg/L	3	0.021	0.029	0.027	0.0074	0.012	0.033	<0.025	0.014	<0.025	0.025	0.02	0.0081	0.1	0.35	0.23
Cobalt	mg/L	5	0.0064	0.007	0.009	0.0026	0.0038	0.0082	0.006	0.0049	0.0061	0.0074	0.0067	0.0029	0.016	0.033	0.030
Copper	mg/L	3	0.0011	<0.002	<0.005	0.0029	0.0015	0.0014	<0.005	0.0011	<0.005	<0.005	0.0014	0.0037	0.011	0.089	0.09
Iron	mg/L	50	13	11	9	9.4	11	25	10	15	12	8.3	4.2	30	650	980	1400
Lead	mg/L	3	0.001	0.002	<0.0025	0.001	0.001	0.003	<0.0025	0.001	<0.0025	<0.0025	0.001	0.002	0.016	0.130	0.086
Manganese	mg/L	5			0.47	0.62	0.56	0.48	0.39			0.39	0.29	0.6	1	1.3	2.2
Molybdenum	mg/L	5	0.001	0.0012	<0.0025	0.00078	0.00096	0.0015	<0.0025	0.00079	<0.0025	<0.0025	0.0014	0.00073	<0.005	0.03	0.0098
Nickel	mg/L	3	0.03	0.043	0.046	0.016	0.025	0.058	0.043	0.027	0.044	0.047	0.046	0.015	0.048	0.2	0.096
Silicon	mg/L		13	14	13	8.9	11	14	11	11	13	13	12	8.5	29	37	50
Silver	mg/L	5	<0.0001	<0.0001	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0001	<0.0001	<0.001	<0.001	<0.001
Strontium	mg/L		2.4	2.7	3	1.8	2.2	2.8	2.3	2.3	2.5	2.6	2.5	1.6	4.5	5.4	7.2
Thallium	mg/L		<0.00005	<0.00005	<0.00025	<0.00005	<0.00005	<0.00005	<0.00025	<0.00005	<0.00025	<0.00025	<0.00005	<0.00005	<0.0005	<0.0005	<0.0005
Tin	mg/L	5	0.005	0.007	0.0065	0.002	0.003	0.008	0.0061	0.004	0.006	0.007	0.005	0.003	0.044	0.130	0.099
Titanium	mg/L	5	0.0059	0.011	<0.025	0.0059	0.0089	0.014	<0.025	0.0061	<0.025	<0.025	0.01	0.009	0.13	0.41	0.35
Vanadium	mg/L	5	0.0014	0.0025	<0.0025	0.00097	0.0014	0.0034	0.0027	0.0018	0.0029	<0.0025	0.0024	0.0017	0.029	0.058	0.075
Zinc	mg/L	3	0.039	0.023	0.027	0.068	0.032	0.066	0.053	0.057	<0.025	<0.025	0.019	0.13	0.69	2.3	3.0
Phenolics	µg/L	1000	8.3	5.7	5.1	9.6	4.5	11	11	23	<10	10	9.7	10	<50	230	32

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
** - Indicates the associated values is an estimated quantity.
2) Blank indicates the parameter was not analysed.

TABLE B-1
LEACHATE GENERAL CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	UNITS	SEWER USE BY-LAW	Apr-18	Jun-18	Sep-18	Dec-18	Apr-19	May-19	Sep-19	Nov-19	Apr-20	Jun-20	Sep-20	Dec-20	Mar-21
pH	units	6.0-10.0	7.73	7.54	7.53	7.52	7.82	7.75	7.45	7.81	7.84	7.72	7.53	7.8	7.57
Specific Conductance	µS/cm		2300	3700	6900	2800	2800	3200	5900	3400	4000	5300	7500	3400	1900
Chloride	mg/L	1500	150	330	620	210	190	260	740	300	380	540	850	330	140
Sulphate	mg/L	1500	35	4.1	<20	38	29	28	<20	43	34	<1.0	<20	73	91
Alkalinity	mg/L		1000	1500	3000	1100	1000	1300	2600	1300	1700	2300	3000	1300	730
Nitrate	mg/L		0.76	<0.10	<0.10	0.38	0.22	<0.10	<0.10	0.41	<0.10	<0.10	<0.10	<0.50	1.33
Nitrite	mg/L		0.013	<0.010	0.014	0.033	<0.010	<0.010	0.062	0.045	0.012	<0.010	0.013	0.124	0.201
Ammonia	mg/L		56	130	260	75	73	88	240	100	130	180	300	71	33
Total Kjeldahl Nitrogen	mg/L	100	59	110	320	73	74	95	280	93	130	200	350	140	34
Organic Nitrogen	mg/L		3	<0.05	60	<0.05	1	7	40	<0.05	<0.05	20	50	69	1
Calcium	mg/L		160	190	530	180	190	200	280	190	27	320	400	330	170
Magnesium	mg/L		77	130	220	89	96	110	210	100	14	180	250	100	57
Hardness	mg/L		700	870	1300	790	820	830	1300	890	900	1000	1300	790	590
Sodium	mg/L		120	260	520	150	160	190	500	200	26	370	600	170	85
Potassium	mg/L		65	160	330	90	89	110	310	120	15	210	360	89	38
Phosphorus - total	mg/L	10	1.20	0.40	85	3	1	1	11	2	2	6	130	8	1.3
Biochemical Oxygen Demand	mg/L	300	6	10	150	8	6	12	670	37	27	94	1600	44	27
Chemical Oxygen Demand	mg/L														
Dissolved Organic Carbon	mg/L														
Suspended Solids	mg/L	350	24	88	2500	380	160	140	8000	5900	840	2600	9500	770	340
Aluminum	mg/L	50	0.07	0.13	13	0.33	0.24	0.51	3.6	0.32	0.16	2.1	8.1	3.5	0.6
Barium	mg/L		0.35	0.73	18	0.98	0.71	0.56	6.6	1.7	0.72	9.7	9.6	9	1.1
Beryllium	mg/L		<0.0005	<0.0005	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.004	<0.004	<0.004	<0.002
Boron	mg/L		1.4	3.2	6.6	1.6	1.7	2.1	5.2	2	0.33	4.3	7.1	2	0.75
Cadmium	mg/L	1	<0.0001	<0.0001	0.0021	0.00015	0.00014	<0.0001	0.0024	0.00026	<0.0001	0.0012	0.0014	0.0016	<0.00045
Chromium	mg/L	3	<0.005	0.013	0.34	0.012	0.0093	0.0096	0.19	0.023	0.01	0.14	0.21	0.11	<0.025
Cobalt	mg/L	5	0.0021	0.0045	0.055	0.0035	0.0032	0.0035	0.018	0.0058	0.0016	0.017	0.04	0.017	0.0036
Copper	mg/L	3	0.0031	0.0027	0.21	0.0044	0.0035	0.0029	0.041	0.0066	0.0021	0.021	0.09	0.074	0.011
Iron	mg/L	50	8.5	34	2100	63	46	20	450	140	72	960	1100	850	110
Lead	mg/L	3	0.001	0.002	0.076	0.003	0.002	0.002	0.039	0.004	0.001	0.021	0.084	0.040	0.0044
Manganese	mg/L	5	0.54	0.59	3.5	0.58	0.67	0.78	1.3	0.53	0.12	1.4	2.8	1.7	0.48
Molybdenum	mg/L	5	0.00065	0.00076	0.013	0.00094	0.00079	0.00062	0.0051	0.0013	<0.0005	<0.005	0.009	0.0089	<0.0025
Nickel	mg/L	3	0.012	0.022	0.14	0.014	0.015	0.018	0.066	0.02	0.004	0.045	0.12	0.043	0.012
Silicon	mg/L		7.3	11	73	10	9.9	10	22	12	3	43	42	35	7.8
Silver	mg/L	5	<0.0001	<0.0001	<0.001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001	<0.0001	<0.0009	<0.0009	<0.0009	<0.00045
Strontium	mg/L		1.5	2.1	7.6	1.9	1.8	1.9	3.8	2.3	0.39	4.7	5.5	4	1.6
Thallium	mg/L		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.0005	<0.00005	<0.00005	<0.0005	<0.0005	<0.0005	<0.00025
Tin	mg/L	5	0.001	0.004	0.130	0.008	0.004	0.003	0.094	0.008	0.004	0.056	0.075	0.047	<0.005
Titanium	mg/L	5	0.0061	0.0077	0.58	0.017	0.013	0.018	0.29	0.023	0.014	0.18	0.32	0.21	<0.025
Vanadium	mg/L	5	0.00081	0.0022	0.12	0.0034	0.0028	0.0031	0.041	0.0068	0.003	0.043	0.06	0.04	0.0036
Zinc	mg/L	3	0.17	0.13	2.8	0.18	0.16	0.13	2.3	0.48	0.18	2.3	3.7	4.1	0.45
Phenolics	µg/L	1000	2.4	<10	62	<5	4.8	5.6	44	8.7	7.1	14	26	7.7	2.2

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
** - Indicates the associated values is an estimated quantity.
2) Blank indicates the parameter was not analysed.

TABLE B-1
LEACHATE GENERAL CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	UNITS	SEWER USE BY-LAW	Jun-21	Sep-21	Dec-21	Apr-22	Jun-22	Sep-22	Dec-22
pH	units	6.0-10.0	7.73	7.66	7.51	7.82	7.49	7.28	7.82
Specific Conductance	µS/cm		5300	3300	2400	3000	5600	7600	7500
Chloride	mg/L	1500	550	340	180	240	600	750	730
Sulphate	mg/L	1500	33	45	70	37	3.1	<20	<40
Alkalinity	mg/L		2100	1400	1000	1300	2000	2500	3000
Nitrate	mg/L		<0.50	<0.10	0.22	0.17	<0.1	<1.0	21.7
Nitrite	mg/L		<0.050	<0.010	0.025	0.021	<0.01	0.25	2.46
Ammonia	mg/L		210	110	66	88	210	420	320
Total Kjeldahl Nitrogen	mg/L	100	240	120	72	85	200	1000	350
Organic Nitrogen	mg/L		30	10	6				
Calcium	mg/L		450	200	210	210	0.0021	270	300
Magnesium	mg/L		190	110	91	100	0.0048	230	250
Hardness	mg/L		1000	890	780	810	1200	1300	1200
Sodium	mg/L		390	220	140	170	7.49	560	580
Potassium	mg/L		210	130	83	97	0.02	340	380
Phosphorus - total	mg/L	10	42	2	2	3	9	94	34
Biochemical Oxygen Demand	mg/L	300	760	41	11	13	220	1200	460
Chemical Oxygen Demand	mg/L								
Dissolved Organic Carbon	mg/L								
Suspended Solids	mg/L	350	1.4	570	310	3900	7700	8400	2800
Aluminum	mg/L	50	10	0.81	0.31	0.6	0.4	2.1	6.3
Barium	mg/L		22	1.2	1.4	2.5	3.7	8.7	15
Beryllium	mg/L		<0.0004	<0.0004	<0.0004	<0.0004	0.004	<0.004	<0.004
Boron	mg/L		4.9	2.4	1.8	2	5.1	7	6.6
Cadmium	mg/L	1	0.0019	0.00015	0.00023	0.00024	<0.0009	<0.0009	0.0025
Chromium	mg/L	3	0.51	0.021	0.016	0.029	<0.05	0.2	0.35
Cobalt	mg/L	5	0.065	0.0071	0.004	0.0065	0.014	0.021	0.100
Copper	mg/L	3	0.064	0.011	0.0048	0.0052	<0.009	0.014	0.099
Iron	mg/L	50	2300	110	130	240	250	720	1200
Lead	mg/L	3	0.089	0.004	0.003	0.005	<0.005	0.027	0.09
Manganese	mg/L	5	2.5	0.85	0.74	0.84	0.73	0.67	1.3
Molybdenum	mg/L	5	0.013	0.0012	0.0011	0.0012	<0.005	0.0053	0.025
Nickel	mg/L	3	0.11	0.027	0.014	0.018	0.038	0.061	0.14
Silicon	mg/L		71	13	12	16	22	58	56
Silver	mg/L	5	<0.0009	<0.00009	<0.00009	<0.00009	<0.0009	<0.0009	<0.0009
Strontium	mg/L		9.1	2.3	2.1	2.3	3.4	5.3	7.6
Thallium	mg/L		<0.0005	<0.00005	<0.00005	<0.00005	<0.0005	<0.0005	<0.0005
Tin	mg/L	5	0.190	0.010	0.006	0.011	0.016	0.078	0.13
Titanium	mg/L	5	0.52	0.026	0.021	0.036	0.07	0.29	0.49
Vanadium	mg/L	5	0.12	0.0051	0.0054	0.0096	0.0096	0.051	0.13
Zinc	mg/L	3	7	0.37	0.25	0.41	0.12	0.69	5.1
Phenolics	µg/L	1000	170	8.3	4.6	6.8	20	240	42

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
** - Indicates the associated values is an estimated quantity.
2) Blank indicates the parameter was not analysed.

TABLE B-2
LEACHATE ORGANIC CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	Apr-84	Aug-84	May-85	Jul-85	Sep-85	Nov-85	Nov-85	Dec-85	Dec-85	May-86	Sep-86	Dec-86	May-87	Aug-87	Oct-87	Dec-87
1,1,1-Trichloroethane			62		160	236	4	28			<100		<2	<100	<10	<1
1,1,1,2-Tetrachloroethane																
1,1,2,2-Tetrachloroethane											<100		<2	<100	<10	<1
1,1,2-Trichloroethane											<1		<2	<100	<10	<1
1,1-Dichloroethane			330	220	230	175	61	61	11	53	<100	62	<2	245	122	49
1,1-Dichloroethylene											<100			<100	<10	
1,2-Dichlorobenzene		20		5							<100		<2	<1	<10	
1,2-Dichloroethane					40	15					<100		<2	<100	<10	2
1,2-Dichloropropane																<1
1,3-Dichlorobenzene											<100		<2	<100	<10	<1
1,4-Dichlorobenzene											<100		<2	<100	<10	4
2-Chloroethyl vinyl ether																
Acetone																
Benzene		20	15	14	19	29	7		3		<100		3	<100	58	7
Bromodichloromethane											<100		<2	<100	<10	<1
Bromoform											<100		<2	<100	<10	<1
Bromomethane																
Carbon tetrachloride											<100		<2	<100	<10	<1
Chlorobenzene			7			50	14		4		<100		2	<100	188	8
Chlorodibromomethane											<100		<2	<100	<10	<1
Chloroethane																
Chloroform											<100		<2	<100	<10	<1
Chloromethane																
Cis-1,2-Dichloroethylene																283
Cis-1,3-Dichloropropylene																
Dichloromethane			1800	2300	1870	914	300	328		1010	280	495	26	<100	337	169
Ethylbenzene		80	50	83	50	125	42	26	9	36	<100	40	3	129	22	36
Isopropyl Acetate																
m/p-Xylenes		250	197	250	200	360	151	116	25	220	205	158	<1	377	61	101
Methyl Ethyl Ketone																
o-Xylene		80	168	120	180	155	159	55	10	52	<100	50	7	148	19	57
Styrene																
Tetrachloroethylene			11	20		13	23				<100		<2	<100	<10	1
Toluene	100	900	490	500	570	1060	276	310	43	630	7513	390	20	467	296	173
trans-1,2-Dichloroethylene			3						1		<100		<2	<100	<10	<1
trans-1,3-Dichloropropylene																
Trichloroethylene			11		40				13		<100	71	11	137	<10	6
Trichlorofluoromethane																
Vinyl Chloride																71
Xylenes: total																

NOTES: 1) * - Indicates a detected parameter concentration below the Reportable Detection Limit (RDL).
** - Indicates the associated value is an estimated quantity.
2) tr - Indicates a detected parameter concentration below an unspecified RDL.
Blank indicates parameter not analysed.
3) All units are µg/L.
4) Organic detections above the Reportable Detection Limit are in black.

TABLE B-2
LEACHATE ORGANIC CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	Apr-88	Jun-88	Sep-88	Nov-88	Mar-89	May-89	Sep-89	Apr-90	May-90	Jul-90	Sep-90	Apr-91	Jun-91	Aug-91	Nov-91
1,1,1-Trichloroethane												<24	<24	<24	<24
1,1,1,2-Tetrachloroethane															
1,1,2,2-Tetrachloroethane												<12	<16	<16	<16
1,1,2-Trichloroethane												<24	<24	<24	<24
1,1-Dichloroethane	1.8	1.7	28.1	2.6	2.2	* 1.7	8.5	48.6		39.0	66.0	34.0	33.0	<23	<20
1,1-Dichloroethylene												<16	<16	<16	<16
1,2-Dichlorobenzene												<16	<8	<16	<16
1,2-Dichloroethane												<16	<16	<16	<16
1,2-Dichloropropane												<20	<20	<20	<20
1,3-Dichlorobenzene								7.4			* 4.4	<12	<16	<12	<12
1,4-Dichlorobenzene	1.6			1.1	0.6		1.3			tr		<16	<12	<12	<12
2-Chloroethyl vinyl ether												<108	<108	<108	<108
Acetone															
Benzene	1.5	1.6		tr	0.7	* 1.56	0.9	15.0			8.7	<8	26.0	23.0	<8
Bromodichloromethane												<16	<16	<30	<16
Bromoform												<12	<12	<12	<12
Bromomethane												<96	<96	<96	<96
Carbon tetrachloride												<12	<12	<12	<12
Chlorobenzene	2.3	5.5				5.5		12.5	29.4			37.0	<24	<24	<24
Chlorodibromomethane												<16	<16	<16	<16
Chloroethane												<92	<92	<92	<92
Chloroform			11.8									<24	11.0	<140	<40
Chloromethane												<92	<92	<92	<92
Cis-1,2-Dichloroethylene	13.4	20.2	385.1	13.2	11.1	20.2	80.1	326.0		291.0	168.0				
Cis-1,3-Dichloropropylene												<28	<28	<28	<28
Dichloromethane	6.1	16.9	234.0	7.7	16.3	16.9	19.3	101.0		66.0	418.0	<125	18.0	370.0	<148
Ethylbenzene	4.2	9.1	35.0		1.8	9.1	2.0	42.6	37.8	21.0	42.0	110.0	110.0	72.0	53.0
Isopropyl Acetate															
m/p-Xylenes	12.0	28.5	103.2	1.4	4.6	28.5	9.8	190.0		81.0					
Methyl Ethyl Ketone				35.5				153.0		21.0	118.0				
o-Xylene	9.2	14.9	45.6	0.9	4.3	14.9	4.1	73.2		51.0					
Styrene															
Tetrachloroethylene				0.8	6.6		* 0.83	tr				<8	<8	<8	<8
Toluene	15.1	41.9	187.1	2.2	6.3	41.9	22.8	305.0	228.0	108.0	225.0	350.0	540.0	370.0	370.0
trans-1,2-Dichloroethylene												32.0	23.0	<16	<16
trans-1,3-Dichloropropylene												<44	<44	<44	<44
Trichloroethylene	1.4				10.1		1.8	30.0			* 7.6	21.0	<12	<12	<12
Trichlorofluoromethane												<12	<12	<12	<12
Vinyl Chloride	2.4		53.6				5.3	212.0			153.0	<116	<116	<116	<116
Xylenes: total															

NOTES: 1) * - Indicates a detected parameter concentration below the Reportable Detection Limit (RDL).
** - Indicates the associated value is an estimated quantity.
2) tr - Indicates a detected parameter concentration below an unspecified RDL.
Blank indicates parameter not analysed.
3) All units are µg/L.
4) Organic detections above the Reportable Detection Limit are in black.

TABLE B-2
LEACHATE ORGANIC CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	May-92	Jun-92	Aug-92	Oct-92	Apr-93	Jun-93	Aug-93	Oct-93	Apr-94	Jul-94	Aug-94	Oct-94	May-95	May-96	Jul-96	Sep-96	Nov-96
1,1,1-Trichloroethane	<12	<6.0	1.9	<3.0	<3.0	<6.0	<0.6	<3.0	<0.6	<0.6	<0.6	<0.6	<0.6	<5.0	<4.0	<2.0	<2.0
1,1,1,2-Tetrachloroethane																	
1,1,2,2-Tetrachloroethane	<8.0	<4.0		<2.0	<2.0	<4.0	<0.4	<2.0	<0.4	<0.4	<0.4	<0.4	<0.4	<5.0	<4.0	<2.0	<2.0
1,1,2-Trichloroethane	<12	<6.0		<3.0	<3.0	<6.0	<0.6	<3.0	<0.6	<0.6	<0.6	<0.6	0.6	<5.0	<4.0	<2.0	<2.0
1,1-Dichloroethane	<10	<8.9	6.8	18.0	3.5	<5.0	7.2	6.7	4.9	3.9	3.7	<0.5	2.4	5.4	<4.0	2.6	<2.0
1,1-Dichloroethylene	<8.0	<5.9		<2.0	<2.0	<4.0	<0.4	<2.0	<0.4	<0.4	<0.4	<0.4	<0.4	<5.0	<4.0	<2.0	<2.0
1,2-Dichlorobenzene	<8.0	<4.0		<2.0	<2.0	<4.0	0.6	<2.0	1.3	<0.4	<0.4	<0.4	0.7	<5.0	<4.0	<2.0	<2.0
1,2-Dichloroethane	<8.0	<4.0	1.2	<2.0	<2.0	<4.0	1.1	<2.0	<0.4	<0.4	<0.4	<0.4	0.5	<5.0	<4.0	<2.0	<2.0
1,2-Dichloropropane	<10	<5.0		<2.5	<2.5	<5.0	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<4.0	<2.0	<2.0
1,3-Dichlorobenzene	<6.0	<3.6		<1.5	<1.5	<3.0	<0.3	<1.5	<0.3	<0.3	<0.3	<0.3	<0.3	<5.0	<4.0	<2.0	<2.0
1,4-Dichlorobenzene	<4.0	<6.3	7.7	8.9	8.2	5.2	5.5	3.8	6.5	6.1	5.0	** 2.0	5.3	7.4	** 3.5	5.0	4.1
2-Chloroethyl vinyl ether		<27		<14	<14	<27	<2.7	<14	<2.7	<2.7	<2.7	<2.7	<2.7				
Acetone																	
Benzene	<4.0	<10	5.2	3.1	6.9	5.2	4.6	2.8	5.4	3.6	4.2	1.8	2.1	5.6	6.0	3.6	1.6
Bromodichloromethane	<8.0	<4.0		<2.0	<2.0	<4.0	<0.4	<2.0	<0.4	<0.4	<0.4	<0.4	<0.4	<5.0	<4.0	<2.0	<2.0
Bromoform	<6.0	<3.0		<1.5	<1.5	<3.0	<0.3	<1.5	<0.3	<0.3	<0.3	<0.3	<0.3	<12.5	<10.0	<5.0	<5.0
Bromomethane	<48	<41		<12	<12	<24	<2.4	<12	<2.4	<2.4	<2.4	<2.4	<2.4	<25.0	<20.0	<10.0	<10.0
Carbon tetrachloride	<6.0	<3.0		<1.5	<1.5	<3.0	<0.3	<1.5	<0.3	<0.3	<0.3	<0.3	<0.3	<5.0	<4.0	<2.0	<2.0
Chlorobenzene	31.0	<8.6	16.0	5.0	28.0	6.6	6.5	4.1	11.0	5.5	4.6	2.1	6.0	14.9	6.5	5.5	4.7
Chlorodibromomethane	<8.0	<4.0		<2.0	<2.0	<4.0	<0.4	<2.0	<0.4	<0.4	<0.4	<0.4	<0.4	<5.0	<4.0	<2.0	<2.0
Chloroethane	<46	<23		<12	<12	<23	5.5	<12	<2.3	<2.3	<2.3	<2.3	<2.3	<25.0	<20.0	<10.0	<10.0
Chloroform	<8.0	<4.0	1.5	<2.0	<2.0	<4.0	0.9	<2.0	<0.4	<0.4	<0.4	<0.4	<0.4	<5.0	<4.0	<2.0	<2.0
Chloromethane	<46	<30		<12	<12	<23	<2.3	<12	<2.3	<2.3	<2.3	<2.3	<2.3	<25.0	<20.0	<10.0	<10.0
Cis-1,2-Dichloroethylene													10.0	19.2	11.3	25.7	7.5
Cis-1,3-Dichloropropylene	<14	<7.0		<3.5	<3.5	<7.0	<0.7	<3.5	<0.7	<0.7	<0.7	<0.7	<0.7	<5.0	<4.0	<2.0	<2.0
Dichloromethane	<55	<35	3.3	45.0	<13	<27	<24	<22	<0.3	<0.3	<0.3	<0.3	<0.3	<25.0	<20.0	<10.0	<10.0
Ethylbenzene	70.0	40.0	5.7	30.0	42.0	<4.0	21.0	19.0	27.0	23.0	20.0	** 8.8	9.4	25.8	41.7	20.1	8.1
Isopropyl Acetate																	
m/p-Xylenes													42.0	81.5	71.6	58.2	29.3
Methyl Ethyl Ketone														<375	976.0	469.0	361.0
o-Xylene													24.0	40.0	33.5	28.8	17.0
Styrene													<0.8	<5.0	<4.0	<2.0	<2.0
Tetrachloroethylene	<4.0	<2.0		<1.0	<1.0	<2.0	0.5	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<4.0	<2.0	<2.0
Toluene	160.0	150.0		61.0	98.0	93.0	50.0	25.0	63.0	31.0	33.0	38.0	21.0	51.4	23.0	29.6	11.0
trans-1,2-Dichloroethylene	<8.0	<5.2	1.7	2.7	<2.0	<4.0	0.9	<2.0	<0.4	<0.4	<0.4	<0.4	<0.4	<5.0	<4.0	<2.0	<2.0
trans-1,3-Dichloropropylene	<22	<11		<5.5	<5.5	<11	<1.1	<5.5	<1.1	<1.1	<1.1	<1.1	<1.1	<5.0	<4.0	<2.0	<2.0
Trichloroethylene	<6.0	<6.5	1.3	7.4	2.1	<3.0	4.1	1.9	<0.3	3.8	0.6	0.8	1.9	<5.0	<4.0	2.1	<2.0
Trichlorofluoromethane	<6.0	<6.6		<1.5	<1.5	<3.0	<0.3	<1.5	<0.3	<0.3	<0.3	<0.3	<0.3	<12.5	<10.0	<5.0	<5.0
Vinyl Chloride	<58	<29		<15	<15	<29	7.2	<15	** 15	5.3	<2.9	<2.9	5.5	<12.5	<10.0	<5.0	<5.0
Xylenes: total																	

NOTES: 1) * - Indicates a detected parameter concentration below the Reportable Detection Limit (RDL).
** - Indicates the associated value is an estimated quantity.
2) tr - Indicates a detected parameter concentration below an unspecified RDL.
Blank indicates parameter not analysed.
3) All units are µg/L.
4) Organic detections above the Reportable Detection Limit are in black.

TABLE B-2
LEACHATE ORGANIC CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	May-97	Jul-97	Sep-97	Dec-97	May-98	Jul-98	Sep-98	Nov-98	Apr-99	Jul-99	Sep-99	Nov-99	Apr-00	Jun-00	Sep-00	Nov-00
1,1,1-Trichloroethane	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.2	<0.5	<4.0	<0.8	<0.2
1,1,1,2-Tetrachloroethane																
1,1,2,2-Tetrachloroethane	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.2	<0.5	<4.0	<0.8	<0.2
1,1,2-Trichloroethane	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.2	<0.5	<4.0	<0.8	<0.2
1,1-Dichloroethane	<10.0	6.1	2.7	2.2	<2.0	<1.0	<1.0	<1.0	* 0.9	<2.0	<2.0	0.4	0.5	*3.1	*0.7	0.5
1,1-Dichloroethylene	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.2	<0.5	<4.0	<0.8	<0.2
1,2-Dichlorobenzene	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	* 0.1	0.6	<4.0	<0.8	<0.2
1,2-Dichloroethane	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.2	<0.5	<4.0	<0.8	<0.2
1,2-Dichloropropane	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.2	<0.5	<4.0	<0.8	<0.2
1,3-Dichlorobenzene	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.2	<0.5	<4.0	<0.8	<0.2
1,4-Dichlorobenzene	* 7.6	7.3	2.3	5.8	7.0	5.1	3.0	* 0.8	<1.0	4.0	6.0	2.3	4.3	8.7	5.0	2.2
2-Chloroethyl vinyl ether																
Acetone	730.0	257.0	164.0	76.4	194.0	<50.0	627.0	372.0	89.7	761.0	298.0	11.4	<25.0	<200	103.0	25.9
Benzene	7.4	8.6	1.9	3.8	3.6	8.0	1.6	0.6	1.3	3.1	2.5	0.7	2.7	5.0	1.2	0.7
Bromodichloromethane	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.2	<0.5	<4.0	<0.8	<0.2
Bromoform	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.2	<0.5	<4.0	<0.8	<0.2
Bromomethane	<25.0	<6.3	<5.0	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	<5.0	<5.0	<0.5	<1.3	<10.0	<2.0	<0.5
Carbon tetrachloride	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.2	<0.5	<4.0	<0.8	<0.2
Chlorobenzene	13.0	14.2	3.4	13.6	12.8	4.9	3.8	1.4	6.2	5.4	4.3	1.9	1.6	15.0	3.9	1.4
Chlorodibromomethane	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.2	<0.5	<4.0	<0.8	<0.2
Chloroethane	<25.0	<6.3	<5.0	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	<5.0	<5.0	<0.5	1.9	<10.0	<2.0	<0.5
Chloroform	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.2	<0.5	<4.0	2.2	<0.2
Chloromethane	<50.0	<12.5	<10.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10.0	<10.0	<1.0	<2.5	<20.0	<4.0	<1.0
Cis-1,2-Dichloroethylene	68.9	44.3	3.0	9.2	9.8	<1.0	5.0	<1.0	1.4	13.7	5.8	0.6	*0.3	12.4	4.9	0.6
Cis-1,3-Dichloropropylene	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.2	<0.5	<4.0	<0.8	<0.2
Dichloromethane	<50.0	<12.5	<10.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10.0	<10.0	<1.0	<5.0	<20.0	<4.0	<1.0
Ethylbenzene	25.9	41.1	17.5	19.6	13.5	20.9	6.9	2.3	8.6	16.7	13.9	<0.2	<0.5	30.6	1.4	<0.2
Isopropyl Acetate																
m/p-Xylenes	69.0	92.7	48.1	48.3	39.6	67.2	31.9	14.1	24.8	85.3	41.8	0.2	6.6	108.0	24.0	8.3
Methyl Ethyl Ketone	585.0	255.0	204.0	66.9	160.0	<25.0	761.0	435.0	59.4	901.0	272.0	<5.0	<12.5	<100	145.0	29.2
o-Xylene	38.2	50.0	16.4	20.6	19.8	17.4	10.7	2.1	7.7	23.8	<2.0	0.4	11.9	39.4	9.7	3.5
Styrene	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.2	<0.5	<4.0	<0.8	<0.2
Tetrachloroethylene	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	0.2	<0.5	<4.0	<0.8	<0.2
Toluene	51.5	69.3	5.9	14.0	14.1	15.8	31.7	27.1	6.0	37.3	16.6	0.5	1.0	60.6	5.5	0.4
trans-1,2-Dichloroethylene	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	0.2	<0.5	<4.0	<0.8	<0.2
trans-1,3-Dichloropropylene	<10.0	<2.5	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.2	<0.5	<4.0	<0.8	<0.2
Trichloroethylene	11.8	4.4	<2.0	1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.2	<0.5	<4.0	<0.8	<0.2
Trichlorofluoromethane	<25.0	<6.3	<5.0	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	<5.0	<5.0	<0.5	<1.3	<10.0	<2.0	<0.5
Vinyl Chloride	<25.0	6.5	<5.0	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	6.8	<5.0	<0.5	<1.3	<10.0	*1.4	<0.2
Xylenes: total																

NOTES: 1) * - Indicates a detected parameter concentration below the Reportable Detection Limit (RDL).
** - Indicates the associated value is an estimated quantity.
2) tr - Indicates a detected parameter concentration below an unspecified RDL.
Blank indicates parameter not analysed.
3) All units are µg/L.
4) Organic detections above the Reportable Detection Limit are in black.

TABLE B-2
LEACHATE ORGANIC CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	Apr-01	Jul-01	Sep-01	Dec-01	Apr-02	Jun-02	Sep-02	Nov-02	May-03	Jul-03	Sep-03	Dec-03	Apr-04	Jun-04	Sep-04	Dec-04
1,1,1-Trichloroethane	<1.6	<2.0	<0.8	<0.2	<2.0	<0.4	<0.4	<0.2	<0.2	*0.3	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane													<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<1.6	<2.0	<0.8	<0.2	<4.0	<0.8	<0.8	<0.4	<0.4	<0.8	<0.4	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	<2.0	<2.0	<0.8	0.7	<4.0	<0.8	<0.8	<0.4	<0.4	<0.8	<0.4	<1.0	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	1.1	1.2	<0.8	0.2	<2.0	<0.4	<0.4	* 0.1	<0.2	0.7	0.8	<0.5	1.2	<0.4	<0.4	<0.4
1,1-Dichloroethylene	<1.6	<2.0	<0.8	<0.2	<2.0	<0.4	<0.4	<0.2	<0.2	<0.4	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	<1.6	<2.0	<0.8	<0.2	<2.0	<0.4	<0.4	<0.2	<0.2	<0.4	<0.2	<0.5	1.0	<0.5	<0.5	<0.5
1,2-Dichloroethane	1.1	<2.0	<0.8	<0.2	<2.0	<0.4	<0.4	<0.2	<0.2	<0.4	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<1.6	<2.0	<0.8	2.8	<2.0	6.1	25.6	12.9	3.1	0.6	7.4	2.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	<1.6	<2.0	<0.8	<0.2	<2.0	<0.4	<0.4	<0.2	<0.2	<0.4	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	6.9	5.8	0.4	<0.2	<2.0	0.8	0.8	1.1	<0.2	0.5	0.7	<0.5	8.0	0.7	<0.5	3.6
2-Chloroethyl vinyl ether													<10	<10	<10	<10
Acetone	<80	<200	<40	<10.0	247.0	<40.0	<40.0	<20.0	<20.0	92.0	<20.0	<50.0	87.0	<15	<15	<15
Benzene	2.8	3.0	<0.4	<0.1	<2.0	0.6	0.5	1.1	*0.1	1.0	1.0	<0.5	4.6	1.7	<0.5	<0.5
Bromodichloromethane	<1.6	<2.0	<0.8	<0.2	<2.0	<0.4	<0.4	<0.2	<0.2	<0.4	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2
Bromoform	<1.6	<2.0	<0.8	<0.2	<4.0	<0.8	<0.8	<0.4	<0.4	<0.8	<0.4	<1.0	<0.2	<0.2	<0.2	<0.2
Bromomethane	<4.0	<5.0	<2.0	<0.5	<10.0	<2.0	<2.0	<1.0	<1.0	<2.0	<1.0	<2.5	<3.0	<3.0	<3.0	<3.0
Carbon tetrachloride	<1.6	<2.0	<0.8	<0.2	<2.0	<0.4	<0.4	<0.2	<0.2	<0.4	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	10.7	6.3	<0.8	<0.2	<2.0	2.6	0.6	5.1	0.6	0.9	1.5	<0.5	17.0	2.1	<0.5	<0.5
Chlorodibromomethane	<1.6	<2.0	<0.8	<0.2	<4.0	<0.8	<0.8	<0.4					<0.2	<0.2	<0.2	<0.2
Chloroethane	<4.0	<5.0	<2.0	<0.5	<4.0	* 0.6	<0.8	0.7	<0.4	3.5	1.7	1.7	<1.0	<1.0	<1.0	<1.0
Chloroform	<1.6	<2.0	<0.8	<0.2	<2.0	<0.4	<0.4	<0.2	<0.2	<0.4	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2
Chloromethane	<8.0	<10.0	<4.0	<1.0	<10.0	<2.0	<2.0	<1.0	<1.0	<2.0	<1.0	<2.5	<2.0	<2.0	<2.0	<2.0
Cis-1,2-Dichloroethylene	10.5	4.7	<0.8	<0.2	<2.0	<0.4	<0.4	<0.2	<0.2	<0.4	0.2	<0.5	5.3	<1.0	<1.0	<1.0
Cis-1,3-Dichloropropylene	<1.6	<2.0	<0.8	<0.2	<4.0	<0.8	<0.8	<0.4	<0.4	<0.8	<0.4	<1.0	<0.14	<0.14	<0.14	<0.14
Dichloromethane	<8.0	<10.0	<4.0	<1.0	<20.0	<4.0	<4.0	<2.0	<1.0	2.0	<1.0	<2.5	21.0	<1.0	<1.0	<1.0
Ethylbenzene	6.0	9.0	<0.8	<0.2	<2.0	<0.4	<0.4	* 0.1	<0.2	1.7	<0.2	<0.5	16.0	1.4	<0.5	<0.5
Isopropyl Acetate																
m/p-Xylenes	33.0	48.0	<0.8	<0.2	<2.0	<0.4	* 0.3	0.7	<0.2	6.5	3.2	0.6	61.0	12.0	0.6	<0.5
Methyl Ethyl Ketone	101.0	165.0	<20.0	<5.0	720.0	<20.0	<20.0	<10.0	<10.0	60.0	<10.0	<25.0	130.0	<15	<15	<15
o-Xylene	12.6	16.1	<0.8	<0.2	<2.0	<0.4	<0.4	0.3	<0.2	8.0	3.0	1.1	19.0	7.1	<0.5	<0.5
Styrene	<1.6	<2.0	<0.8	<0.2	<2.0	<0.4	<0.4	<0.2	<0.2	<0.4	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethylene	<1.6	<2.0	<0.8	<0.2	<2.0	<0.4	<0.4	<0.2	<0.2	<0.4	<0.2	<0.5	<0.5	<0.5	<0.5	0.9
Toluene	12.3	11.3	<0.8	<0.2	<2.0	<0.8	* 0.5	<0.4	<0.4	3.5	1.0	<1.0	36.0	1.5	<0.5	<0.5
trans-1,2-Dichloroethylene	<1.6	<2.0	<0.8	<0.2	<2.0	<0.4	<0.4	<0.2	<0.2	<0.4	<0.2	<0.5	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropylene	<1.6	<2.0	<0.8	<0.2	<4.0	<0.8	<0.8	<0.4	<0.4	<0.8	<0.4	<1.0	<0.14	<0.14	<0.14	<0.14
Trichloroethylene	1.5	<2.0	<0.8	<0.2	<2.0	<0.4	<0.4	<0.2	<0.2	<0.4	<0.2	<0.5	<0.5	<0.5	<0.5	0.6
Trichlorofluoromethane	<4.0	<5.0	<2.0	<0.5	<4.0	<0.8	<0.8	<0.4	<0.4	<0.8	<0.4	<1.0	<2.0	<2.0	<2.0	<2.0
Vinyl Chloride	1.7	1.7	<0.8	<0.2	<4.0	<0.8	<0.8	<0.4	<0.4	<0.8	<0.4	<1.0	1.0	<0.2	<0.2	<0.2
Xylenes: total																

NOTES: 1) * - Indicates a detected parameter concentration below the Reportable Detection Limit (RDL).
** - Indicates the associated value is an estimated quantity.
2) tr - Indicates a detected parameter concentration below an unspecified RDL.
Blank indicates parameter not analysed.
3) All units are µg/L.
4) Organic detections above the Reportable Detection Limit are in black.

TABLE B-2
LEACHATE ORGANIC CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	Apr-05	Jul-05	Sep-05	Dec-05	Mar-06	Jun-06	Sep-06	Nov-06	Apr-07	Jul-07	Sep-07	Apr-08	Jul-08	Oct-08	Dec-08
1,1,1-Trichloroethane	<1	<3	<0.5	<1	<1.0	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5
1,1,1,2-Tetrachloroethane	<1	<3	<0.5	<1	<1.0	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<1	<3	<0.5	<1	<1.0	<0.5	<1.0	<1.0	<0.5	<1.0	<1.0	<2	<2	<1	<1
1,1,2-Trichloroethane	<2	<5	<1	<2	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0	<2	<2	<1	<1
1,1-Dichloroethane	<1	<3	<0.5	<1	1	<0.5	<1.0	<1.0	<0.5	<0.5	0.8	1	1	0.7	<0.5
1,1-Dichloroethylene	<1	<3	<0.5	<1	<1.0	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5
1,2-Dichlorobenzene	<1	<3	0.6	<2	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0	<2	<2	<1	<1
1,2-Dichloroethane	<1	<3	<0.5	<1	<1.0	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<2	<2	<1	<1
1,2-Dichloropropane	<1	<3	<0.5	<1	<1.0	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5
1,3-Dichlorobenzene	<1	<3	<0.5	<2	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0	<2	<2	<1	<1
1,4-Dichlorobenzene	7	8	7.4	7	6	5	10	9	6	5	8	9	9	8	8
2-Chloroethyl vinyl ether							<20.0	<20	<10.0	<10.0	<2.0	<20		<10	
Acetone	<300	<300	67	<100	<100	250	310	<100	<50.0	300	260	<100	<100	110	<50
Benzene	1	<3	3.6	4	4	<0.5	5	4	4.3	1.4	3.4	5	4	1.8	3.1
Bromodichloromethane	<1	<3	<0.5	<1	<1.0	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5
Bromoform	<2	<5	<1	<2	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0	<2	<2	<1	<1
Bromomethane	<5	<10	<3	<5	<5.0	<3.0	<5.0	<5.0	<3.0	<3.0	<3.0	<5	<5	<3	<3
Carbon tetrachloride	<1	<3	<0.5	<1	<1.0	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5
Chlorobenzene	8	7	8.1	24	15	<0.5	8	13	21	4.1	7.6	17	12	6	15
Chlorodibromomethane	<2	<5	<1	<2	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0	<2	<2	<1	<1
Chloroethane	<2	<5			<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0	<2	<2	<1	<1
Chloroform	<1	<3	<0.5	<1	<1.0	<0.5	<1.0	<1.0	<0.5	0.7	1	<1	<1	<0.5	<0.5
Chloromethane	<5	<10			<5.0	<3.0	<5.0	<5.0	<3.0	<3.0	<3.0	<5	<5	<3	<3
Cis-1,2-Dichloroethylene	4	4	1.7	<1	5	2.1	4	5	<0.5	2.5	2.5	6	3	1.5	1.1
Cis-1,3-Dichloropropylene	<2	<5	<1	<2	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0	<2	<2	<1	<1
Dichloromethane	<5	<10	<3	<5	6	<3.0	<5.0	<5.0	<3.0	<3.0	<3.0	5	<5	<3	<3
Ethylbenzene	7	6	9.3	22	10	<0.5	10	<1.0	25	<0.5	7.7	12	5	1.7	12
Isopropyl Acetate															
m/p-Xylenes	83	55	60.6	101	62	20	80	46	81	21	44	83	62	22	64
Methyl Ethyl Ketone	<50	339	103	<50	79	290	350	100	<30.0	360	340	66	110	110	<30
o-Xylene	28	20	13.6	15	20	2.3	23	25	21	7.8	13	29	21	7.1	12
Styrene	<1	<3	<0.5	<1	<2.0	<0.5	<1.0	<1.0	<0.9	<0.5	<0.5	<2	<2	<1	<1
Tetrachloroethylene	<1	<3	0.5	2	<1.0	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<1	<1	<0.5	0.7
Toluene	7	11	8	4	30	<1.0	16	17	7	6	8	50	18	3	6
trans-1,2-Dichloroethylene	<1	<3	<0.5	<1	<1.0	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5
trans-1,3-Dichloropropylene	<2	<5	<1	<2	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0	<2	<2	<1	<1
Trichloroethylene	<1	<3	<0.5	<1	<1.0	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5
Trichlorofluoromethane	<2	<5			<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0	<2	<2	<1	<1
Vinyl Chloride	<5	<5	<1	<2	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0	<2	<2	<1	<1
Xylenes: total															

NOTES: 1) * - Indicates a detected parameter concentration below the Reportable Detection Limit (RDL).
** - Indicates the associated value is an estimated quantity.
2) tr - Indicates a detected parameter concentration below an unspecified RDL.
Blank indicates parameter not analysed.
3) All units are µg/L.
4) Organic detections above the Reportable Detection Limit are in black.

TABLE B-2
LEACHATE ORGANIC CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	Apr-09	Jun-09	Oct-09	Dec-09	Apr-10	Jun-10	Sep-10	Nov-10	Mar-11	Jun-11	Sep-11	Nov-11	Apr-12	Jun-12	Sep-12	Nov-12	Apr-13	Jun-13	Sep-13
1,1,1-Trichloroethane	<1	<0.5	<0.1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<1	<0.5	<0.5	<2.5	<1	<1.0	<0.2	<2.5	<5	<2.5
1,1,1,2-Tetrachloroethane	<1	<0.5	<0.1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<1	<0.5	<0.5	<5	<2	<2.0	<0.4	<5	<10	<5
1,1,2,2-Tetrachloroethane	<2	<1	<0.2	<1	<1	<1	<2	<1	<1	<2	<1	<1	<5	<2	<2.0	<0.4	<5	<10	<5
1,1,2-Trichloroethane	<2	<1	<0.2	<1	<1	<1	<2	<1	<1	<2	<1	<1	<5	<2	<2.0	<0.4	<5	<10	<5
1,1-Dichloroethane	<1	0.5	0.1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<1	<0.5	<0.5	<2.5	<1	<1.0	<0.2	<2.5	<5	<2.5
1,1-Dichloroethylene	<1	<0.5	<0.1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<1	<0.5	<0.5	<2.5	<1	<1.0	<0.2	<2.5	<5	<2.5
1,2-Dichlorobenzene	<2	1	0.4	<1	<1	<1	<2	<1	<1	<2	<1	<1	<5	<2	<2.0	<0.4	<5	<10	<5
1,2-Dichloroethane	<2	<1	<0.2	<1	<1	<1	<2	<1	<1	<2	<1	<1	<5	<2	<2.0	<0.4	<5	<10	<5
1,2-Dichloropropane	<1	<0.5	<0.1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<1	<0.5	<0.5	<2.5	<1	<1.0	<0.2	<2.5	<5	<2.5
1,3-Dichlorobenzene	<2	<1	<0.2	<1	<1	<1	<2	<1	<1	<2	<1	<1	<5	<2	<2.0	<0.4	<5	<10	<5
1,4-Dichlorobenzene	7	12	4.3	4	8	8	6	4	7	9	7	5	<5	5.3	<2.0	2.6	6.1	<10	7
2-Chloroethyl vinyl ether	<20	<10	<2	<10	<10	<10	<20		<10	<20	<10		<50	<20	<20	<4.0	<50	<100	<50
Acetone	<100	63	66	<50	58	77	<100	<50	<50	<100	<50	<50	<250	<100	<100	<20	<250	<500	<250
Benzene	4	2.7	0.1	2	1.5	0.7	<1		4.8	3	<0.5	2.2	<2.5	<1	<1.0	0.51	2.8	<5	<2.5
Bromodichloromethane	<1	<0.5	<0.1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<1	<0.5	<0.5	<2.5	<1	<1.0	<0.2	<2.5	<5	<2.5
Bromoform	<2	<1	<0.2	<1	<1	<1	<2	<1	<1	<2	<1	<1	<5	<2	<2.0	<0.4	<5	<10	<5
Bromomethane	<5	<3	<0.5	<3	<3	<3	<5	<3	<3	<5	<3	<3	<13	<5	<5.0	<1.0	<13	<25	<13
Carbon tetrachloride	<1	<0.5	<0.1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<1	<0.5	<0.5	<2.5	<1	<1.0	<0.2	<2.5	<5	<2.5
Chlorobenzene	17	10	1.1	13	5.5	3	<1	7.8	16	12	<0.5	9.1	3.8	<1	1.6	1.3	16	7.1	4.8
Chlorodibromomethane	<2	<1	<0.2	<1	<1	<1	<2	<1	<1	<2	<1	<1	<5	<2	<2.0	<0.4	<5	<10	<5
Chloroethane	<2	<1	0.4	<1	<1	1	<2	<1	1	<2	<1	1	<5	<2	<2.0	<0.4	<5	<10	<5
Chloroform	<1	<0.5	<0.1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<1	<0.5	<0.5	<2.5	<1	<1.0	<0.2	<2.5	<5	<2.5
Chloromethane	<5	<3	<0.5	<3	<3	<3	<5	<3	<3	<5	<3	<3	<13	<5	<5.0	<1.0	<13	<25	<13
Cis-1,2-Dichloroethylene	1	1.6	0.3	<0.5	0.8	2.8	3	<0.5	1.4	2	<0.5	<0.5	<2.5	<1	<1.0	<0.2	<2.5	<5	<2.5
Cis-1,3-Dichloropropylene	<2	<1	<0.2	<1	<1	<1	<2	<1	<1	<2	<1	<1	<5	<2	<2.0	<0.4	<5	<10	<5
Dichloromethane	<5	<3	<0.5	<3	<3	3	<5	<3	<3	<5	<3	<3	<13	<5	<5.0	<1.0	<13	<25	<13
Ethylbenzene	15	3.9	<0.1	6.4	<0.5	<0.5	<1	0.7	14	7	<0.5	7.9	<2.5	<1	<1.0	<0.2	5.1	<5	<2.5
Isopropyl Acetate																			
m/p-Xylenes	61	34	2.1	37	16	3.5	3	14	62	53	2.1	37	7.9	<1	3.6	4.1	23	11	11
Methyl Ethyl Ketone	<50	68	71	<30	42	43	<50	<30	<30	<50	<30	<30	<130	<50	<50	<10	<130	<250	<130
o-Xylene	16	13	1	3.7	7.7	8.2	2	1.6	14	22	1.6	7.5	2.6	<1	<1.0	0.55	7.4	<5	3.5
Styrene	<2	<1	<0.2	<1	<1	<1	<2	<1	<1	<2	<1	<1	<5	<2	<2.0	<0.4	<5	<10	<5
Tetrachloroethylene	<1	<0.5	0.1	0.7	<0.5	<0.5	<1	<0.5	<0.5	<1	<0.5	1.6	<2.5	<1	<1.0	<0.2	<2.5	<5	<2.5
Toluene	19	12	<0.2	3	2	1	<2	<1	11	14	<1	5	<5	<2	<2.0	<0.4	<5	<10	<5
trans-1,2-Dichloroethylene	<1	<0.5	<0.1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<1	<0.5	<0.5	<2.5	<1	<1.0	<0.2	<2.5	<5	<2.5
trans-1,3-Dichloropropylene	<2	<1	<0.2	<1	<1	<1	<2	<1	<1	<2	<1	<1	<5	<2	<2.0	<0.4	<5	<10	<5
Trichloroethylene	<1	<0.5	<0.1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<1	<0.5	<0.5	<2.5	<1	<1.0	<0.2	<2.5	<5	<2.5
Trichlorofluoromethane	<2	<1	<0.2	<1	<1	<1	<2	<1	<1	<2	<1	<1	<5	<2	<2.0	<0.4	<5	<10	<5
Vinyl Chloride	<2	<1	<0.2	<1	<1	<1	<2	<1	<1	<2	<1	<1	<5	<2	<2.0	<0.4	<5	<10	<5
Xylenes: total																			

NOTES: 1) * - Indicates a detected parameter concentration below the Reportable Detection Limit (RDL).
** - Indicates the associated value is an estimated quantity.
2) tr - Indicates a detected parameter concentration below an unspecified RDL.
Blank indicates parameter not analysed.
3) All units are µg/L.
4) Organic detections above the Reportable Detection Limit are in black.

TABLE B-2
LEACHATE ORGANIC CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	Dec-13	Apr-14	Jun-14	Sep-14	Dec-14	Apr-15	Jun-15	Sep-15	Nov-15	Apr-16	Jun-16	Sep-16	Nov-16
1,1,1-Trichloroethane	<0.25	<0.5	<0.5	<1	<0.5	<0.5	<0.25	<0.5	<0.5	<2.0	<0.50	<2.0	<0.50
1,1,1,2-Tetrachloroethane	<0.5	<1	<1	<2	<1	<1	<0.5	<1	<1	<4.0	<1.0	<4.0	<1.0
1,1,2,2-Tetrachloroethane	<0.5	<1	<1	<2	<1	<1.0	<0.50	<1.0	<1.0	<4.0	<1.0	<4.0	<1.0
1,1,2-Trichloroethane	<0.5	<1	<1	<2	<1	<1.0	<0.50	<1.0	<1.0	<4.0	<1.0	<4.0	<1.0
1,1-Dichloroethane	<0.25	<0.5	0.53	<1	<0.5	<0.50	<0.25	<0.50	<0.50	<2.0	<0.50	<2.0	<0.50
1,1-Dichloroethylene	<0.25	<0.5	<0.5	<1	<0.5	<0.50	<0.25	<0.50	<0.50	<2.0	<0.50	<2.0	<0.50
1,2-Dichlorobenzene	<0.5	<1	<1	<2	<1	<1.0	0.7	<1.0	<1.0	<4.0	<1.0	<4.0	<1.0
1,2-Dichloroethane	<0.5	<1	<1	<2	<1	<1.0	<0.50	<1.0	<1.0	<4.0	<1.0	<4.0	<1.0
1,2-Dichloropropane	<0.25	<0.5	<0.5	<1	<0.5	<0.50	<0.25	<0.50	<0.50	<2.0	<0.50	<2.0	<0.50
1,3-Dichlorobenzene	<0.5	<1	<1	<2	<1	<1.0	<0.50	<1.0	<1.0	<4.0	<1.0	<4.0	<1.0
1,4-Dichlorobenzene	4.1	7.6	7.8	5.7	2.3	6.1	5.8	6.4	3.6	6.8	5.2	5.6	1.3
2-Chloroethyl vinyl ether	<5	<50	<10	<20	<10	<25	<13		<25	<100	<25	<100	<25
Acetone	39	<50	<50	<100	<50	<50	<25	<50	<50	<200	<50	<200	<50
Benzene	0.43	3.5	2.4	<1	<0.5	3.2	1.8	<0.5	0.7	<2.0	0.74	<2.0	<0.50
Bromodichloromethane	<0.25	<0.5	<0.5	<1	<0.5	<0.5	<0.25	<0.50	<0.50	<2.0	<0.50	<2.0	<0.50
Bromoform	<0.5	<1	<1	<2	<1	<1.0	<0.50	<1.0	<1.0	<4.0	<1.0	<4.0	<1.0
Bromomethane	<1.3	<2.5	<2.5	<5	<2.5	<2.5	<1.3	<2.5	<2.5	<10	<2.5	<10	<2.5
Carbon tetrachloride	<0.25	<0.5	<0.5	<1	<0.5	<0.50	<0.25	<0.50	<0.50	<2.0	<0.50	<2.0	<0.50
Chlorobenzene	1.5	23	11	1.6	1	14	8.7	1.3	3.6	10	3.5	4.5	1
Chlorodibromomethane	<0.5	<1	<1	<2	<1	<1.0	<0.50	<1.0	<1.0	<4.0	<1.0	<4.0	<1.0
Chloroethane	<0.5	<1	<1	<2	<1	<5.0	0.61	1.2	<1.0	<4.0	<1.0	<4.0	<1.0
Chloroform	<0.25	<0.5	<0.5	<1	<0.5	<0.50	<0.25	<0.50	<0.50	<2.0	<0.50	<2.0	<0.50
Chloromethane	<1.3	<2.5	<2.5	<5	<2.5	<2.5	<1.3	<2.5	<2.5	<10	<2.5	<10	<2.5
Cis-1,2-Dichloroethylene	<0.25	1.1	0.7	<1	<0.5	0.52	<0.25	<0.50	<0.50	<2.0	<0.50	<2.0	<0.50
Cis-1,3-Dichloropropylene	<0.5	<1	<1	<2	<1	<1.0	<0.50	<1.0	<1.0	<4.0	<1.0	<4.0	<1.0
Dichloromethane	<1.3	<2.5	<2.5	<5	<2.5	<2.5	<1.3	<2.5	<2.5	<10	<2.5	<10	<2.5
Ethylbenzene	<0.25	9.7	3.5	<1	<0.5	5.1	1.1	<0.50	<0.50	<2.0	<0.50	<2.0	<0.50
Isopropyl Acetate													
m/p-Xylenes	2.8	41	36	1.3	<0.5	31	13	<0.50	2.8	10	4	7.2	0.67
Methyl Ethyl Ketone	15	<25	<25	<50	<25	<25	<13	<25	<25	<100	<25	<100	<25
o-Xylene	0.73	9.2	17	1.2	<0.5	6	4.1	0.5	<0.50	4.2	2.3	<2.0	<0.50
Styrene	<0.5	<1	<1	<2	<1	<1.0	<0.50	<1.0	<1.0	<4.0	<1.0	<4.0	<1.0
Tetrachloroethylene	<0.25	<0.5	<0.5	<1	<0.5	<0.50	<0.25	<0.50	<0.50	<2.0	<0.50	<2.0	<0.50
Toluene	<0.5	4.1	8.5	<2	<1	1.9	1.1	<1.0	<1.0	<4.0	<1.0	<4.0	<1.0
trans-1,2-Dichloroethylene	<0.25	<0.5	<0.5	<1	<0.5	<0.50	<0.25	<0.50	<0.50	<2.0	<0.50	<2.0	<0.50
trans-1,3-Dichloropropylene	<0.5	<1	<1	<2	<1	<1.0	<0.50	<1.0	<1.0	<4.0	<1.0	<4.0	<1.0
Trichloroethylene	<0.25	<0.5	<0.5	<1	<0.5	<0.50	<0.25	<0.50	<0.50	<2.0	<0.50	<2.0	<0.50
Trichlorofluoromethane	<0.5	<1	<1	<2	<1	<1.0	<0.50	<1.0	<1.0	<4.0	<1.0	<4.0	<1.0
Vinyl Chloride	<0.5	<1	<1	<2	<1	<1.0	<0.50	<1.0	<1.0	<4.0	<1.0	<4.0	<1.0
Xylenes: total													

NOTES: 1) * - Indicates a detected parameter concentration below the Reportable Detection Limit (RDL).
** - Indicates the associated value is an estimated quantity.
2) tr - Indicates a detected parameter concentration below an unspecified RDL.
Blank indicates parameter not analysed.
3) All units are µg/L.
4) Organic detections above the Reportable Detection Limit are in black.

TABLE B-2
LEACHATE ORGANIC CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	Apr-17	Jun-17	Sep-17	Nov-17	Apr-18	Jun-18	Sep-18	Dec-18	Apr-19	May-19	Sep-19	Nov-19	Apr-20	Jun-20	Sep-20	Dec-20
1,1,1-Trichloroethane	<0.50	<0.50	<1.0	<2.0	<1.0	<1.0	<5.0	<1.0	<5.0	<2.0	<5.0	<0.50	<0.10	<5.0	<2.5	<1.0
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<2.0	<4.0	<2.0	<2.0	<10	<2.0	<10	<4.0	<10	<1.0	<0.20	<10	<5.0	<2.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<2.0	<4.0	<2.0	<2.0	<10	<2.0	<10	<4.0	<10	<1.0	<0.20	<10	<5.0	<2.0
1,1,2-Trichloroethane	<1.0	<1.0	<2.0	<4.0	<2.0	<2.0	<10	<2.0	<10	<4.0	<10	<1.0	<0.20	<10	<5.0	<2.0
1,1-Dichloroethane	<0.50	<0.50	<1.0	<2.0	<1.0	<1.0	<5.0	<1.0	<5.0	<2.0	<5.0	<0.50	0.33	<5.0	<2.5	<1.0
1,1-Dichloroethylene	<0.50	<0.50	<1.0	<2.0	<1.0	<1.0	<5.0	<1.0	<5.0	<2.0	<5.0	<0.50	<0.10	<5.0	<2.5	<1.0
1,2-Dichlorobenzene	<1.0	<1.0	<2.0	<4.0	<2.0	<2.0	<10	<2.0	<10	<4.0	<10	<1.0	0.57	<10	<5.0	<2.0
1,2-Dichloroethane	<1.0	<1.0	<2.0	<4.0	<2.0	<2.0	<10	<2.0	<10	<4.0	<10	<1.0	<0.20	<10	<5.0	<2.0
1,2-Dichloropropane	<0.50	<0.50	<1.0	<2.0	<1.0	<1.0	<5.0	<1.0	<5.0	<2.0	<5.0	<0.50	<0.10	<5.0	<2.5	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<2.0	<4.0	<2.0	<2.0	<10	<2.0	<10	<4.0	<10	<1.0	<0.20	<10	<5.0	<2.0
1,4-Dichlorobenzene	6.9	8.3	6.1	<4.0	4.8	5.4	<10	6.5	<10	7.8	<10	3.8	6.7	<10	<5.0	3.4
2-Chloroethyl vinyl ether	<25	<25	<50	<100	<50	<50	<250	<50	<250	<100	<250	<25	<5.0	<250		<50
Acetone	<50	<50	<100	<200	<100	<100	<500	<100	<500	<200	<500	<50	37	<500	<250	<100
Benzene	3.3	1.3	<1.0	<2.0	2.4	2.1	<5.0	2.8	<5.0	3.5	<5.0	0.85	2	<5.0	<2.5	1.1
Bromodichloromethane	<0.50	<0.50	<1.0	<2.0	<1.0	<1.0	<5.0	<1.0	<5.0	<2.0	<5.0	<0.50	<0.10	<5.0	<2.5	<1.0
Bromoform	<1.0	<1.0	<2.0	<4.0	<2.0	<2.0	<10	<2.0	<10	<4.0	<10	<1.0	<0.20	<10	<5.0	<2.0
Bromomethane	<2.5	<2.5	<5.0	<10	<5.0	<5.0	<25	<5.0	<25	<10	<25	<2.5	<0.50	<25	<13	<5.0
Carbon tetrachloride	<0.50	<0.50	<1.0	<2.0	<1.0	<1.0	<5.0	<1.0	<5.0	<2.0	<5.0	<0.50	<0.10	<5.0	<2.5	<1.0
Chlorobenzene	18	6.9	5	2.3	13	11	5.5	13	19	17	<5.0	6.1	11	9	5.3	6.4
Chlorodibromomethane	<1.0	<1.0	<2.0	<4.0	<2.0	<2.0	<10	<2.0	<10	<4.0	<10	<1.0	<0.20	<10	<5.0	<2.0
Chloroethane	<1.0	<1.0	<2.0	<4.0	<2.0	<2.0	<10	<2.0	<10	<4.0	<10	<1.0	0.4	<10	<5.0	<2.0
Chloroform	<0.50	<0.50	<1.0	<2.0	<1.0	<1.0	<5.0	<1.0	<5.0	<2.0	<5.0	<0.50	<0.10	<5.0	<2.5	<1.0
Chloromethane	<2.5	<2.5	<5.0	<10	<5.0	<5.0	<25	<5.0	<25	<10	<25	<2.5	<0.50	<25	<13	<5.0
Cis-1,2-Dichloroethylene	0.88	<0.50	<1.0	<2.0	<1.0	<1.0	<5.0	<1.0	<5.0	<2.0	<5.0	<0.50	0.32	<5.0	<2.5	<1.0
Cis-1,3-Dichloropropylene	<1.0	<1.0	<2.0	<4.0	<2.0	<2.0	<10	<2.0	<10	<4.0	<10	<1.0	<0.20	<10	<5.0	<2.0
Dichloromethane	<2.5	<2.5	<5.0	<10	<5.0	<5.0	<25	<5.0	<25	<10	<25	<2.5	<0.50	<25	<13	<5.0
Ethylbenzene	8.3	0.85	<1.0	<2.0	4	1.1	<5.0	2.6	5.8	8.2	<5.0	<0.50	2.1	<5.0	<2.5	<1.0
Isopropyl Acetate									<50	<20	<50	<5.0	<1.0	<50		<10
m/p-Xylenes	34	8.2	5.4	2.6	20	10	6.3	23	29	36	5	2.1	14	5.1	<2.5	2.4
Methyl Ethyl Ketone	<25	<25	<50	<100	<50	<50	<250	<50	<250	<100	<250	<25	18	<250	<130	<50
o-Xylene	9.5	3.5	2	<2.0	4.5	3.6	<5.0	3.8	7.1	8.8	<5.0	1.4	6.1	<5.0	<2.5	<1.0
Styrene	<1.0	<1.0	<2.0	<4.0	<2.0	<2.0	<10	<2.0	<10	<4.0	<10	<1.0	<0.20	<10	<5.0	<2.0
Tetrachloroethylene	<0.50	<0.50	<1.0	<2.0	<1.0	<1.0	<5.0	<1.0	<5.0	<2.0	<5.0	<0.50	<0.10	<5.0	<2.5	<1.0
Toluene	4.1	<1.0	<2.0	<4.0	<2.0	<2.0	<10	<2.0	<10	<4.0	<10	<1.0	1	<10	<5.0	<2.0
trans-1,2-Dichloroethylene	<0.50	<0.50	<1.0	<2.0	<1.0	<1.0	<5.0	<1.0	<5.0	<2.0	<5.0	<0.50	<0.10	<5.0	<2.5	<1.0
trans-1,3-Dichloropropylene	<1.0	<1.0	<2.0	<4.0	<2.0	<2.0	<10	<2.0	<10	<4.0	<10	<1.0	<0.20	<10	<5.0	<2.0
Trichloroethylene	<0.50	<0.50	<1.0	<2.0	<1.0	<1.0	<5.0	<1.0	<5.0	<2.0	<5.0	<0.50	<0.10	<5.0	<2.5	<1.0
Trichlorofluoromethane	<1.0	<1.0	<2.0	<4.0	<2.0	<2.0	<10	<2.0	<10	<4.0	<10	<1.0	<0.20	<10	<5.0	<2.0
Vinyl Chloride	<1.0	<1.0	<2.0	<4.0	<2.0	<2.0	<10	<2.0	<10	<4.0	<10	<1.0	<0.20	<10	<5.0	<2.0
Xylenes: total									36	44	5	3.5	20	5.1	<2.5	2.4

NOTES: 1) * - Indicates a detected parameter concentration below the Reportable Detection Limit (RDL).
** - Indicates the associated value is an estimated quantity.
2) tr - Indicates a detected parameter concentration below an unspecified RDL.
Blank indicates parameter not analysed.
3) All units are µg/L.
4) Organic detections above the Reportable Detection Limit are in black.

TABLE B-2
LEACHATE ORGANIC CHEMICAL RESULTS - Maintenance Hole 23
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	Mar-21	Jun-21	Sep-21	Dec-21	Apr-22	Jun-22	Sep-22	Dec-22
1,1,1-Trichloroethane	<5.0	<2.5	<2.0	<1.0	<1.0	<2.0	<5.0	<2.5
1,1,1,2-Tetrachloroethane	<10	<5.0	<4.0	<2.0	<2.0	<4	<10	<5.0
1,1,2,2-Tetrachloroethane	<10	<5.0	<4.0	<2.0	<2.0	<4.0	<10	<5.0
1,1,2-Trichloroethane	<10	<5.0	<4.0	<2.0	<2.0	<4.0	<10	<5.0
1,1-Dichloroethane	<5.0	<2.5	<2.0	<1.0	<1.0	<2.0	<5.0	<2.5
1,1-Dichloroethylene	<5.0	<2.5	<2.0	<1.0	<1.0	<2.0	<5.0	<2.5
1,2-Dichlorobenzene	<10	<5.0	<4.0	<2.0	<2.0	<2.0	<10	<5.0
1,2-Dichloroethane	<10	<5.0	<4.0	<2.0	<2.0	<2.0	<10	<5.0
1,2-Dichloropropane	<5.0	<2.5	<2.0	<1.0	<1.0	<2.0	<5.0	<2.5
1,3-Dichlorobenzene	<10	<5.0	5.1	<2.0	<2.0	<2.0	<10	<5.0
1,4-Dichlorobenzene	<10	5.3	7.2	5.7	5.9	4.1	<10	<5.0
2-Chloroethyl vinyl ether	<250		<100			<100	<250	
Acetone	<500	<250	<200	<100	<100	<200	<500	<250
Benzene	<5.0	<2.5	3.1	2.1	2	<2.0	<5.0	<2.5
Bromodichloromethane	<5.0	<2.5	<2.0	<1.0	<1.0	<2.0	<5.0	<2.5
Bromoform	<10	<5.0	<4.0	<2.0	<2.0	<4.0	<10	<5.0
Bromomethane	<25	<13	<10	<5.0	<5.0	<10	<25	<13
Carbon tetrachloride	<5.0	<2.5	<2.0	<1.0	<1.0	<2	<5.0	<2.5
Chlorobenzene	8.8	8.2	16	14	13	6.8	<5.0	<2.5
Chlorodibromomethane	<10	<5.0	<4.0	<2.0	<2.0	<4.0	<10	<5.0
Chloroethane	<10	<5.0	<4.0	<2.0	<2.0	<4.0	<10	<5.0
Chloroform	<5.0	<2.5	<2.0	<1.0	<1.0	<2.0	<5.0	<2.5
Chloromethane	<25	<13	<10	<5.0	<5.0	<10	<25	<13
Cis-1,2-Dichloroethylene	<5.0	<2.5	<2.0	<1.0	<1.0	<2.0	<5.0	<2.5
Cis-1,3-Dichloropropylene	<10	<5.0	<4.0	<2.0	<2.0	<4.0	<10	<5.0
Dichloromethane	<25	<13	<10	<5.0	<5.0	<100	<25	<13
Ethylbenzene	<5.0	<2.5	2.1	<1.0	1.8	<2.0	<5.0	<2.5
Isopropyl Acetate	<50		<20			<20	<50	
m/p-Xylenes	6.5	5.3	17	6.8	12	4.7	<5.0	<2.5
Methyl Ethyl Ketone	<250	<130	<100	<50	<50	<100	<250	<130
o-Xylene	<5.0	2.8	3.8	1.8	3.2	2.1	<5.0	<2.5
Styrene	<10	<5.0	<4.0	<2.0	<2.0	<4.0	<10	<5.0
Tetrachloroethylene	<5.0	<2.5	<2.0	<1.0	<1.0	<2.0	<5.0	<2.5
Toluene	<10	<5.0	<4.0	<2.0	<2.0	<4.0	<10	<5.0
trans-1,2-Dichloroethylene	<5.0	<2.5	<2.0	<1.0	<1.0	<2.0	<5.0	<2.5
trans-1,3-Dichloropropylene	<10	<5.0	<4.0	<2.0	<2.0	<4.0	<10	<5.0
Trichloroethylene	<5.0	<2.5	<2.0	<1.0	<1.0	<2.0	<5.0	<2.5
Trichlorofluoromethane	<10	<5.0	<4.0	<2.0	<2.0	<4.0	<10	<5.0
Vinyl Chloride	<10	<5.0	<4.0	<2.0	<2.0	<4.0	<10	<5.0
Xylenes: total	6.5	8.1	21	8.6	15	6.8	<5.0	<2.5

NOTES: 1) * - Indicates a detected parameter concentration below the Reportable Detection Limit (RDL).
** - Indicates the associated value is an estimated quantity.
2) tr - Indicates a detected parameter concentration below an unspecified RDL.
Blank indicates parameter not analysed.
3) All units are µg/L.
4) Organic detections above the Reportable Detection Limit are in black.

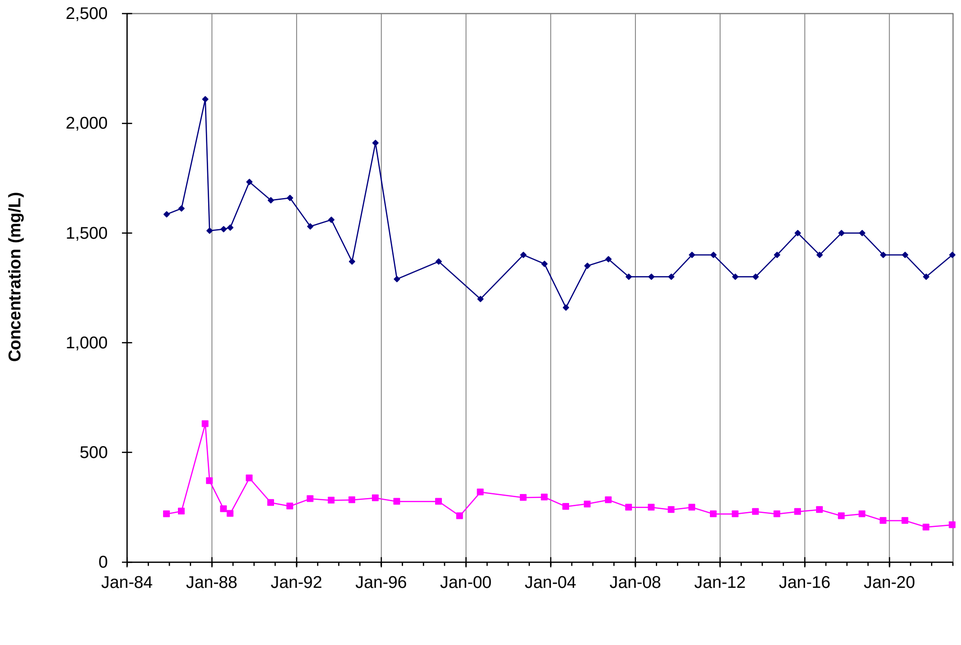
APPENDIX

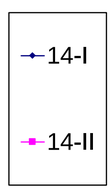
C GROUNDWATER CHEMISTRY

FIGURE C-1

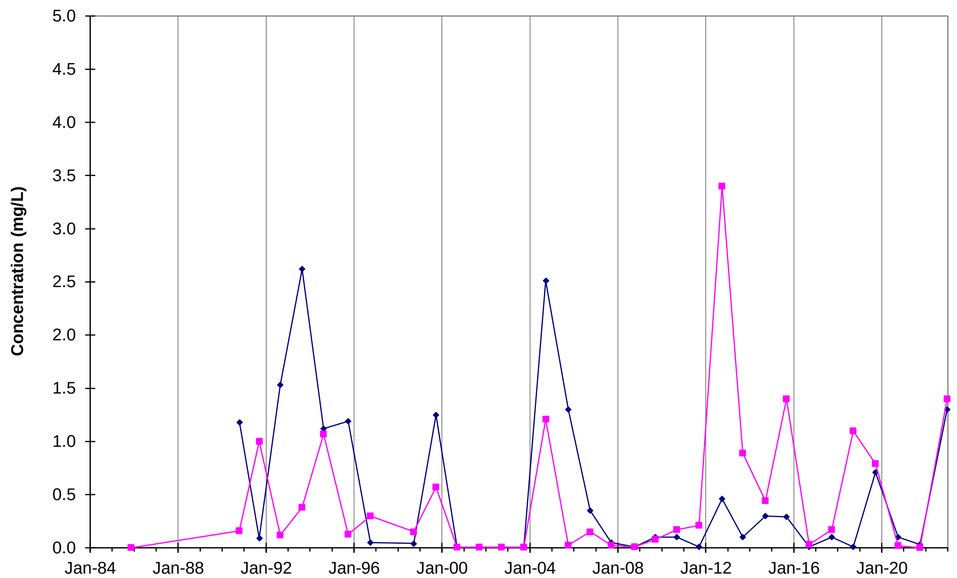
TIME CONCENTRATION GRAPHS - Borehole 14

CHLORIDE

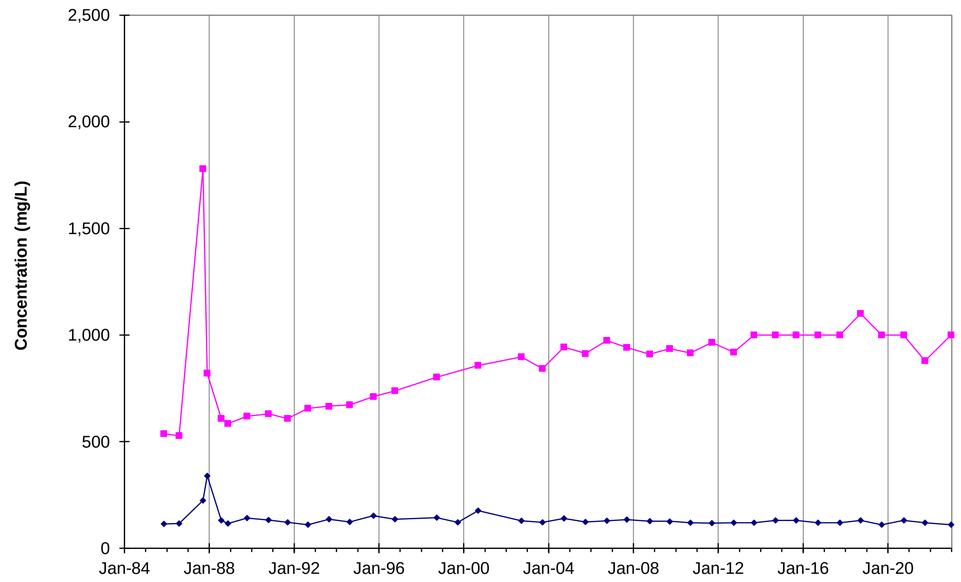




IRON



ALKALINITY



NITROGEN

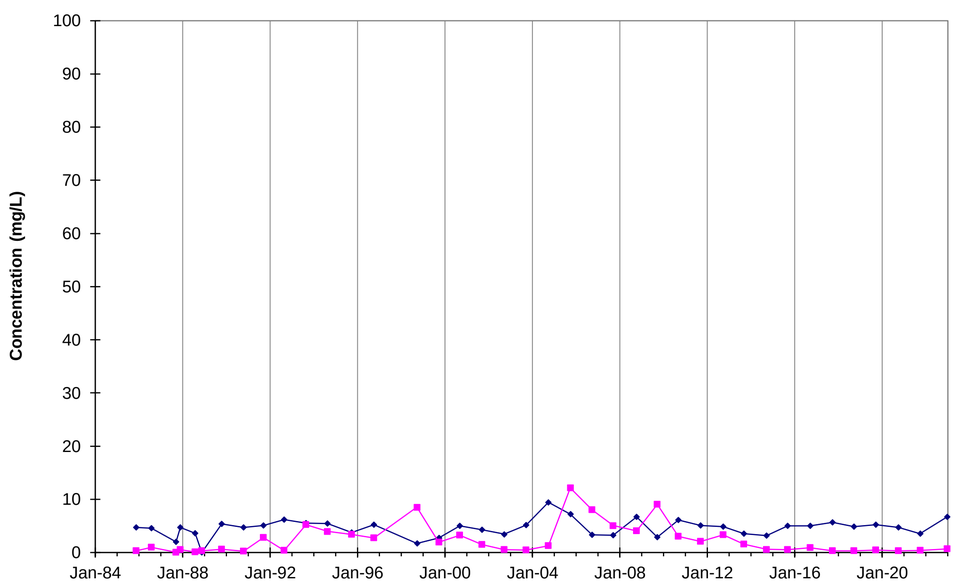
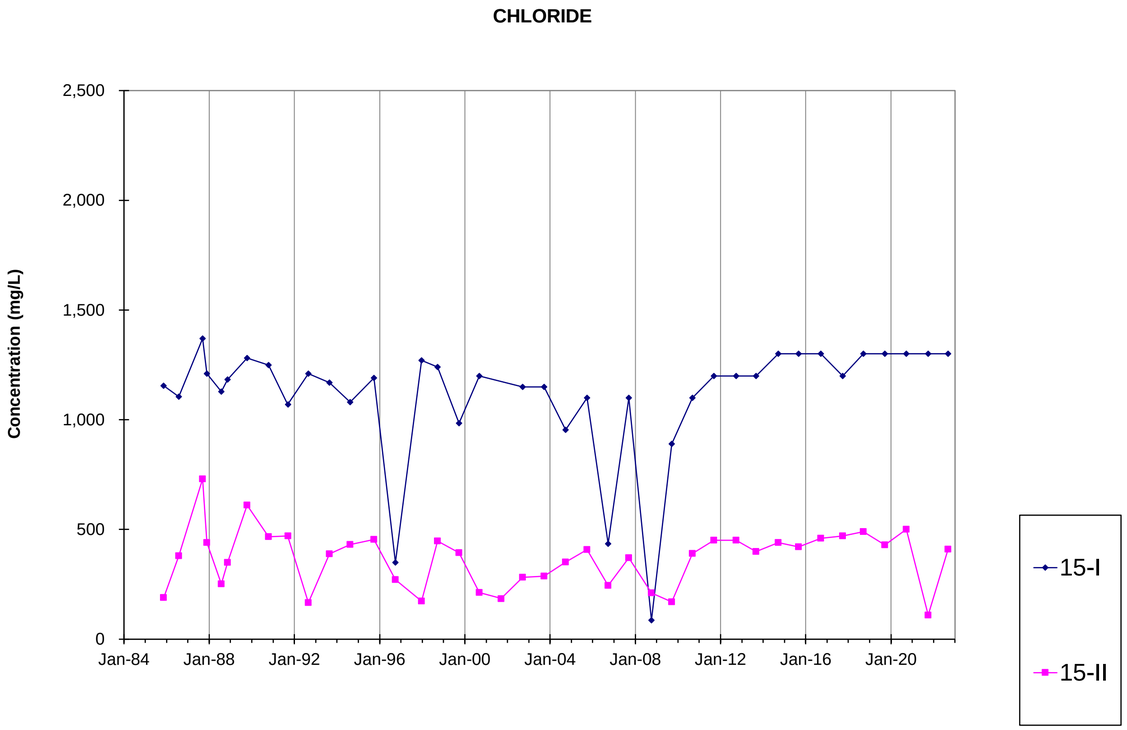
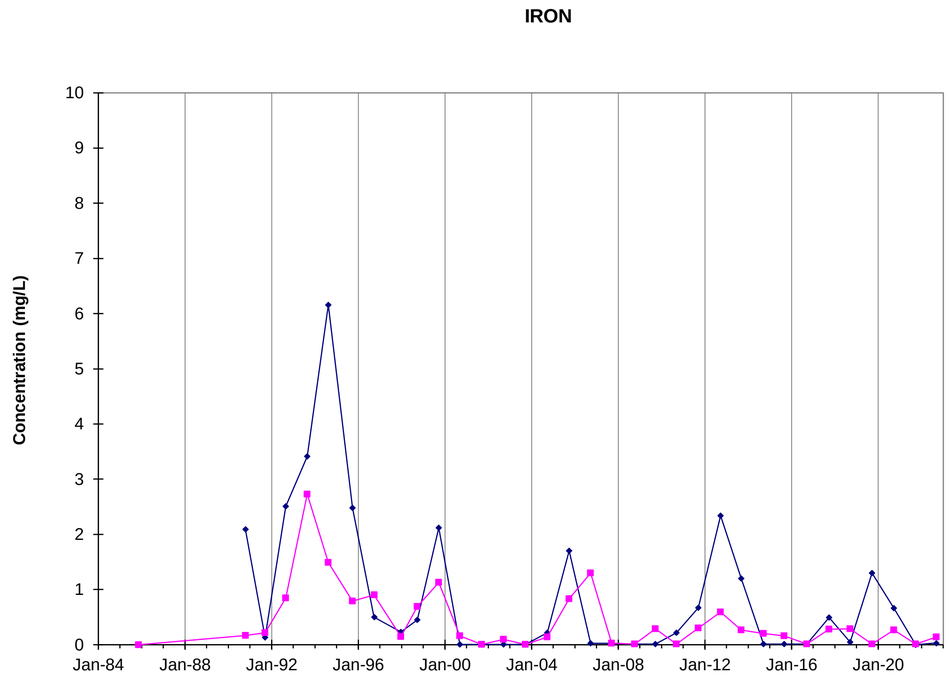
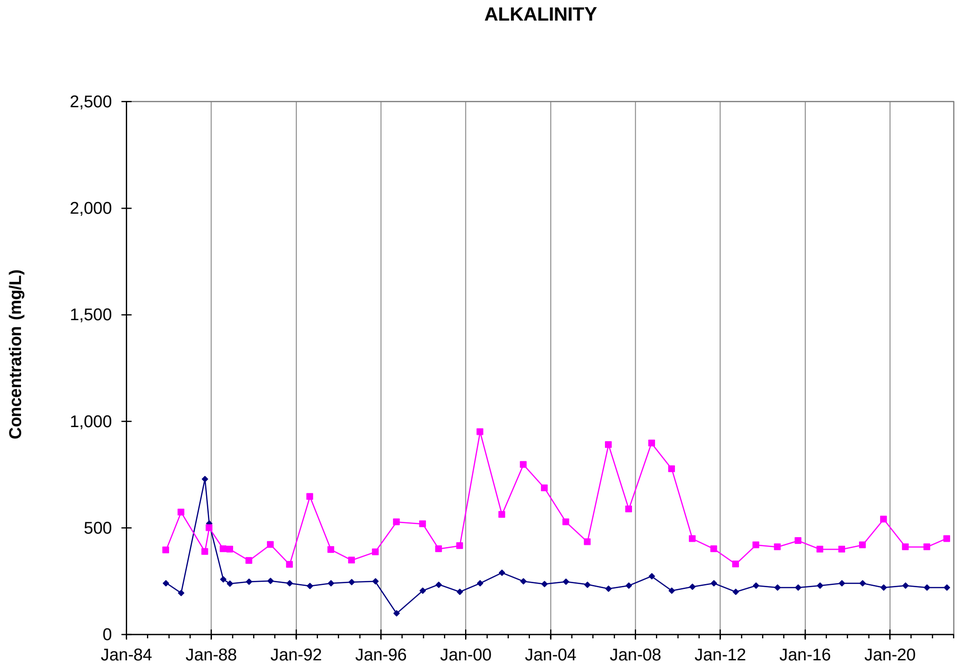


FIGURE C-2

TIME CONCENTRATION GRAPHS - Borehole 15







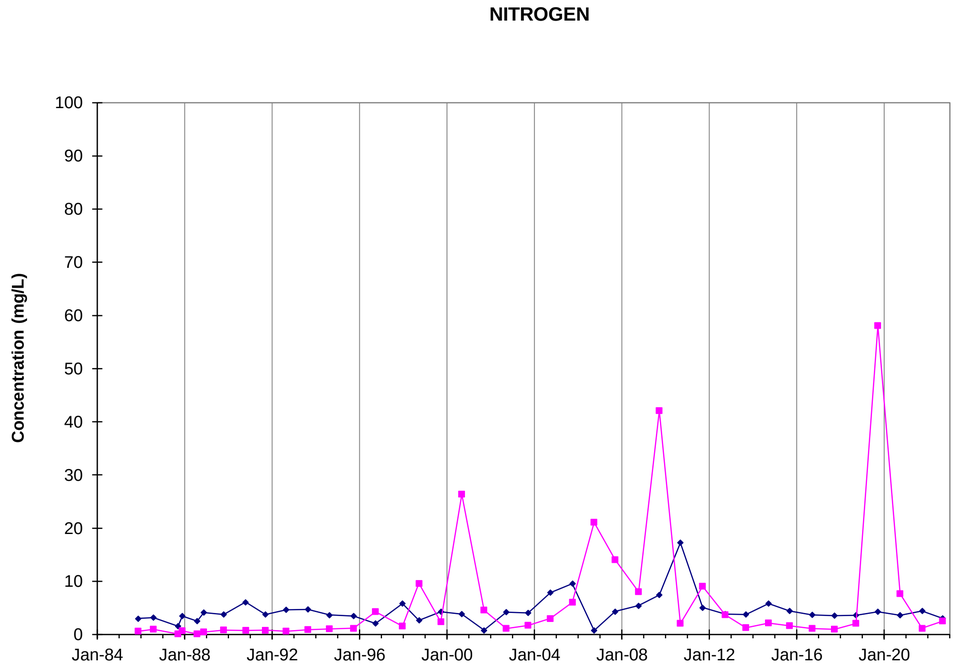
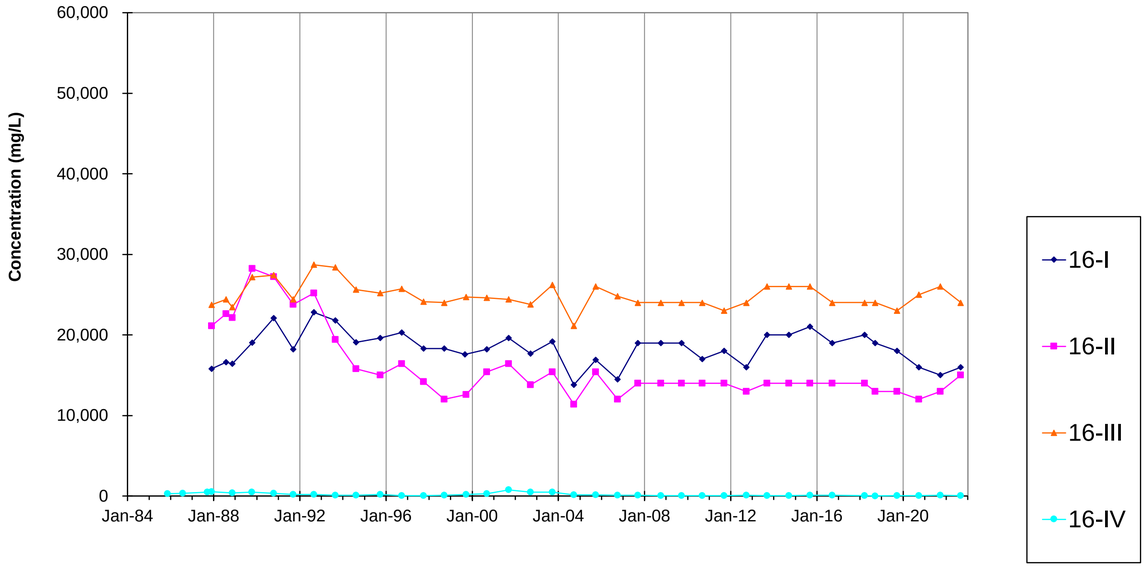


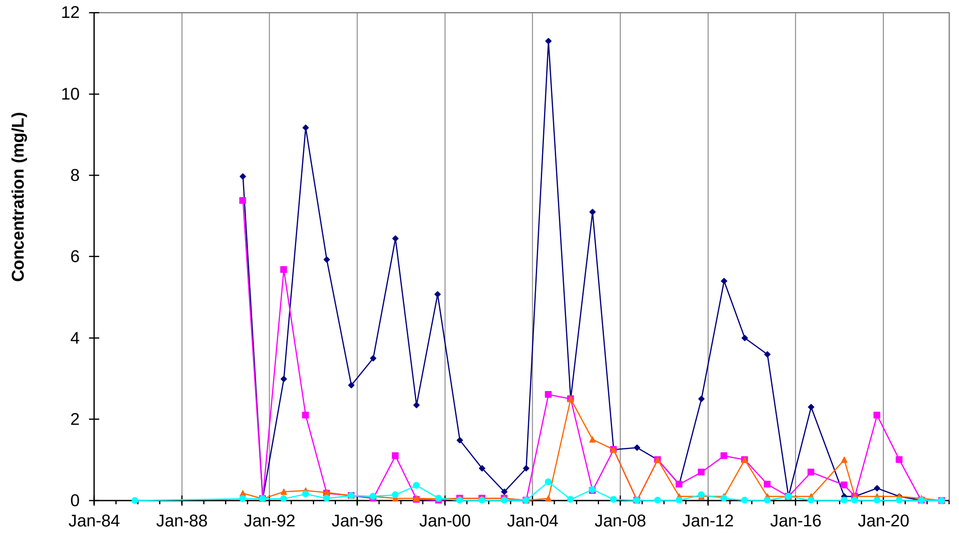
FIGURE C-3

TIME CONCENTRATION GRAPHS - Borehole 16

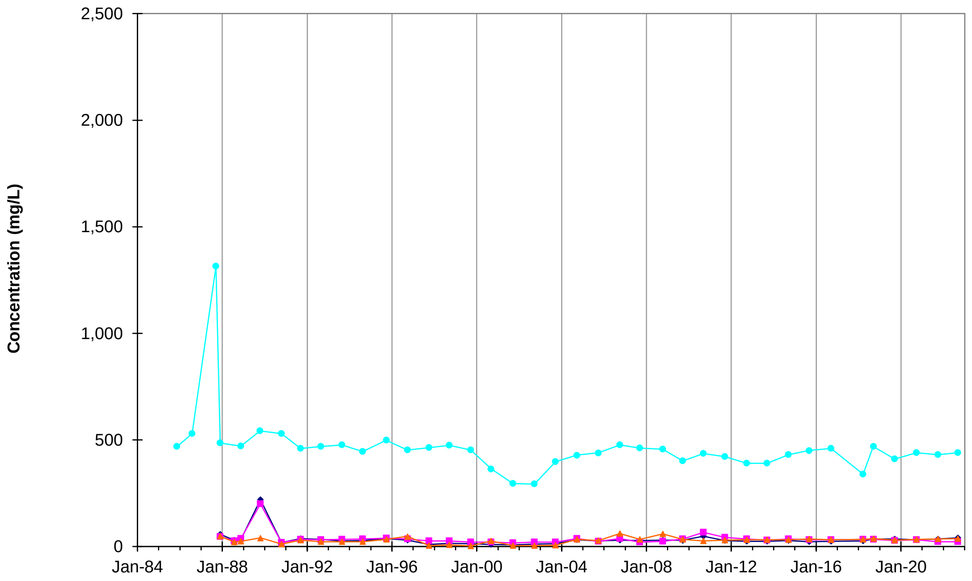
CHLORIDE



IRON



ALKALINITY



NITROGEN

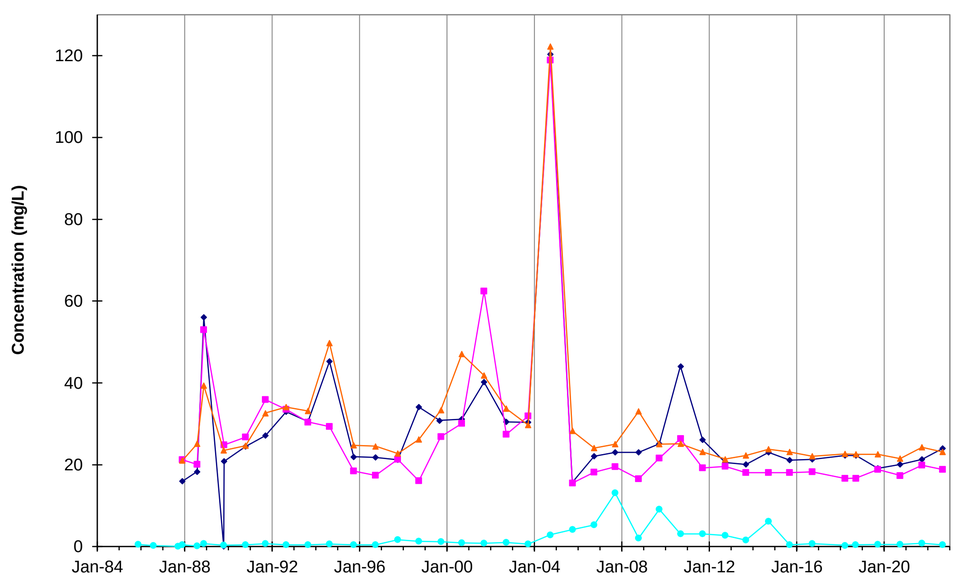
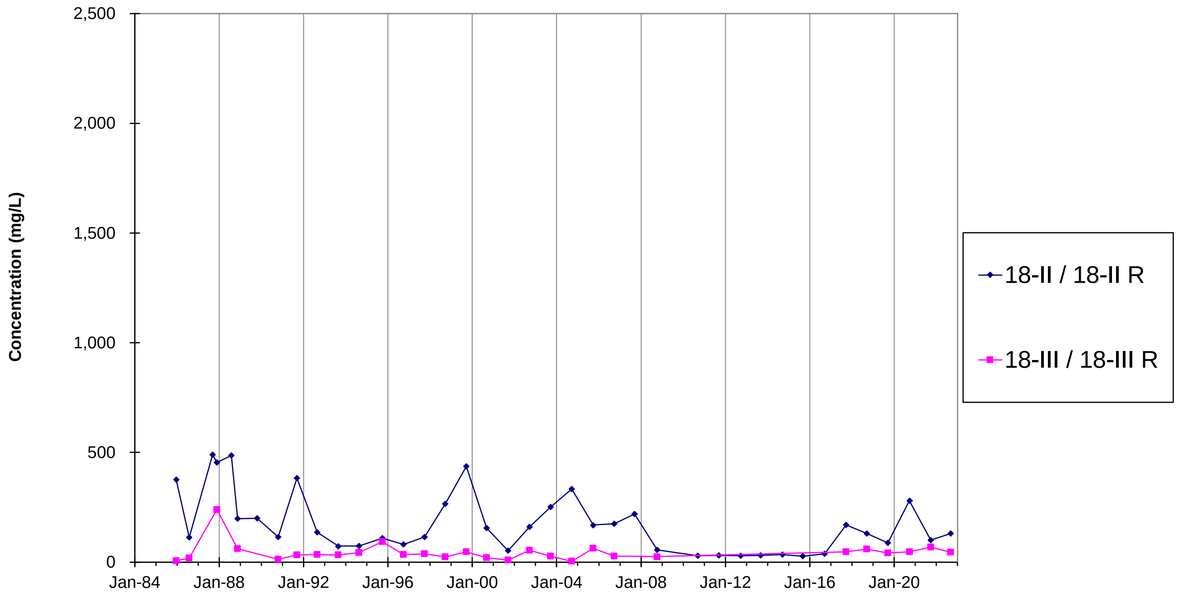


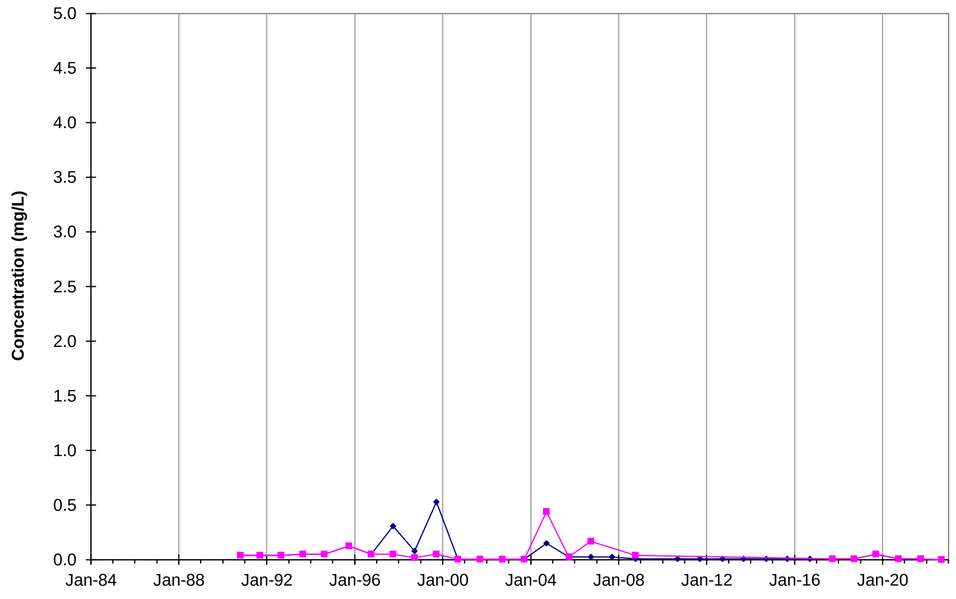
FIGURE C-4

TIME CONCENTRATION GRAPHS - Borehole 18

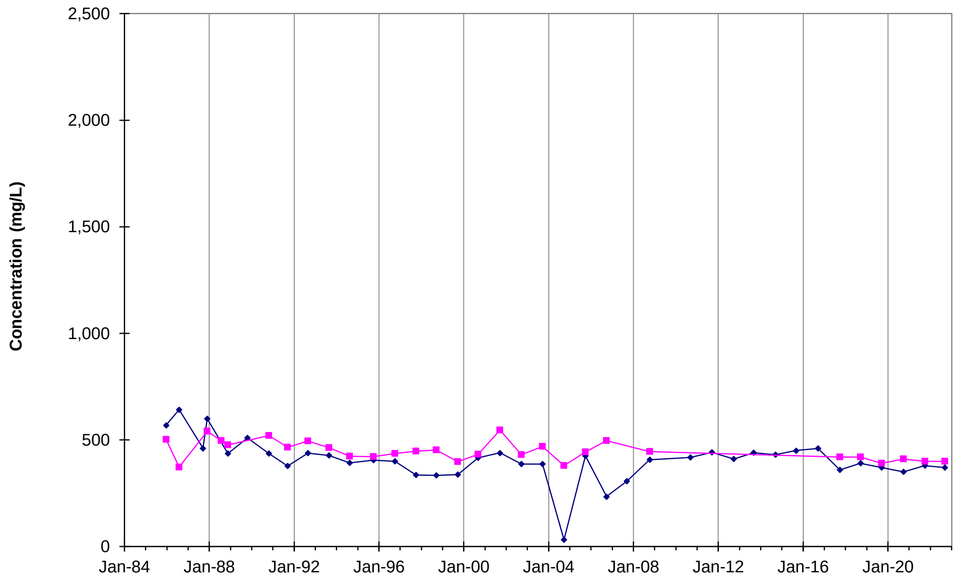
CHLORIDE



IRON



ALKALINITY



NITROGEN

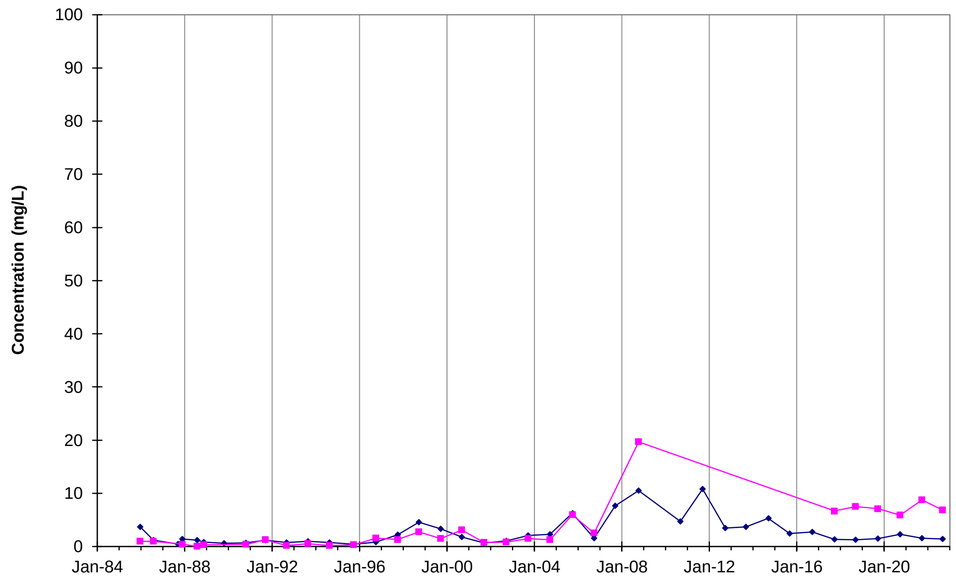
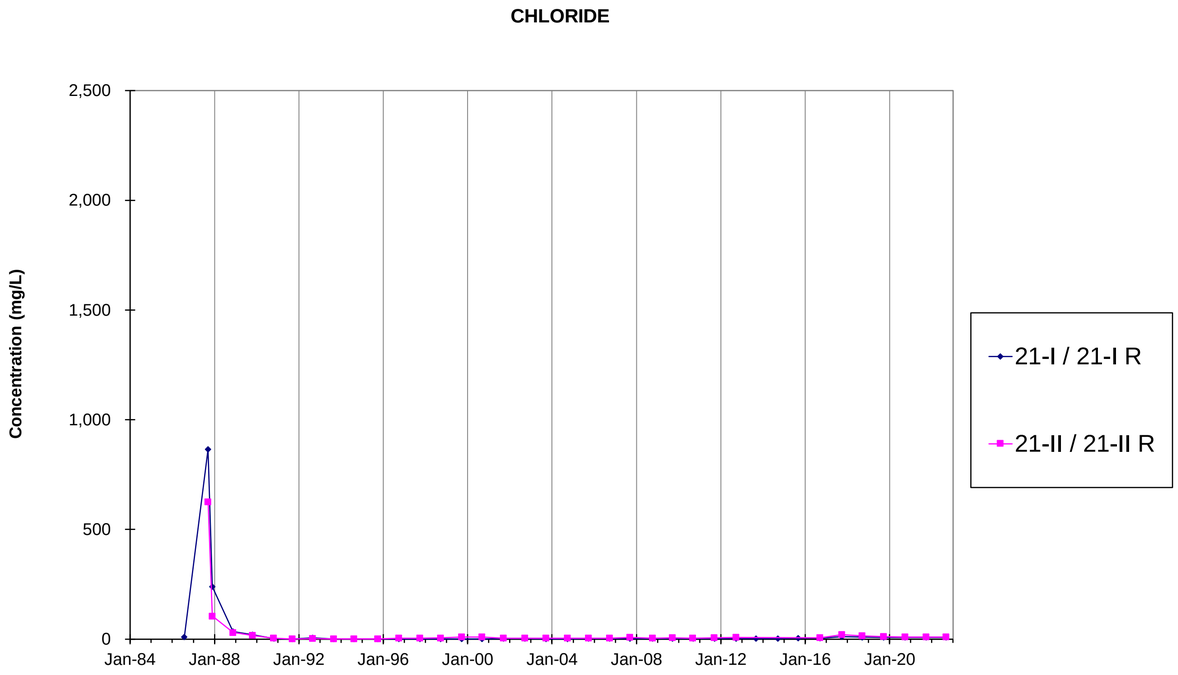
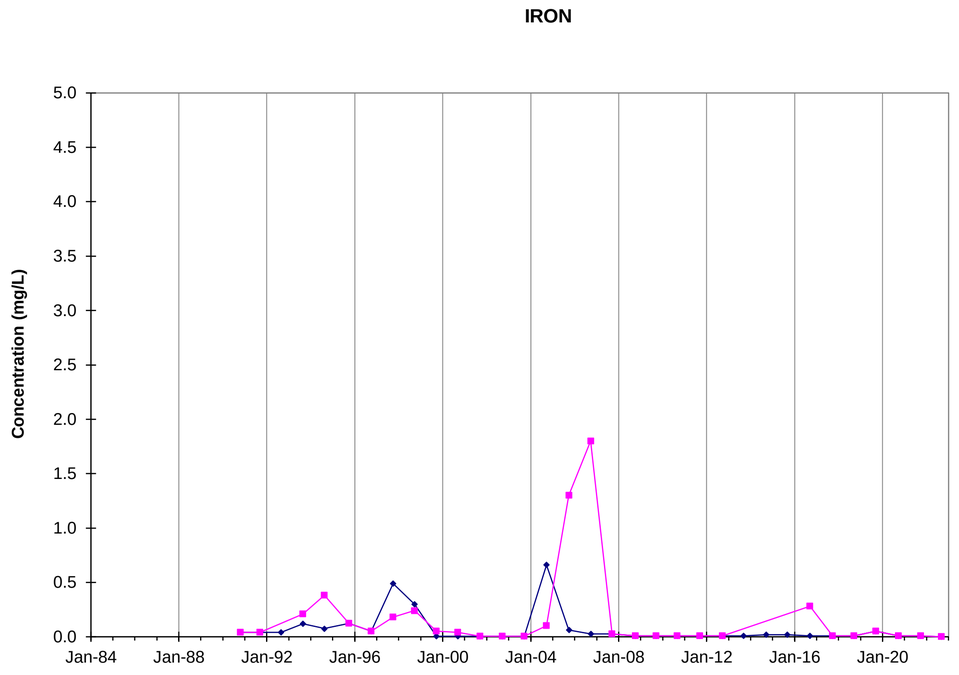
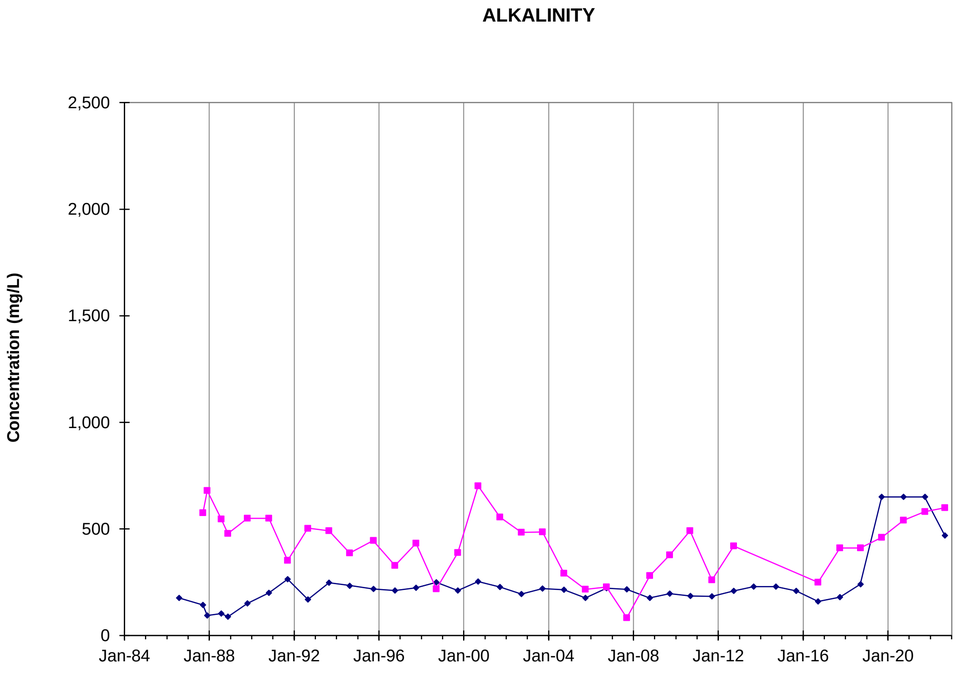


FIGURE C-5

TIME CONCENTRATION GRAPHS - Borehole 21







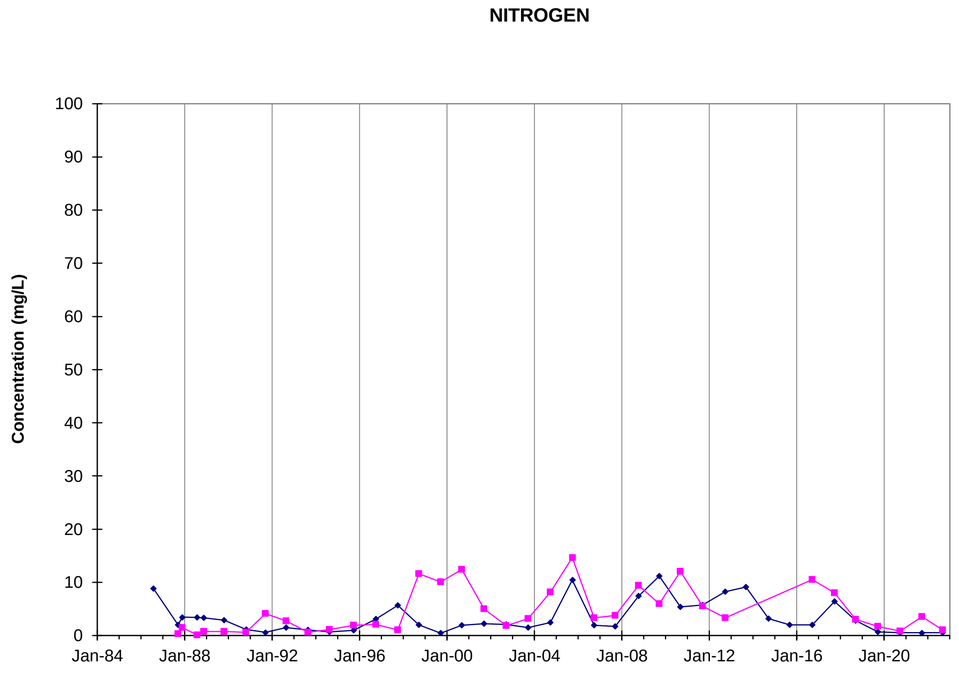
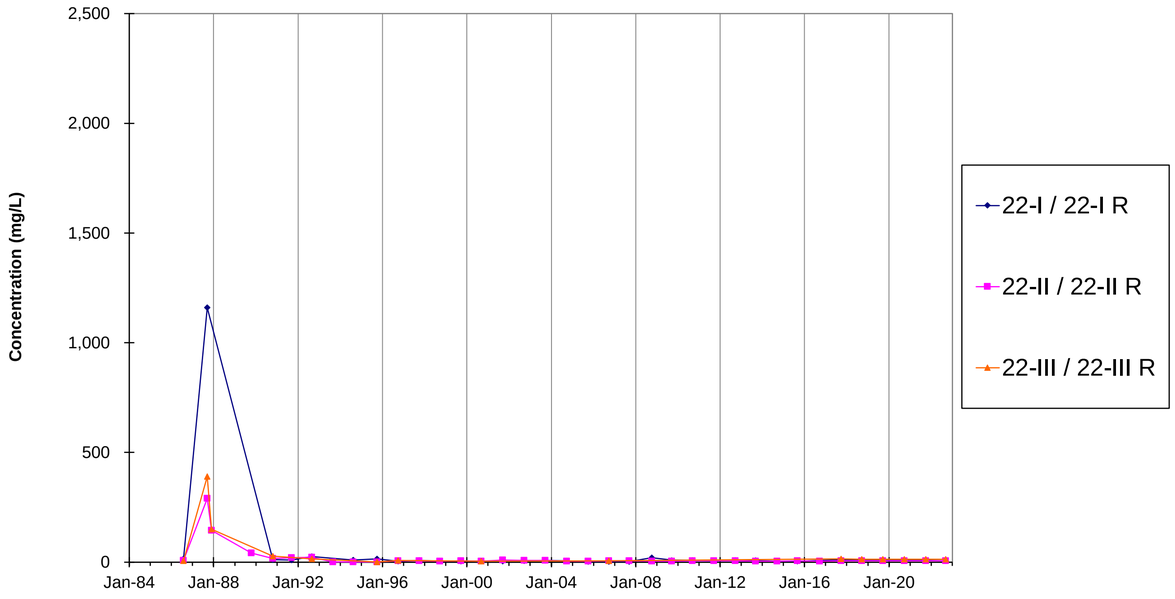


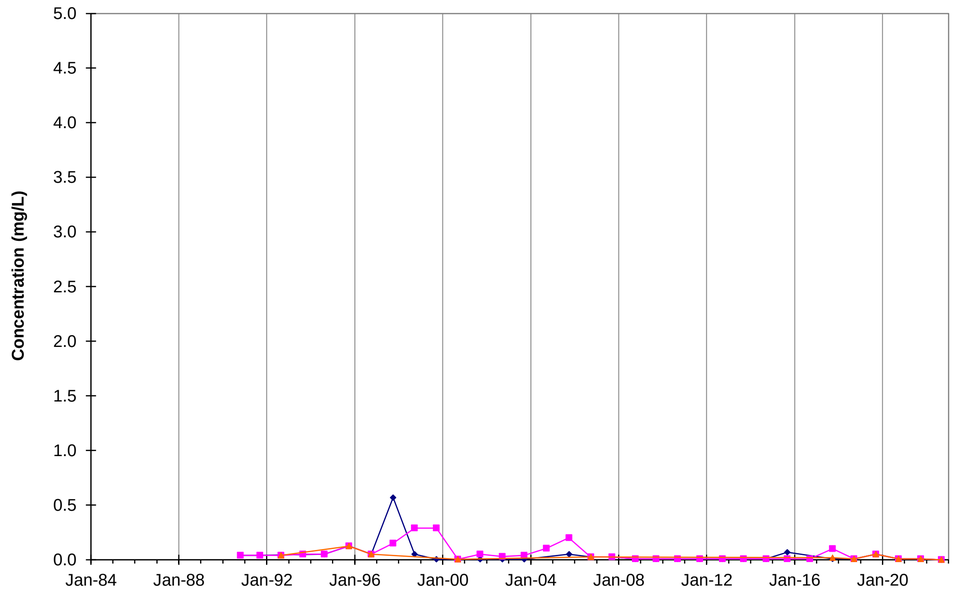
FIGURE C-6

TIME CONCENTRATION GRAPHS - Borehole 22

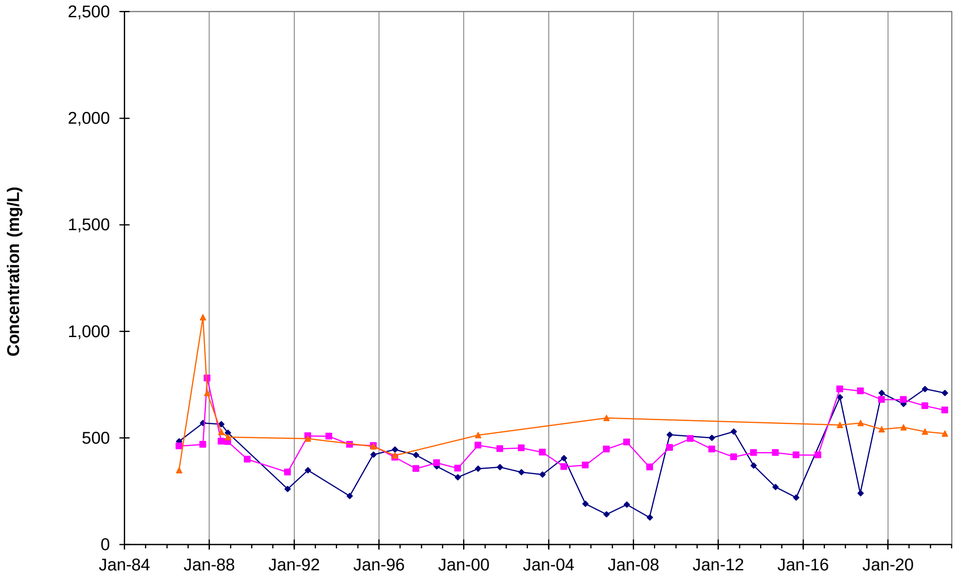
CHLORIDE



IRON



ALKALINITY



NITROGEN

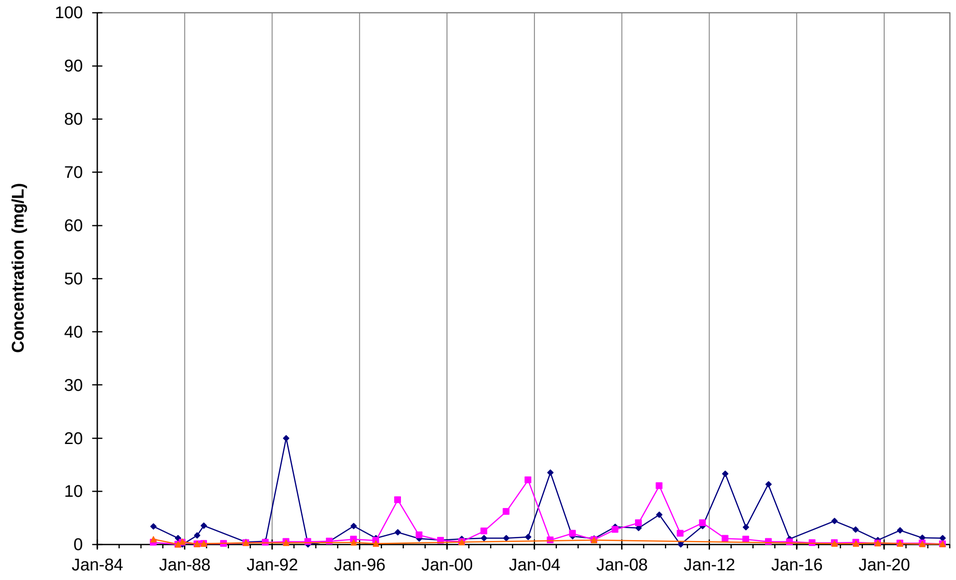
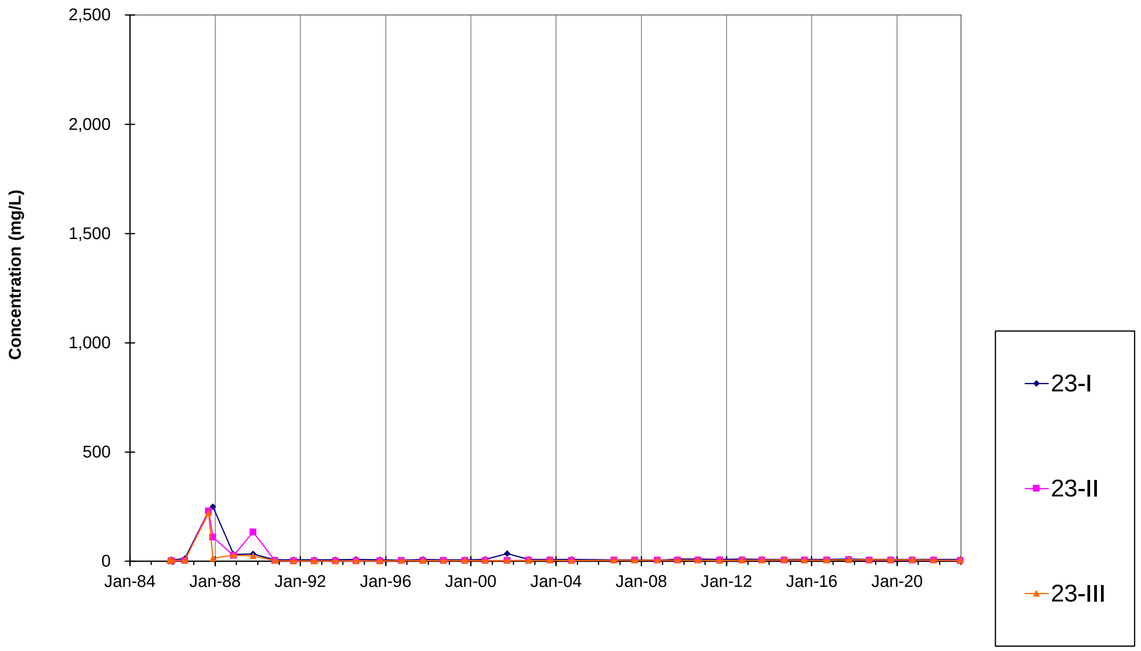


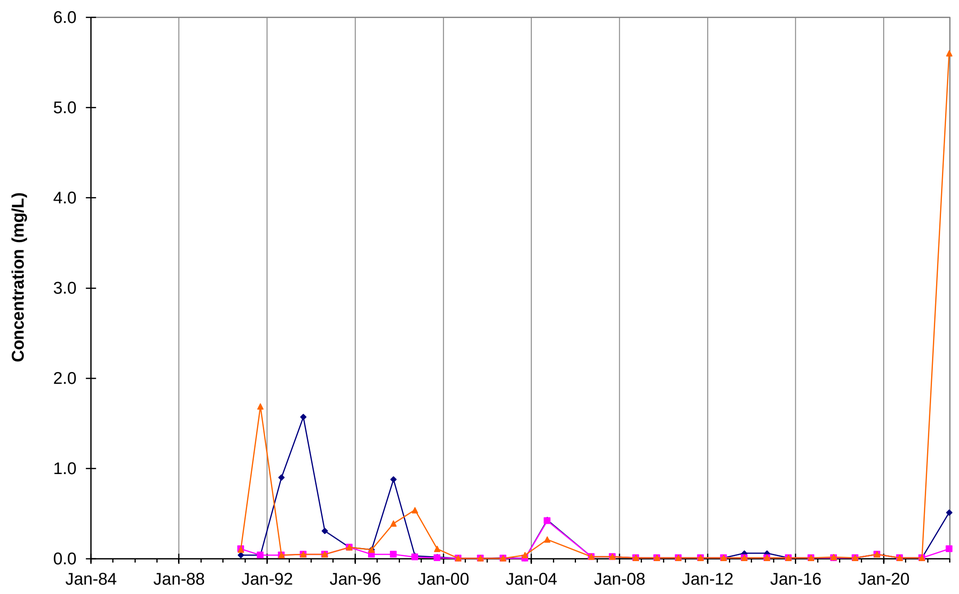
FIGURE C-7

TIME CONCENTRATION GRAPHS - Borehole 23

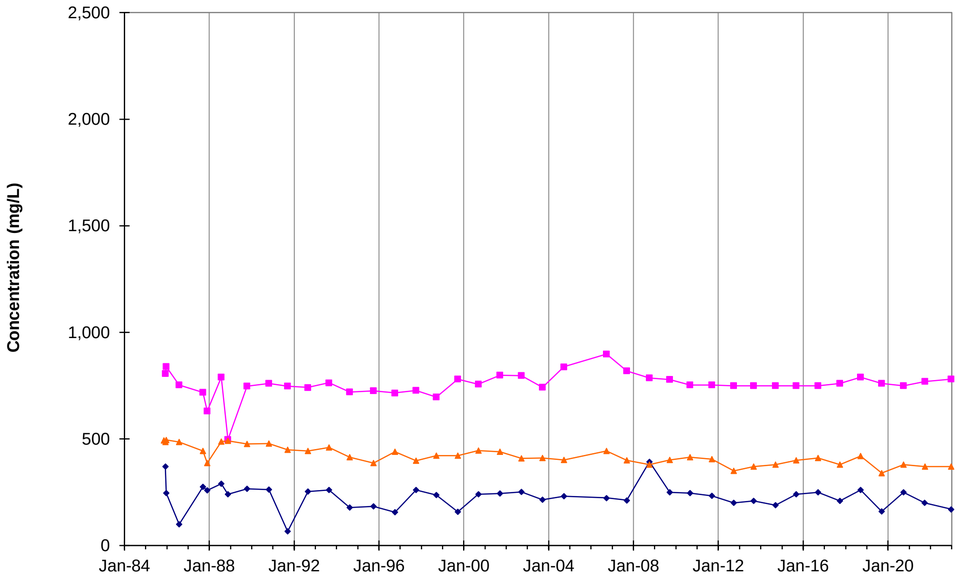
CHLORIDE



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NITROGEN

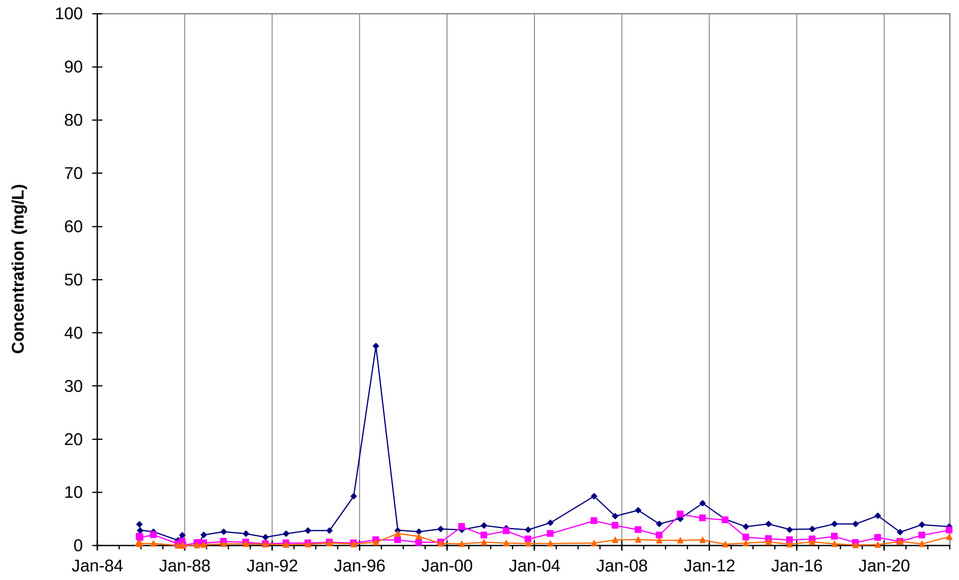
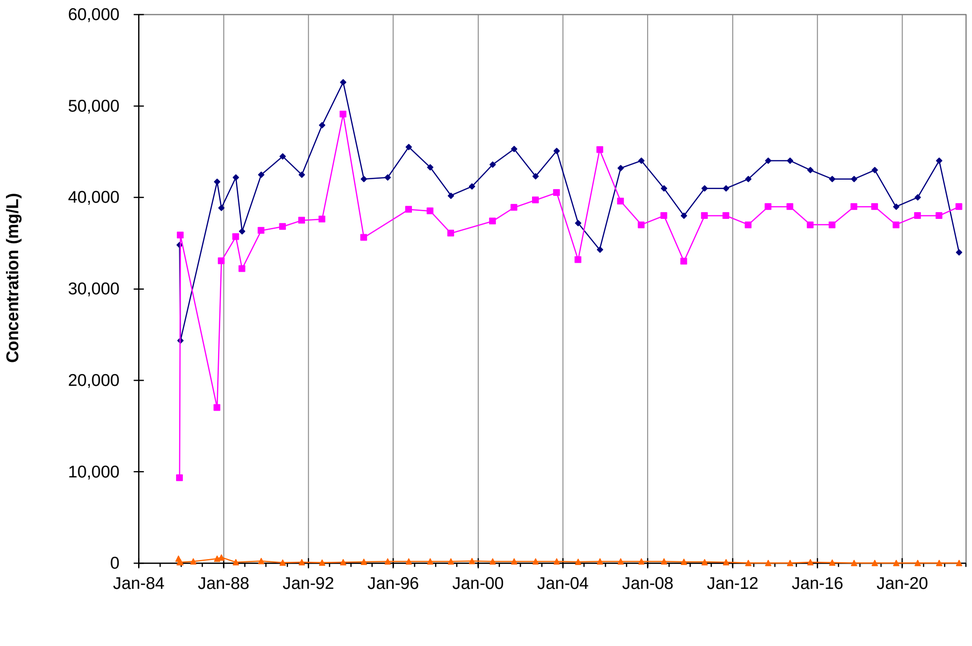


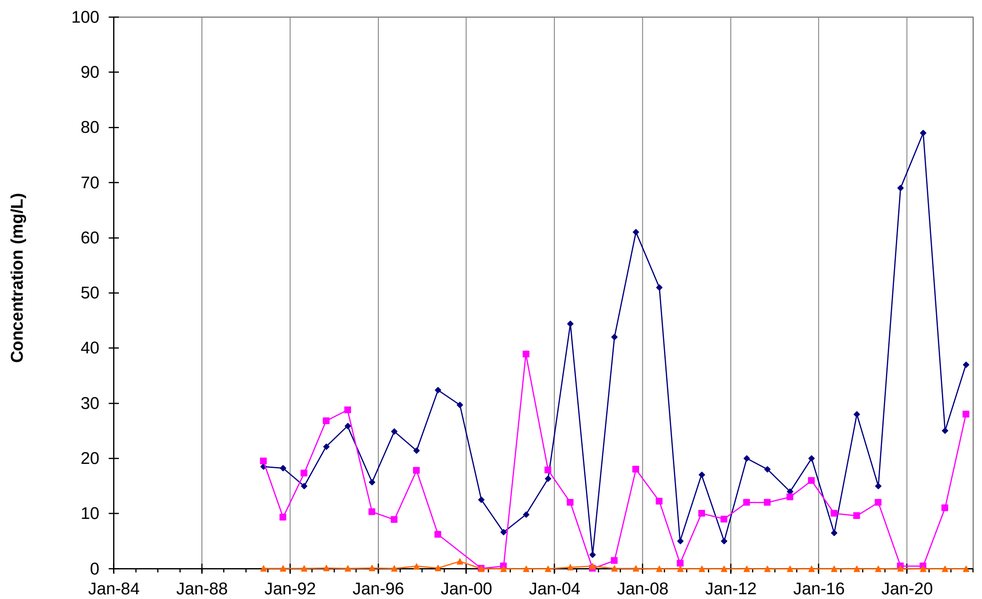
FIGURE C-8

TIME CONCENTRATION GRAPHS - Borehole 24

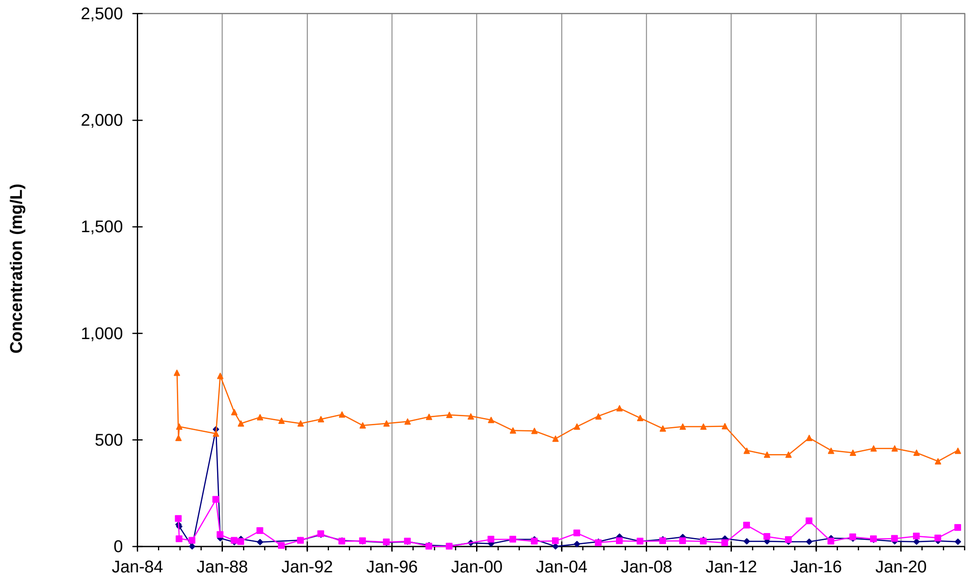
CHLORIDE



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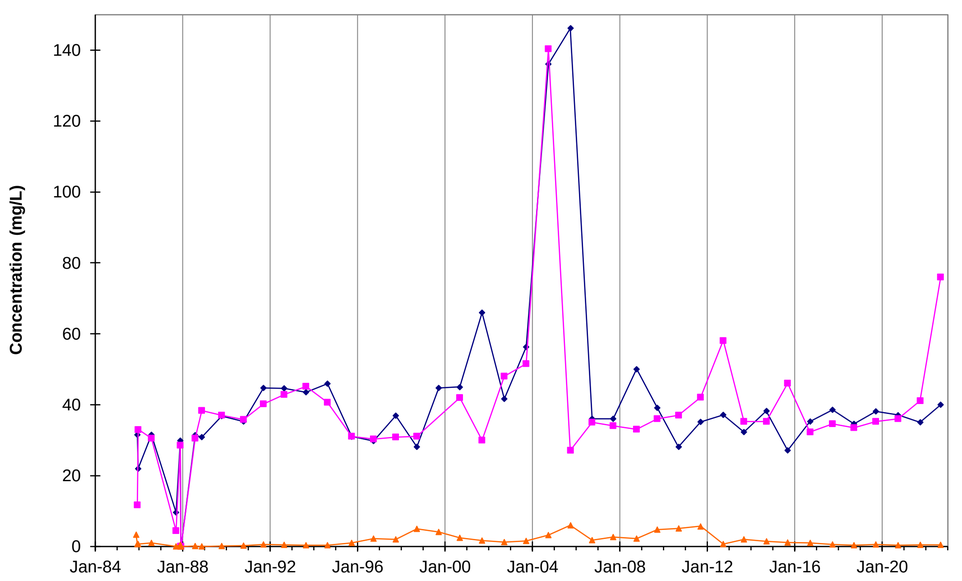
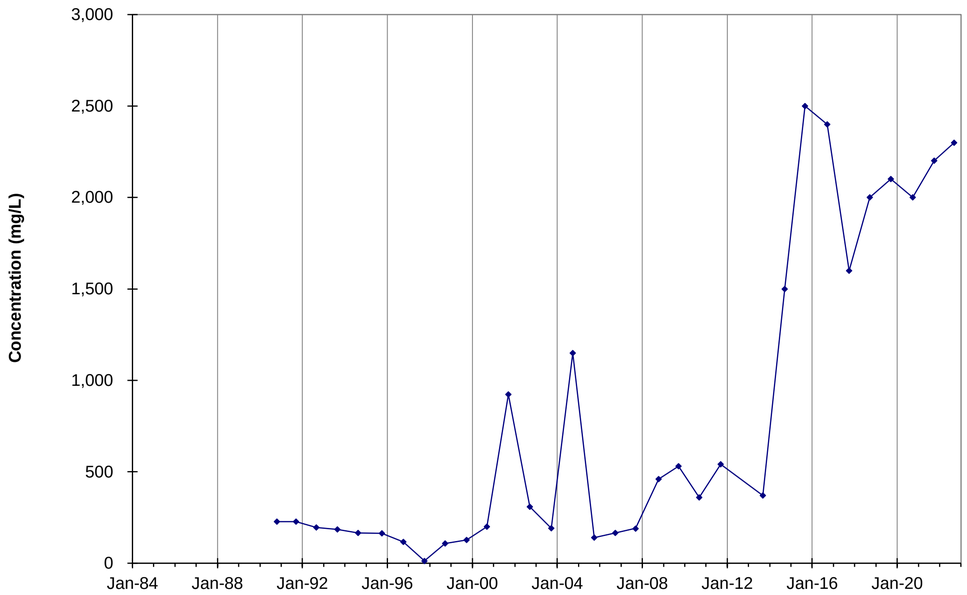


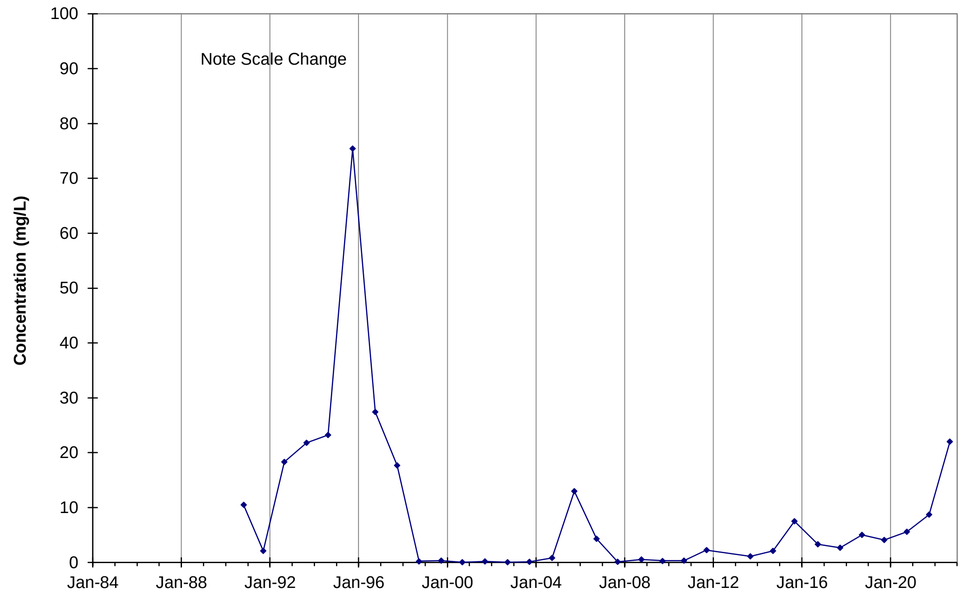
FIGURE C-9

TIME CONCENTRATION GRAPHS - Monitor 25-I

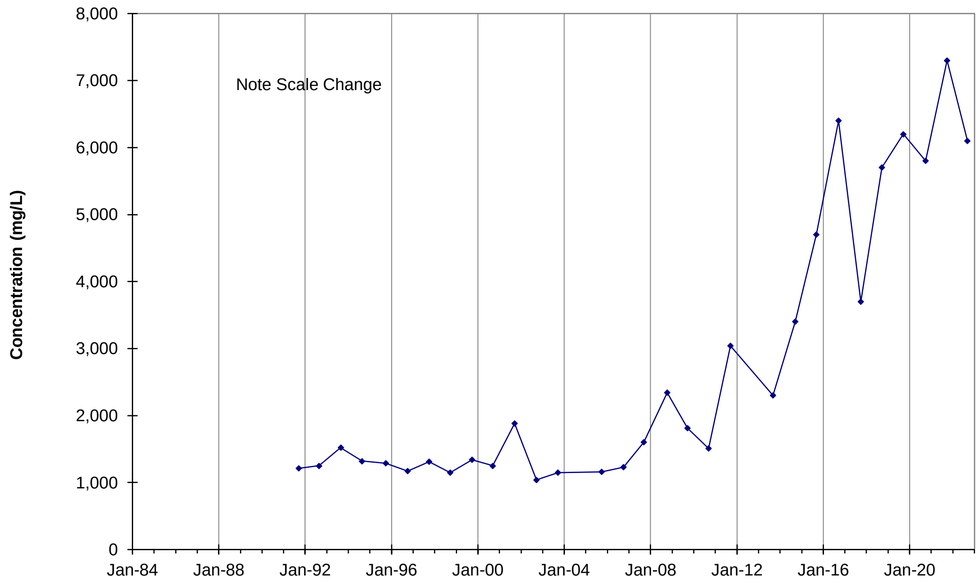
CHLORIDE



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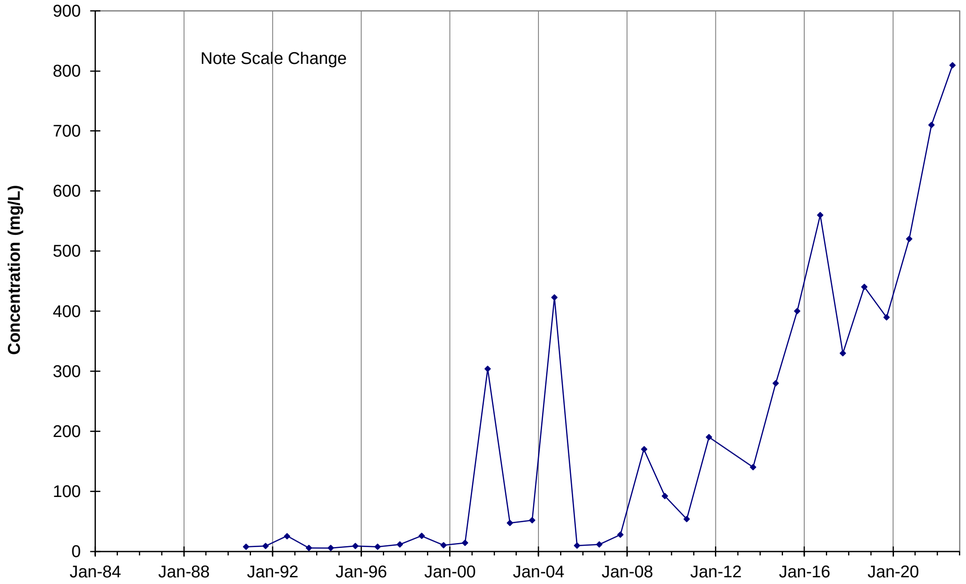
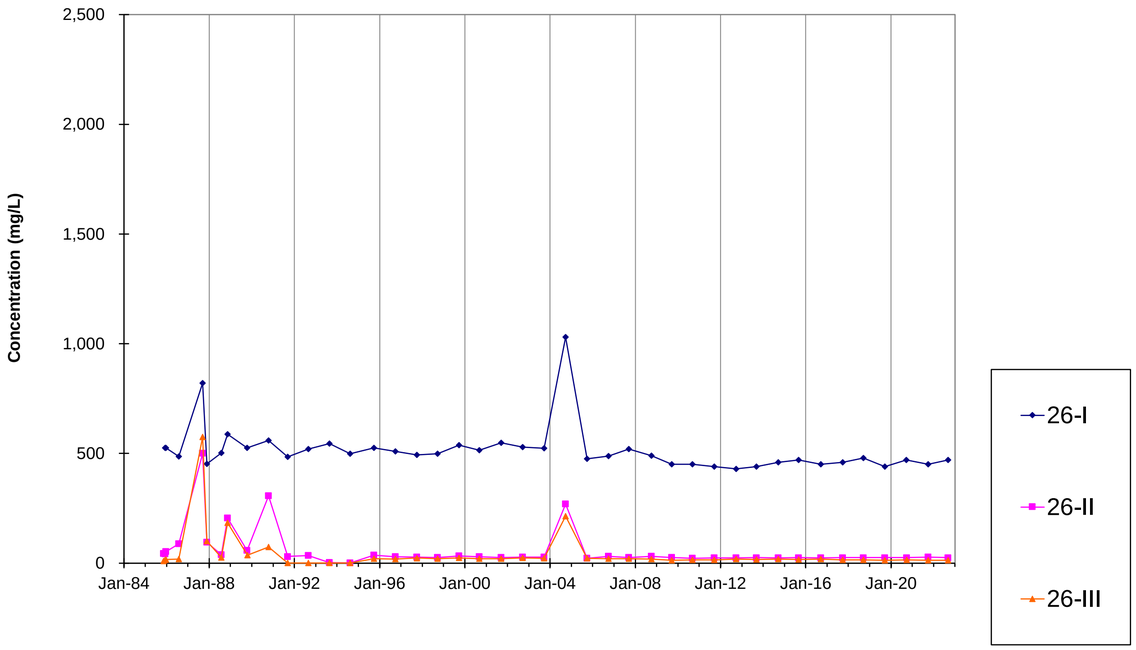


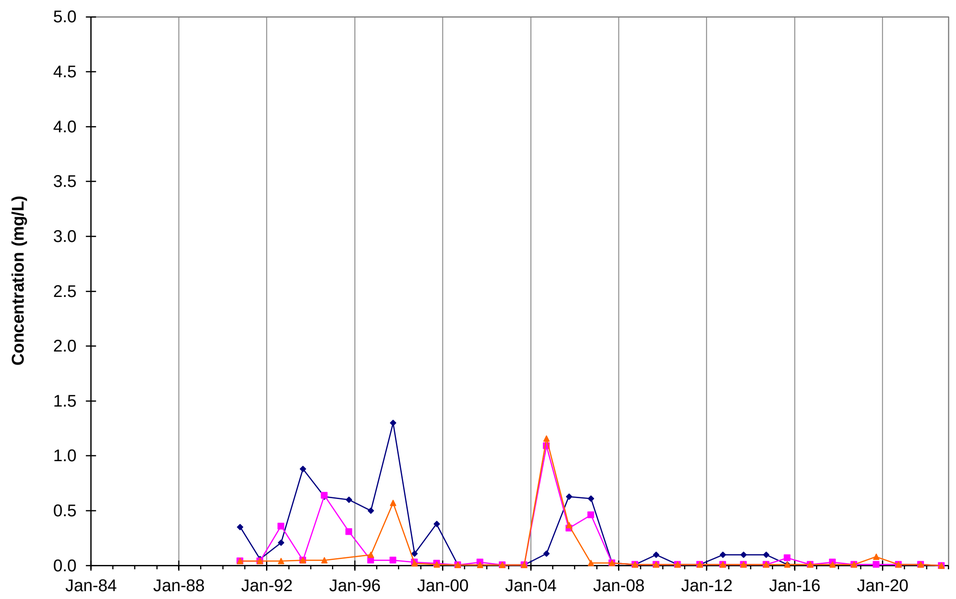
FIGURE C-10

TIME CONCENTRATION GRAPHS - Borehole 26

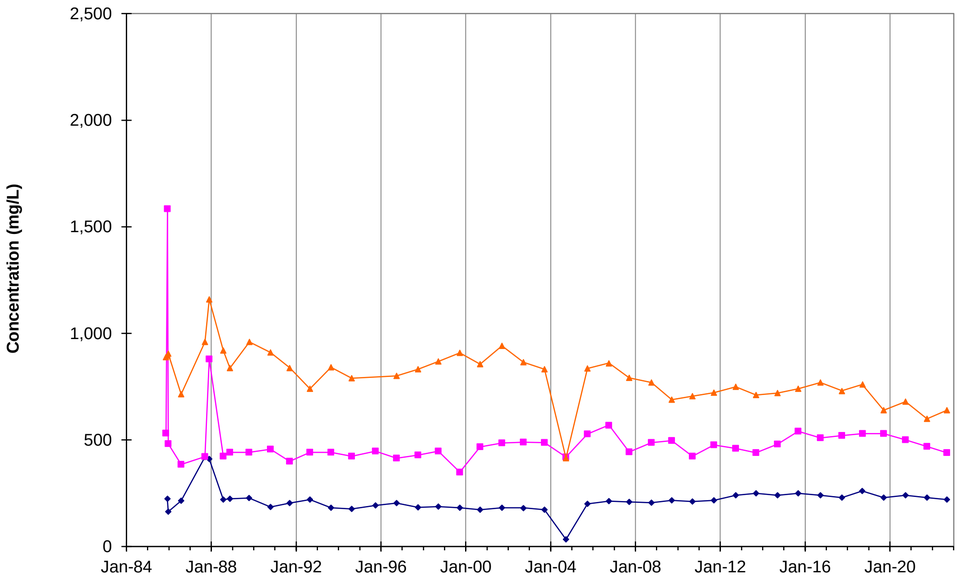
CHLORIDE



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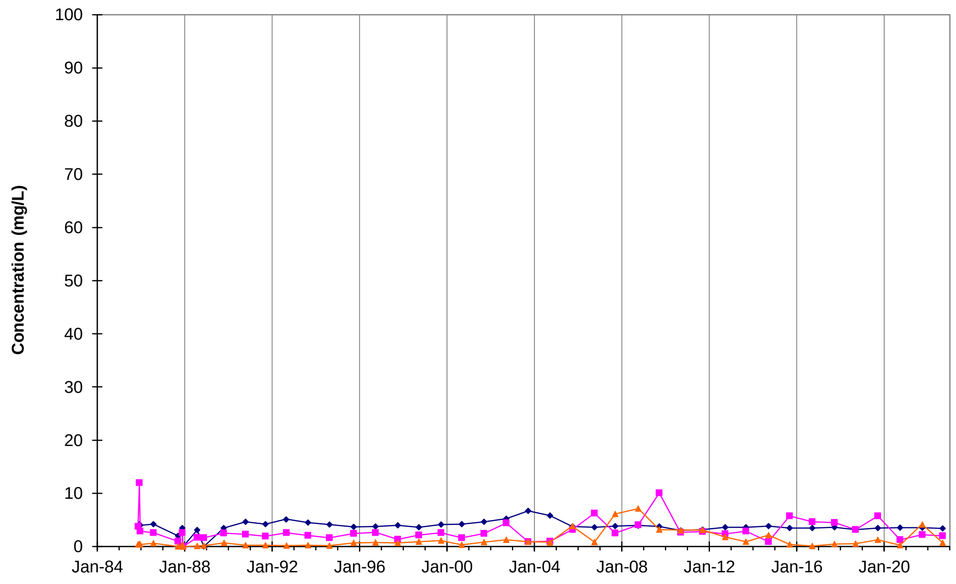
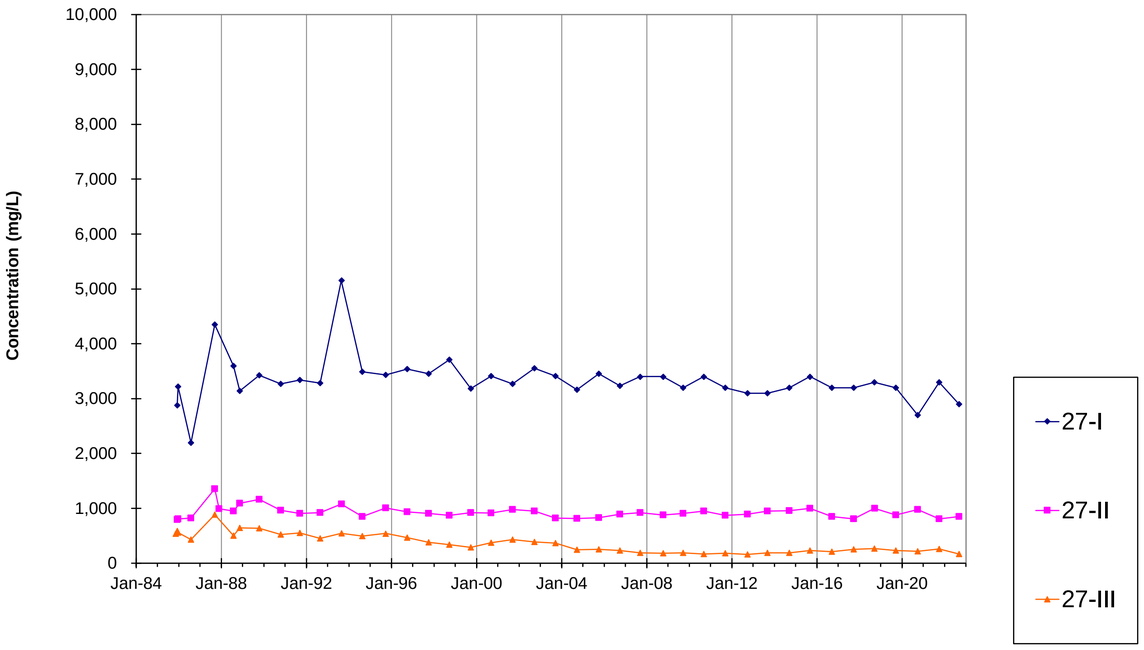


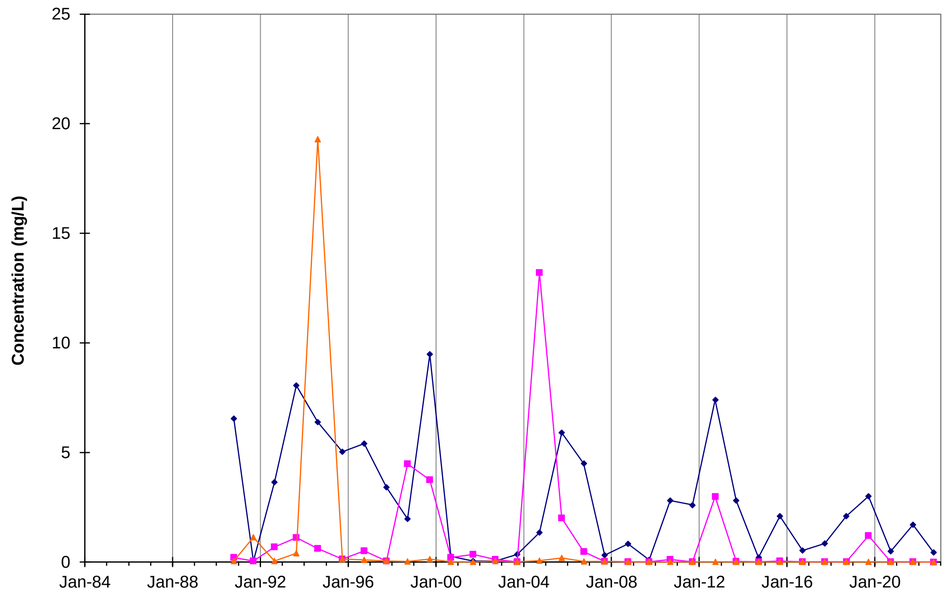
FIGURE C-11

TIME CONCENTRATION GRAPHS - Borehole 27

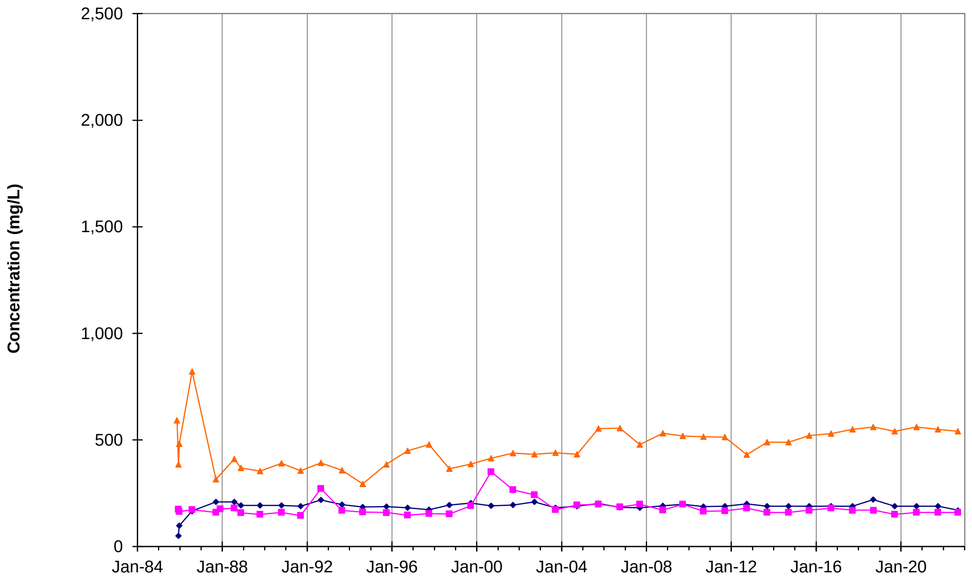
CHLORIDE



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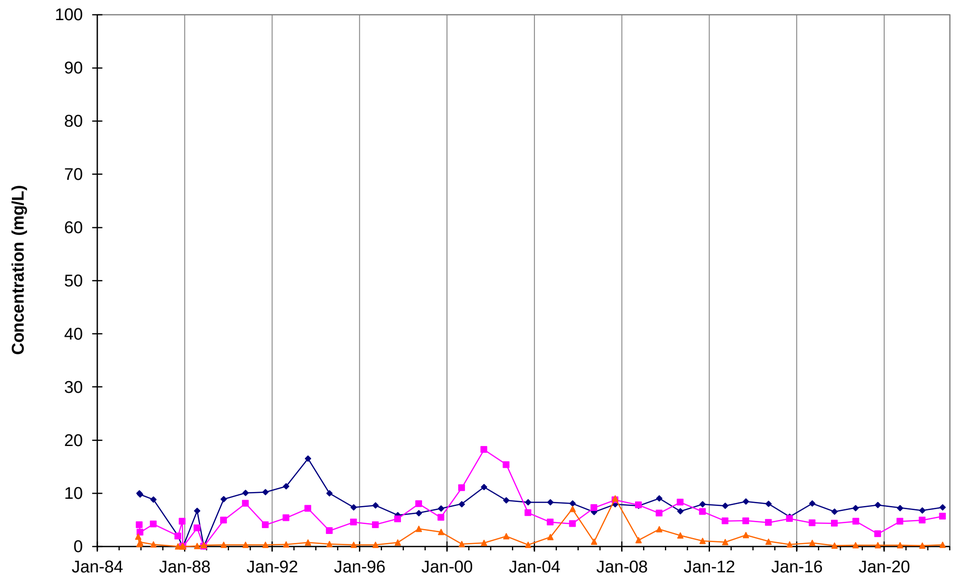
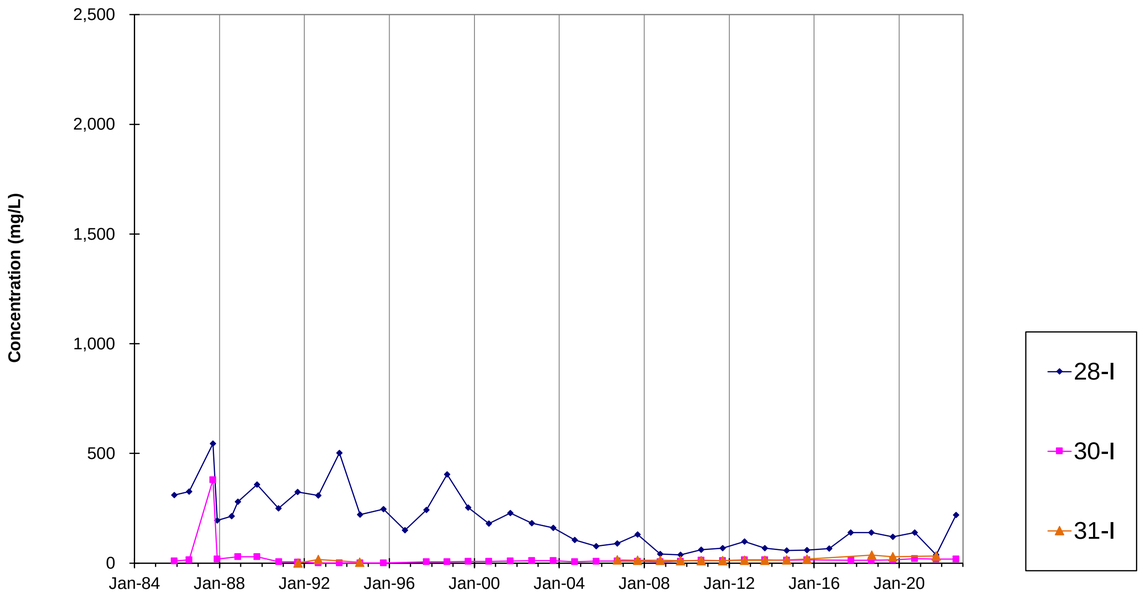


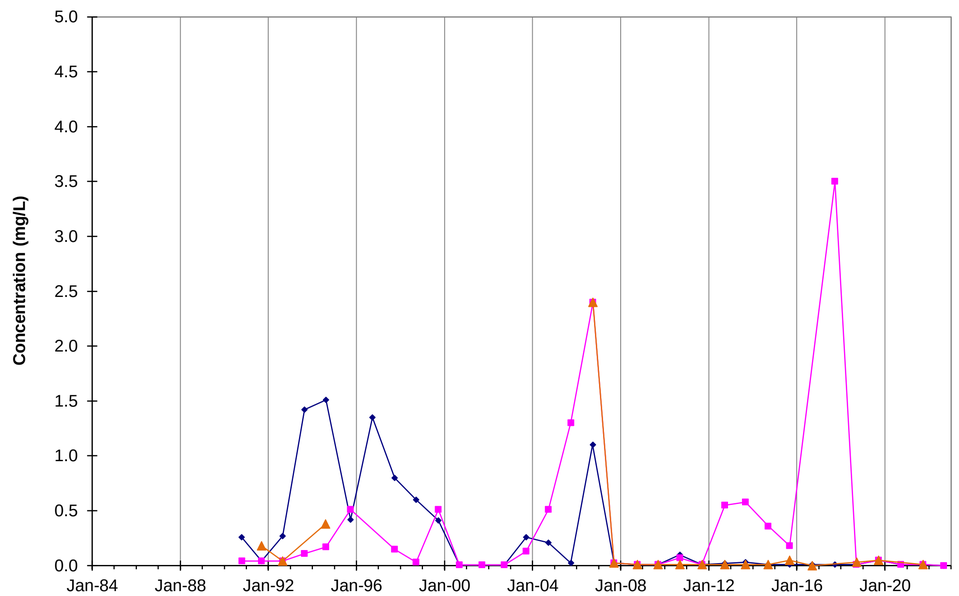
FIGURE C-12

TIME CONCENTRATION GRAPHS - Boreholes 28, 30, & 31

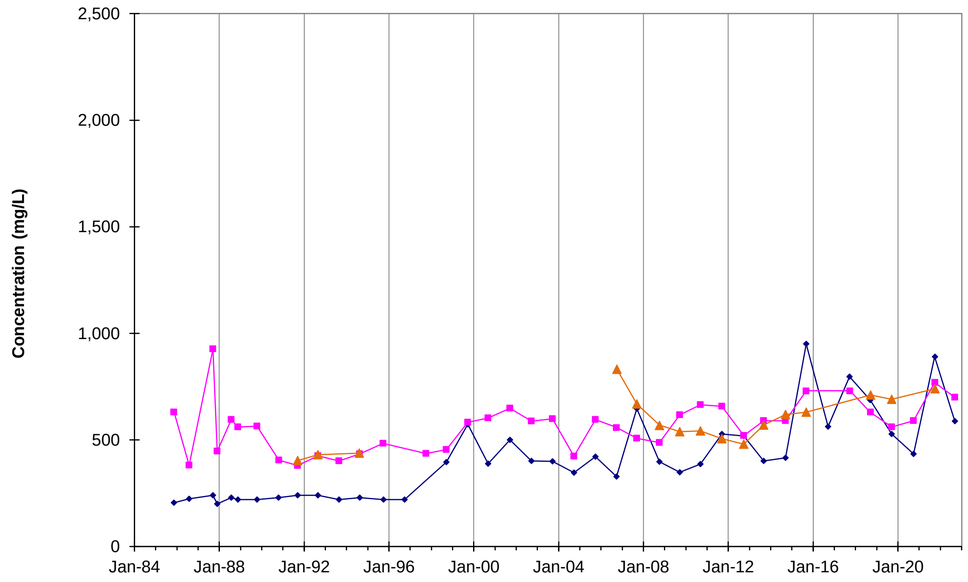
CHLORIDE



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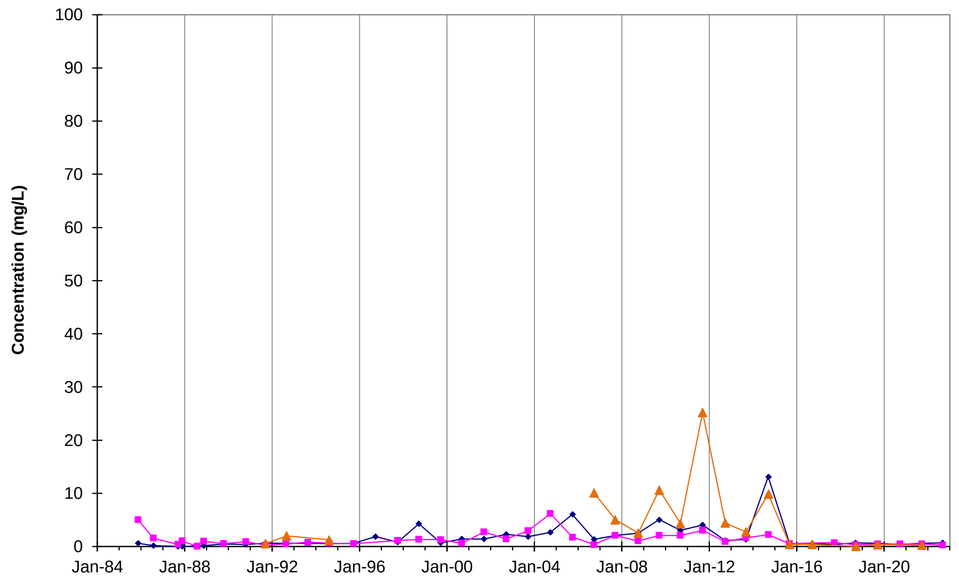
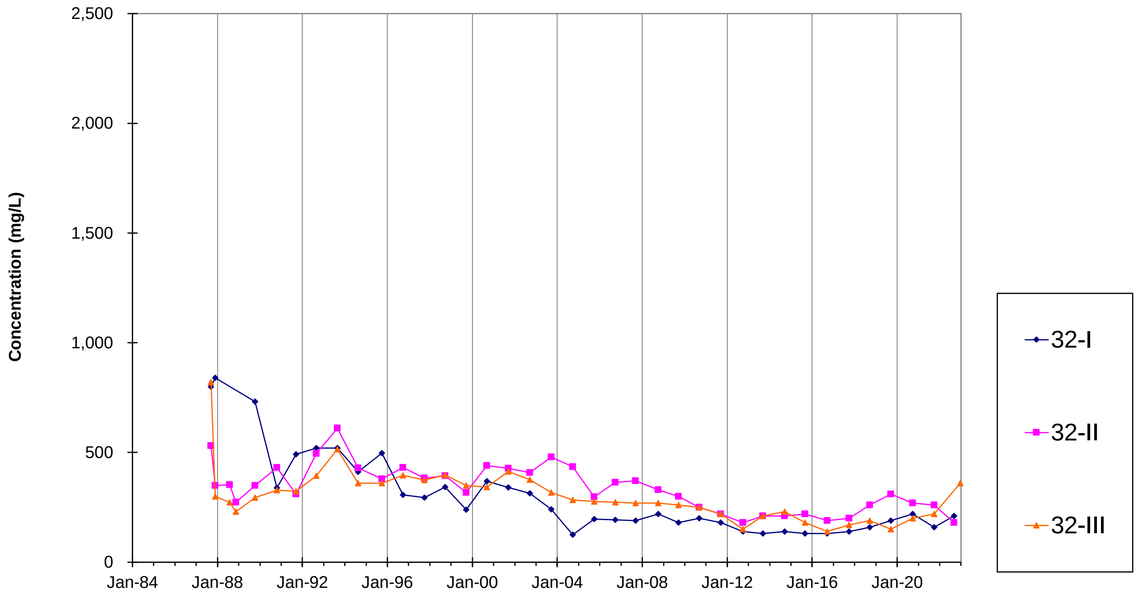


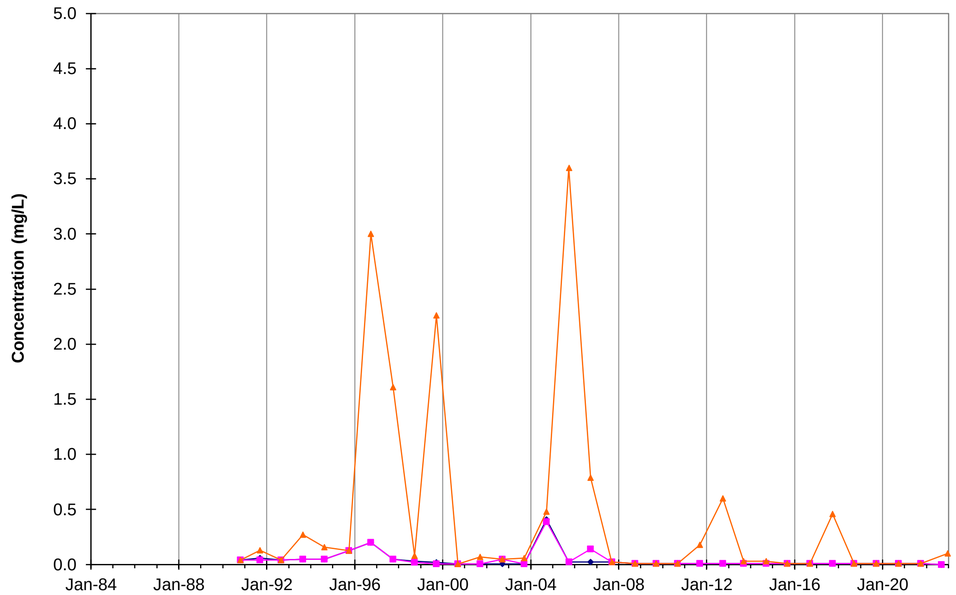
FIGURE C-13

TIME CONCENTRATION GRAPHS - Borehole 32

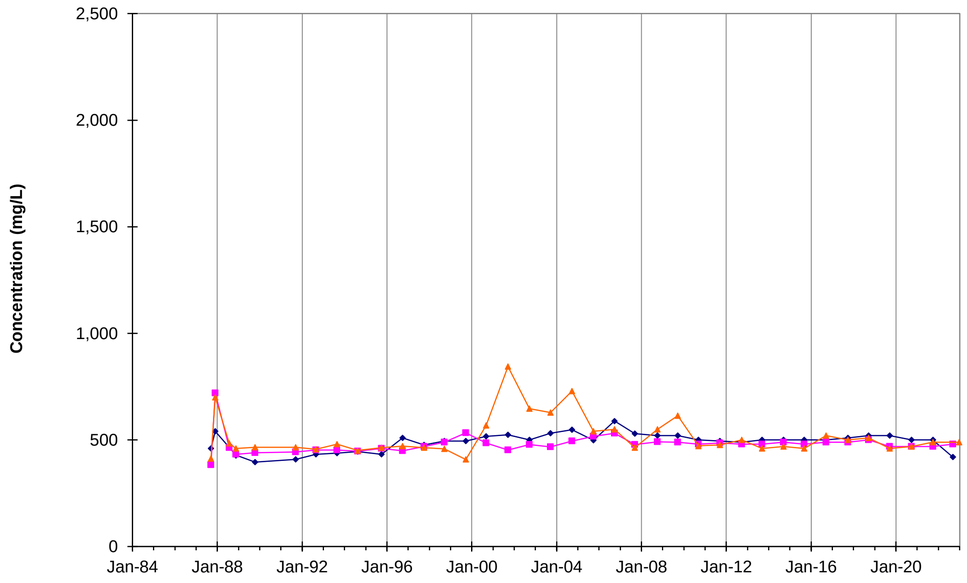
CHLORIDE



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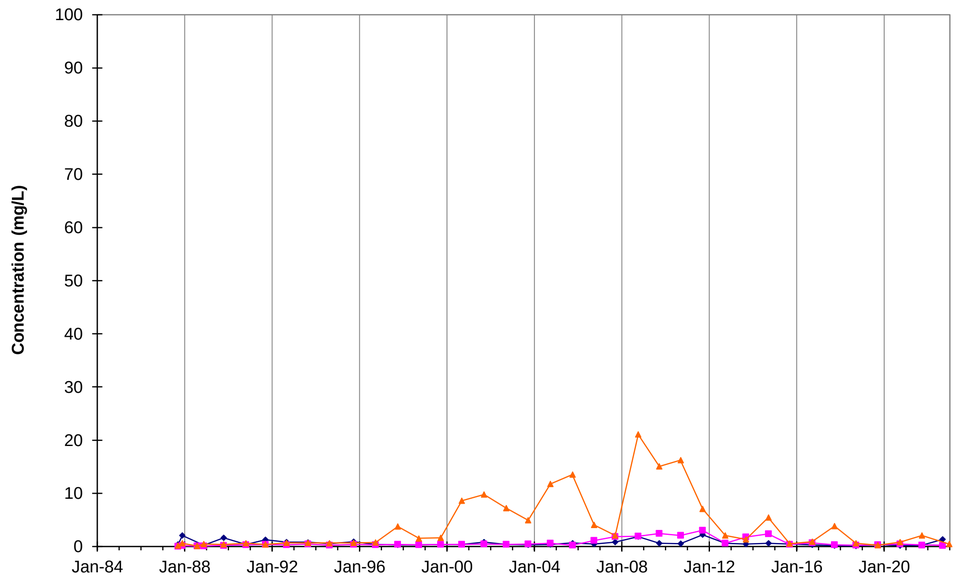
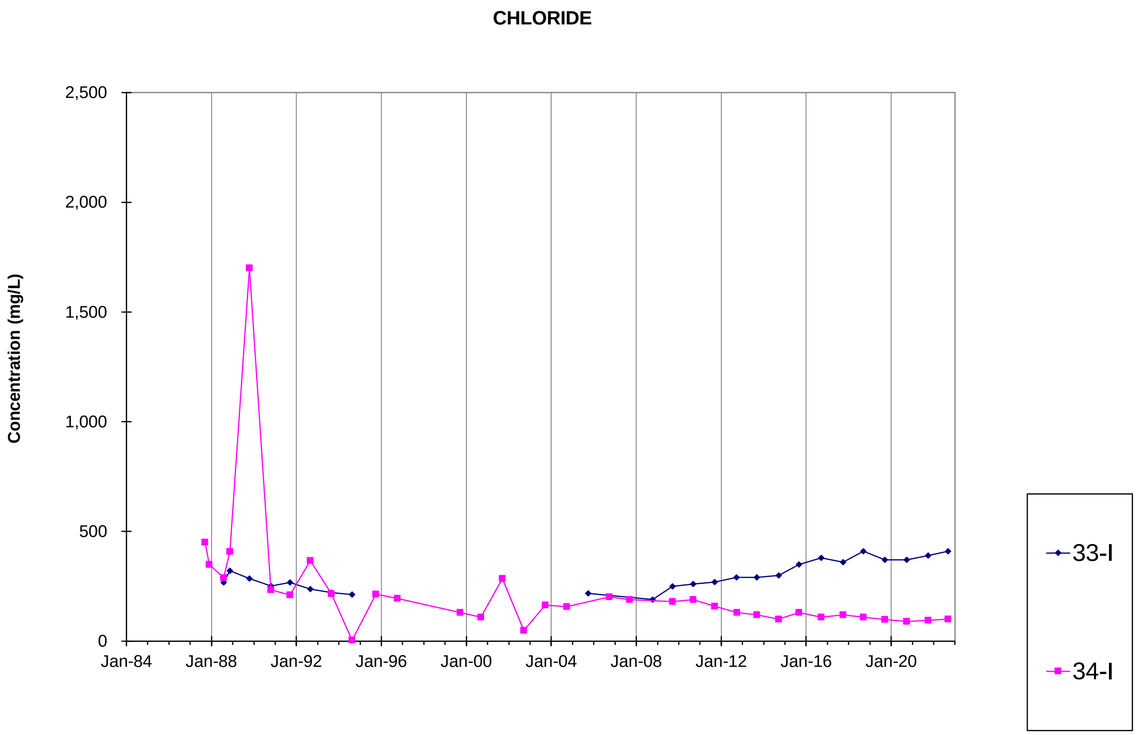
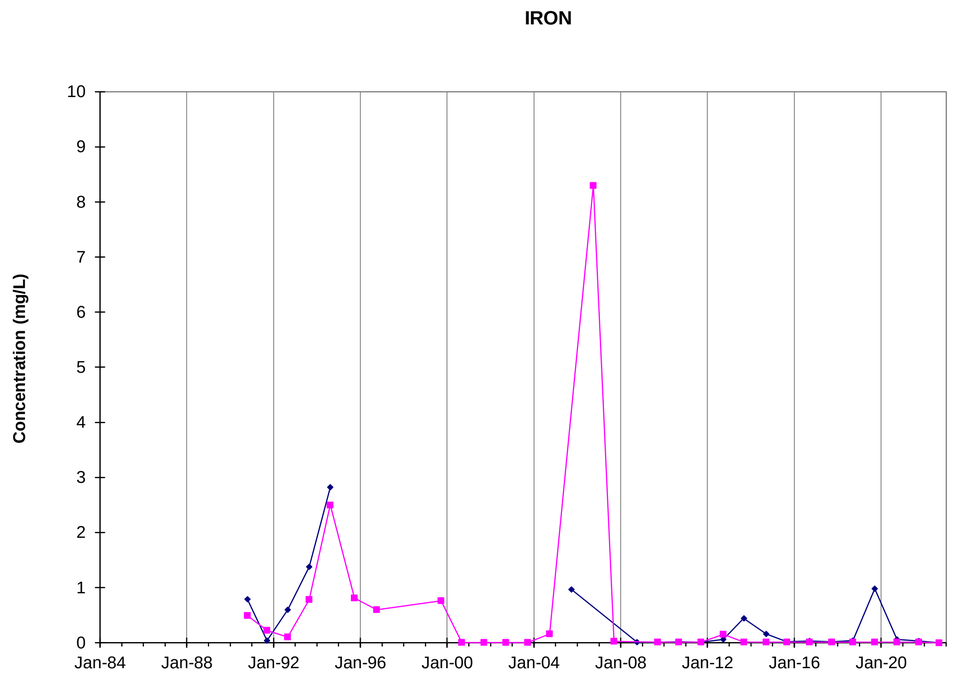
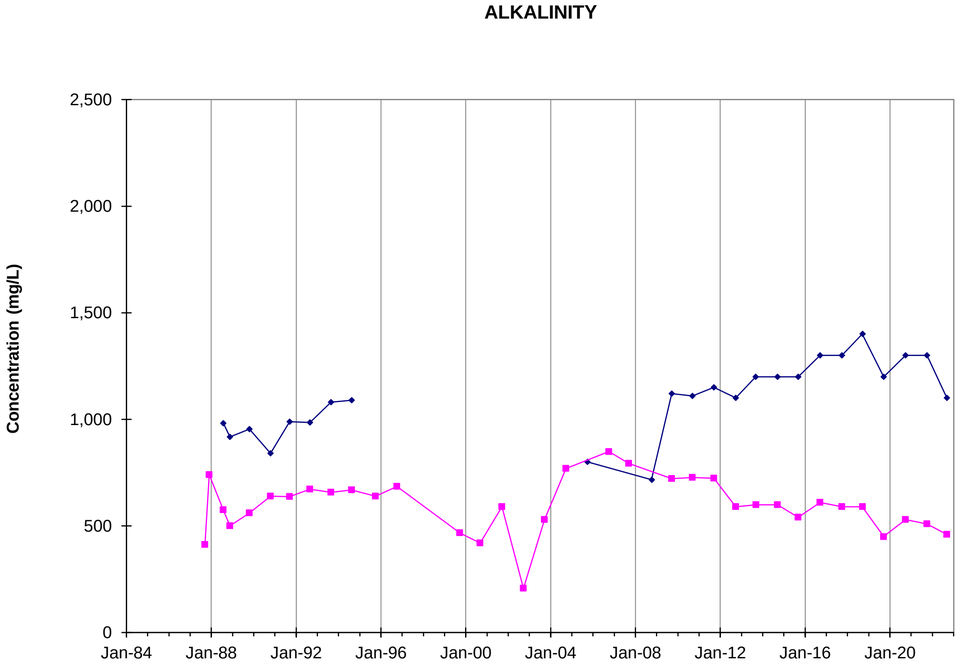


FIGURE C-14

TIME CONCENTRATION GRAPHS - Boreholes 33 & 34







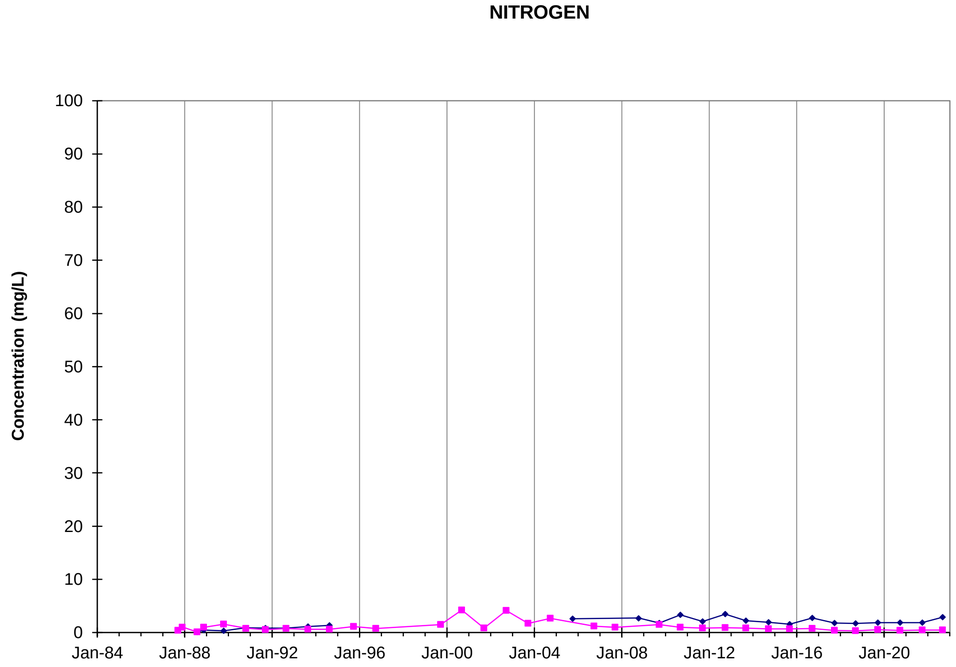
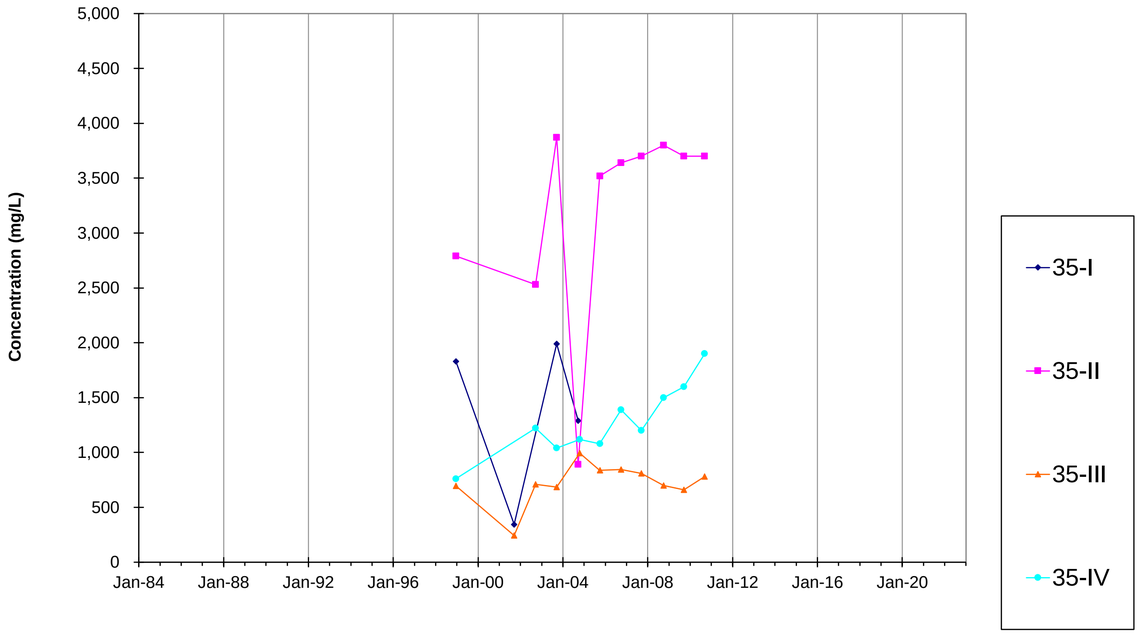


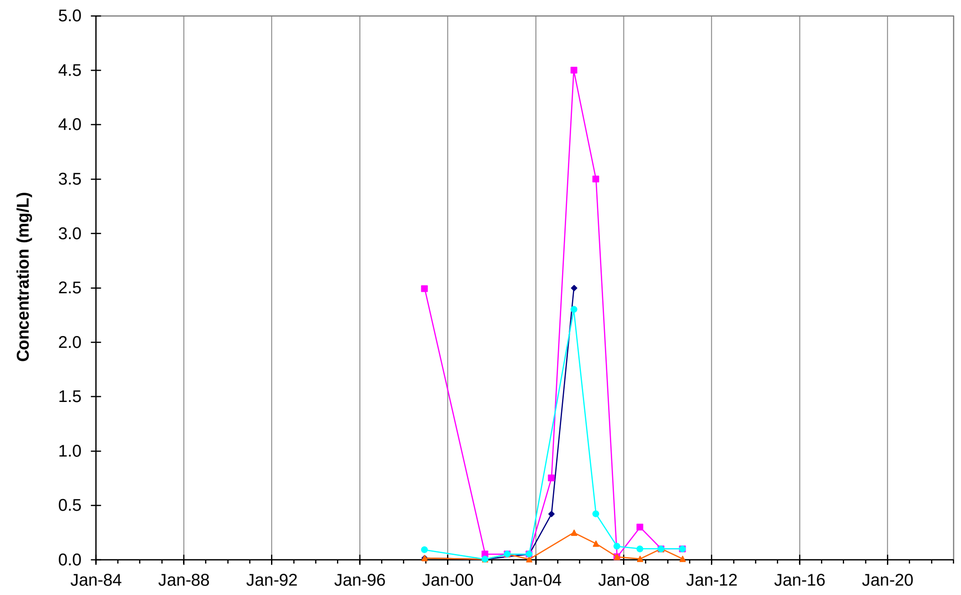
FIGURE C-15

TIME CONCENTRATION GRAPHS - Borehole 35

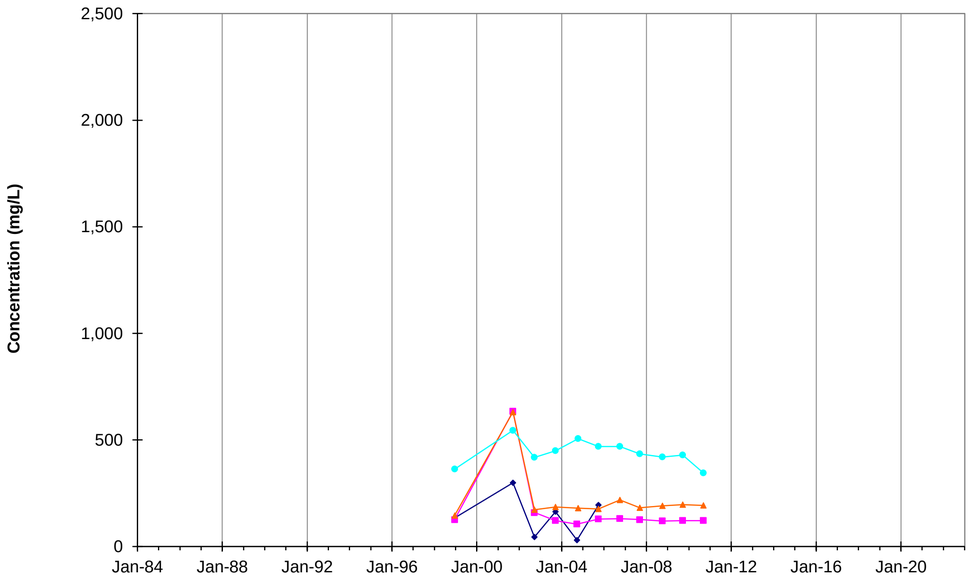
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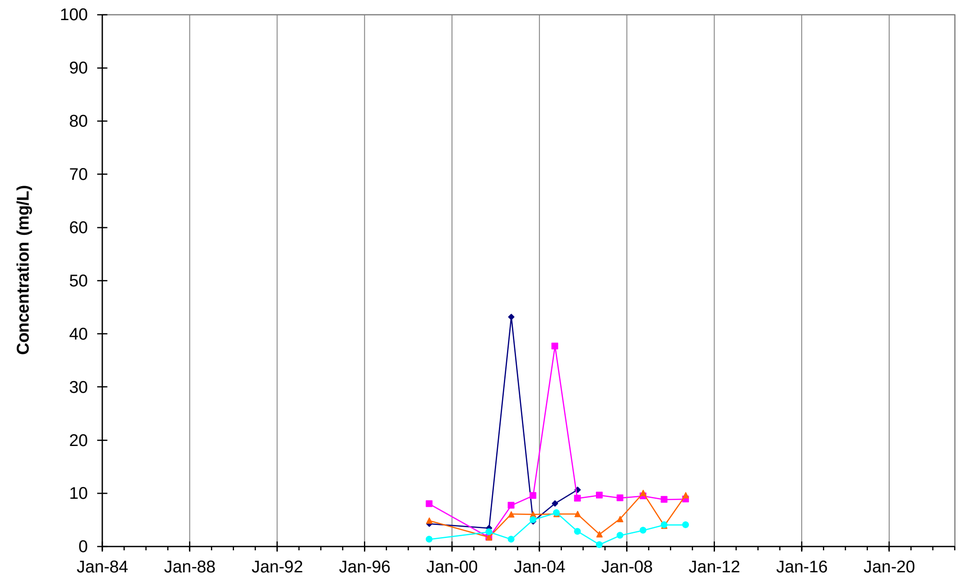
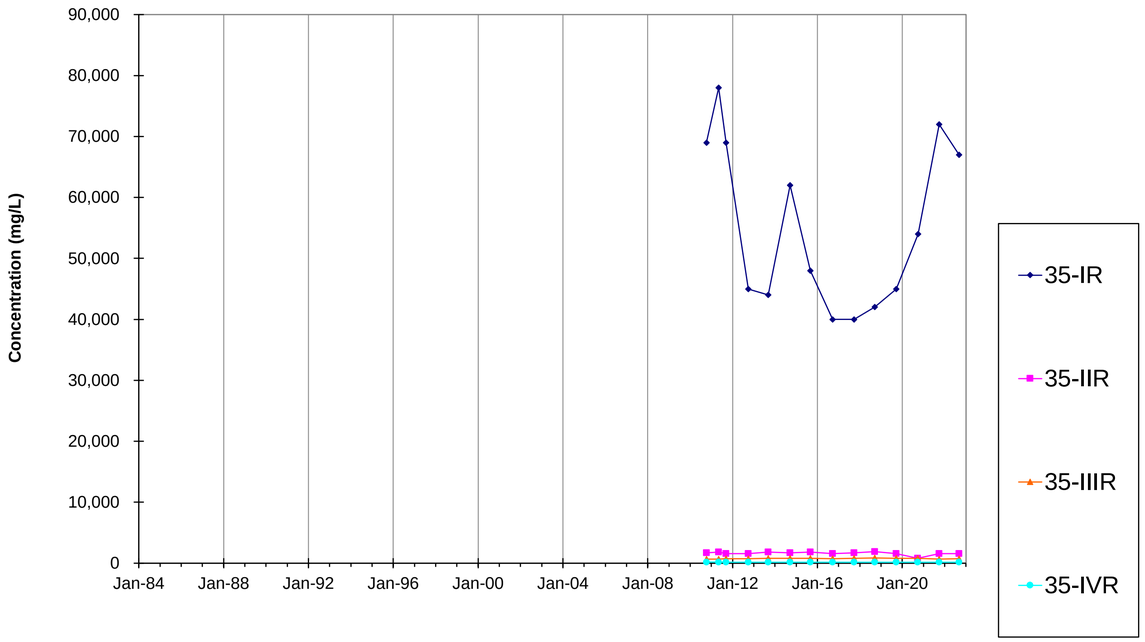


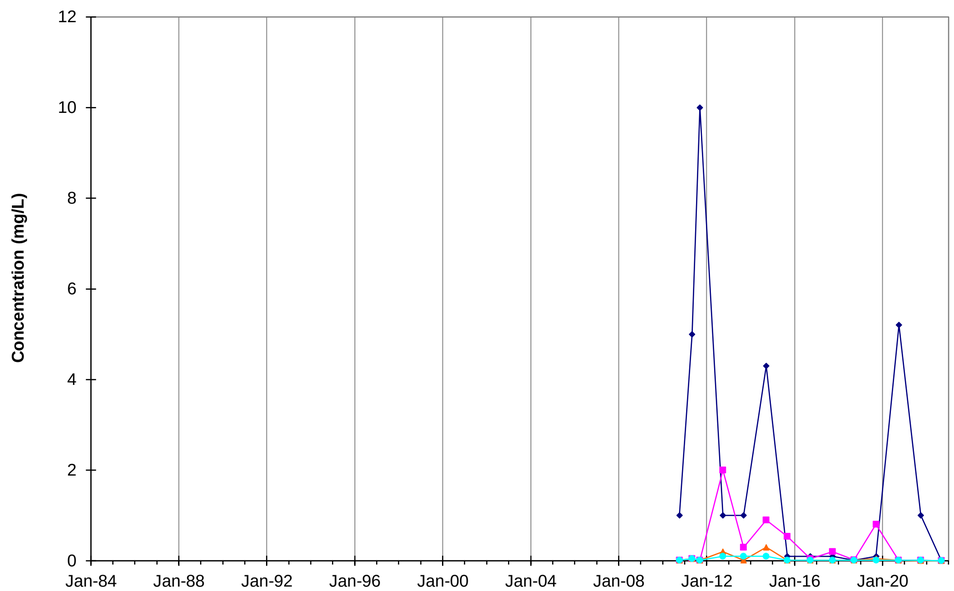
FIGURE C-16

TIME CONCENTRATION GRAPHS - Borehole 35R

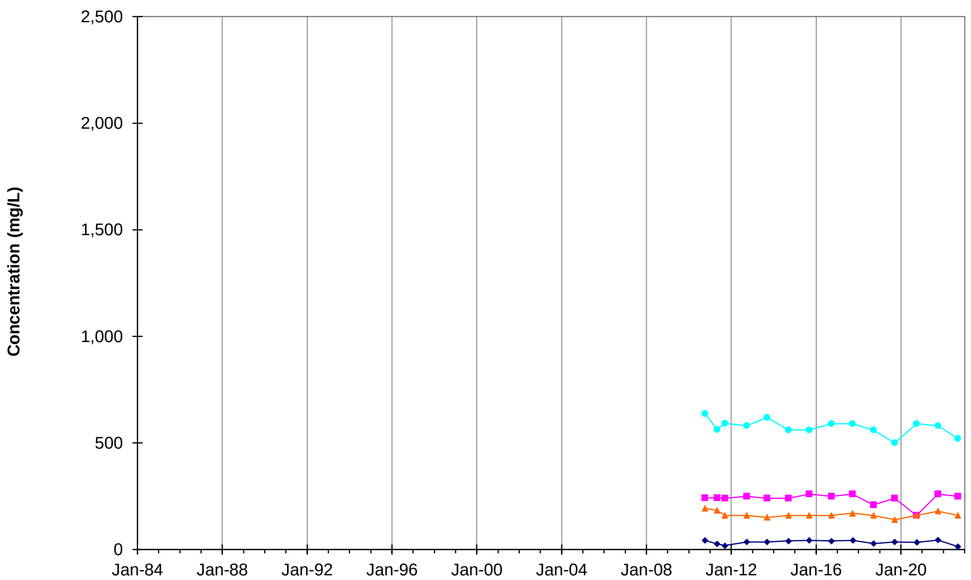
CHLORIDE



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NITROGEN

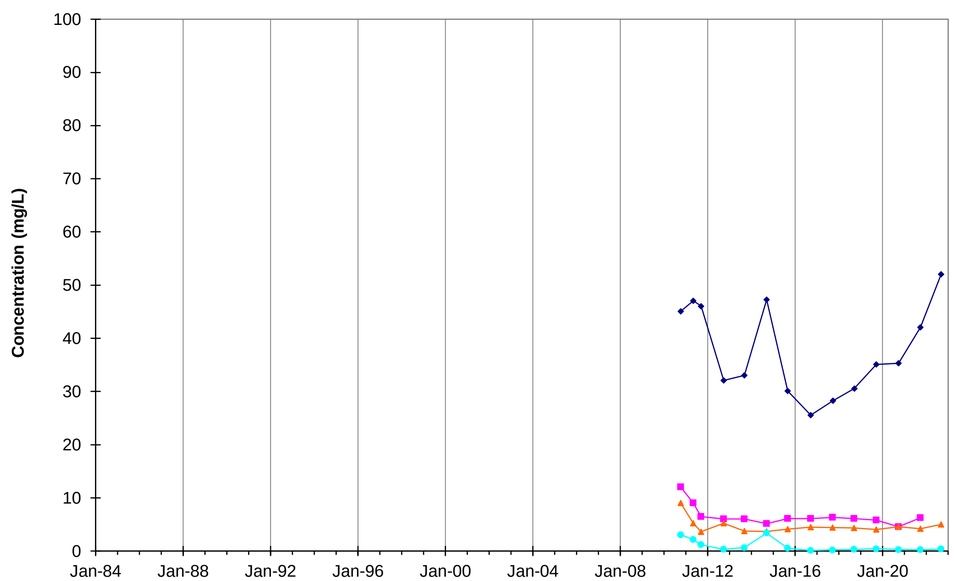
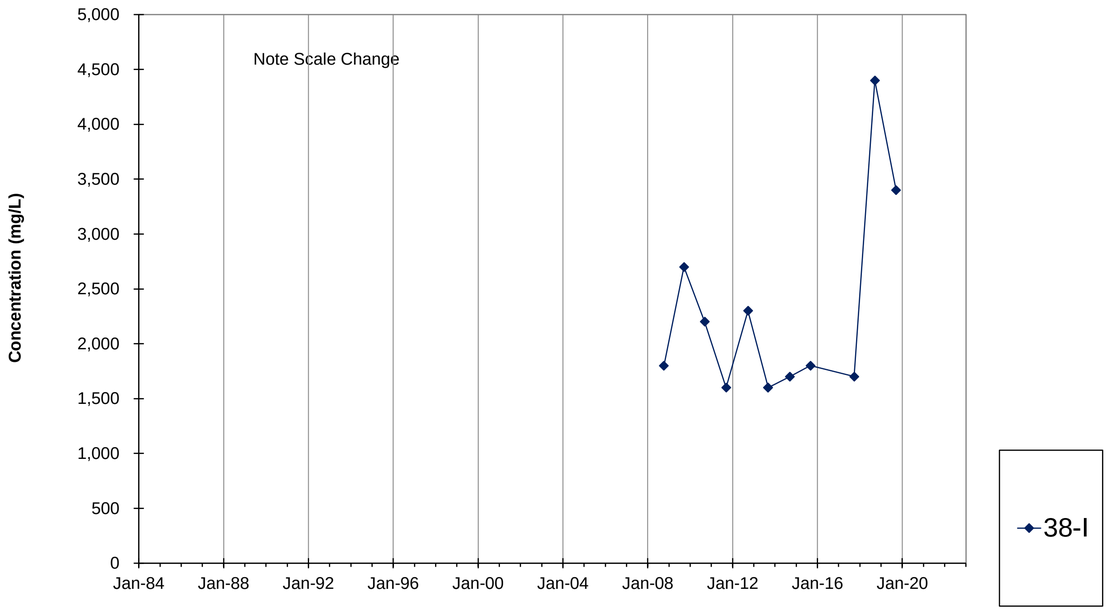


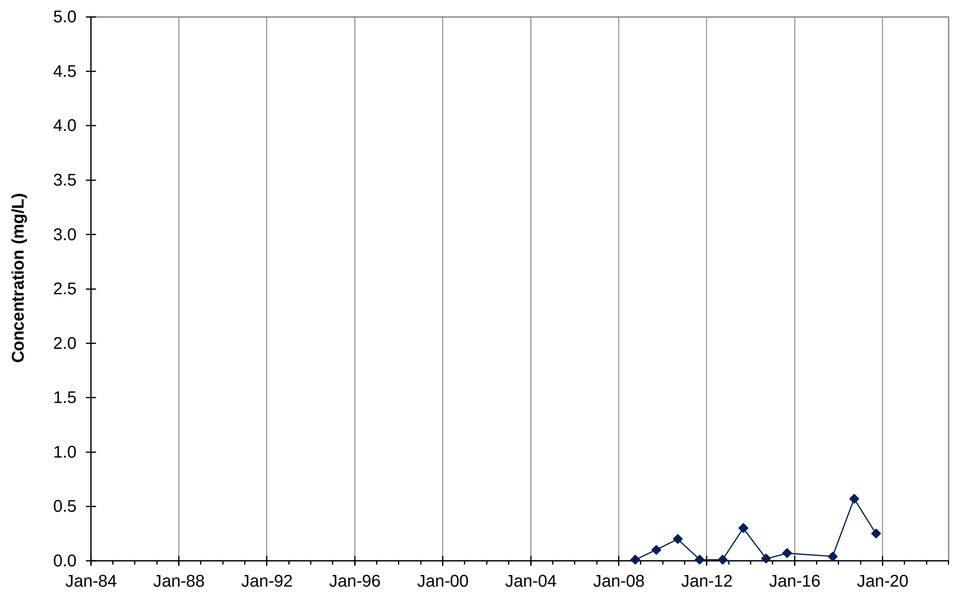
FIGURE C-17

TIME CONCENTRATION GRAPHS - Borehole 38

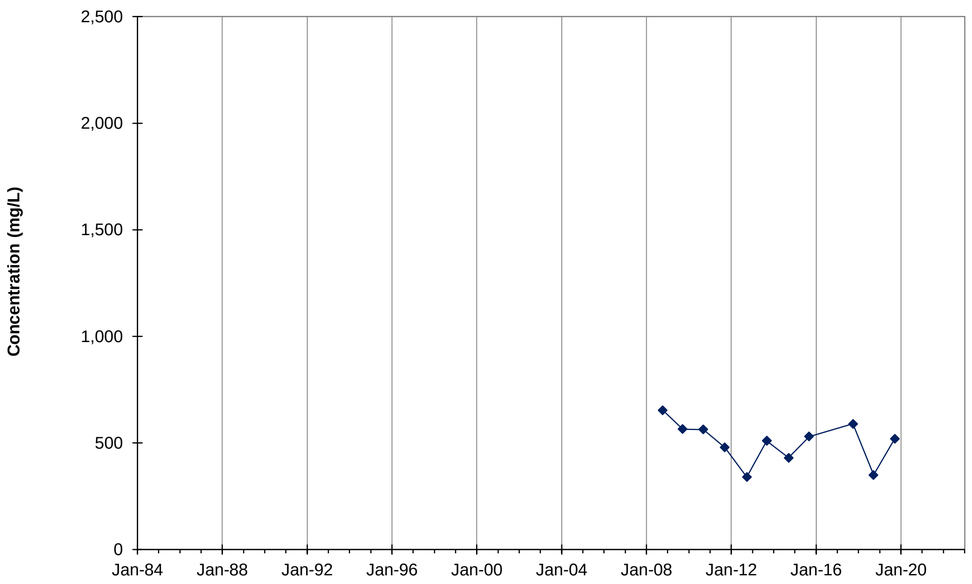
CHLORIDE



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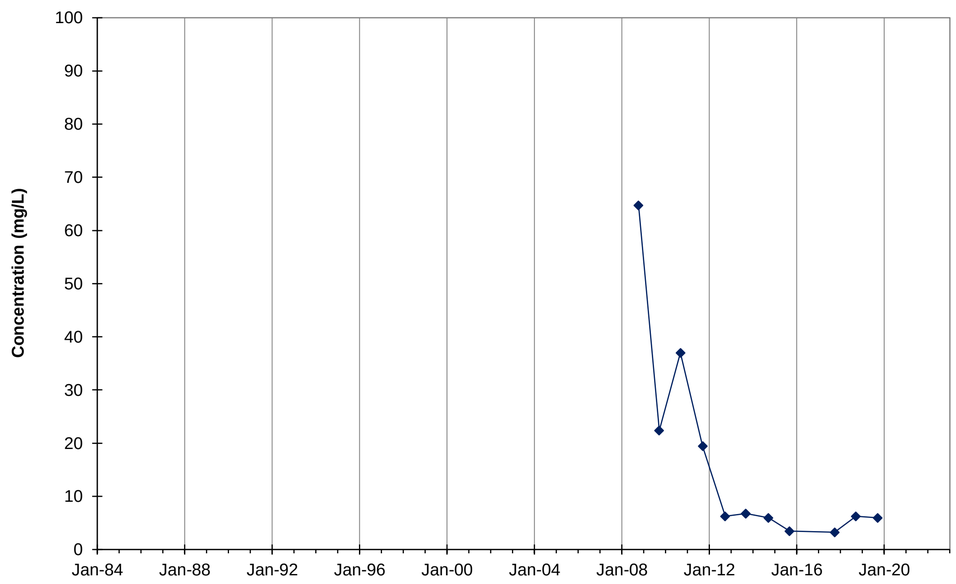
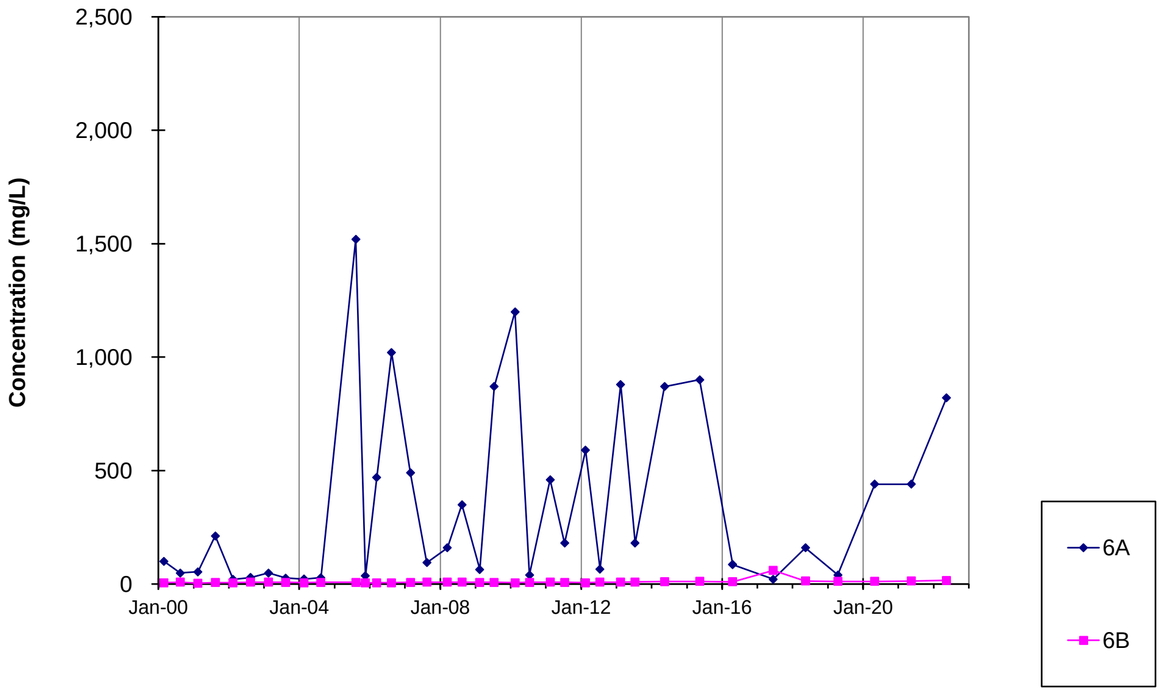


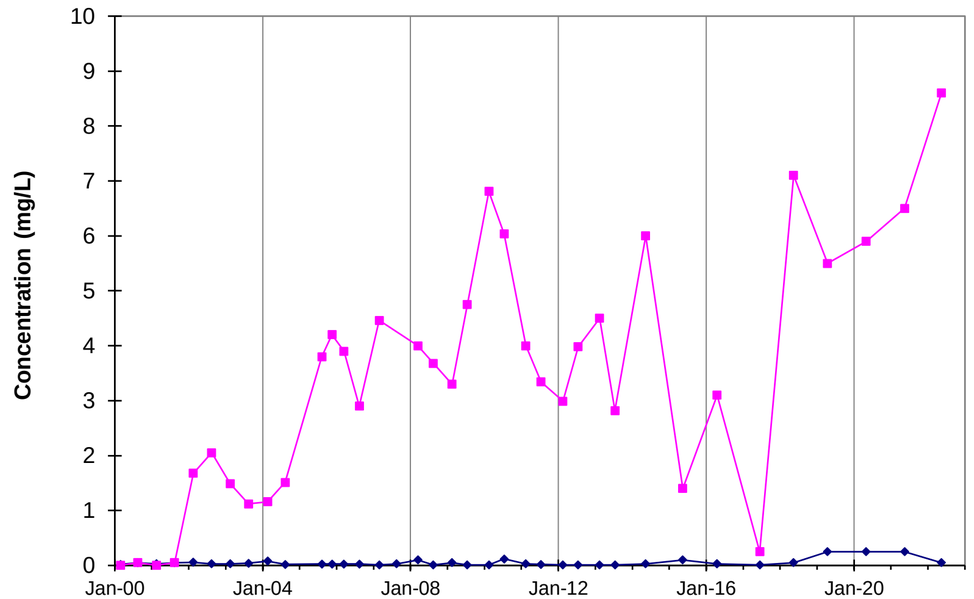
FIGURE C-18

TIME CONCENTRATION GRAPHS - Meridian Brick : Borehole MW6

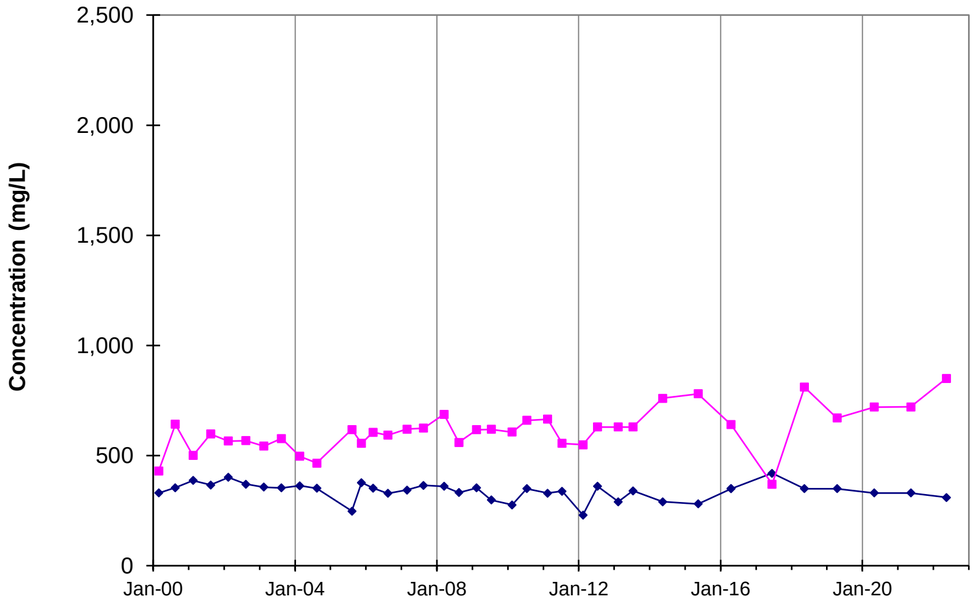
CHLORIDE



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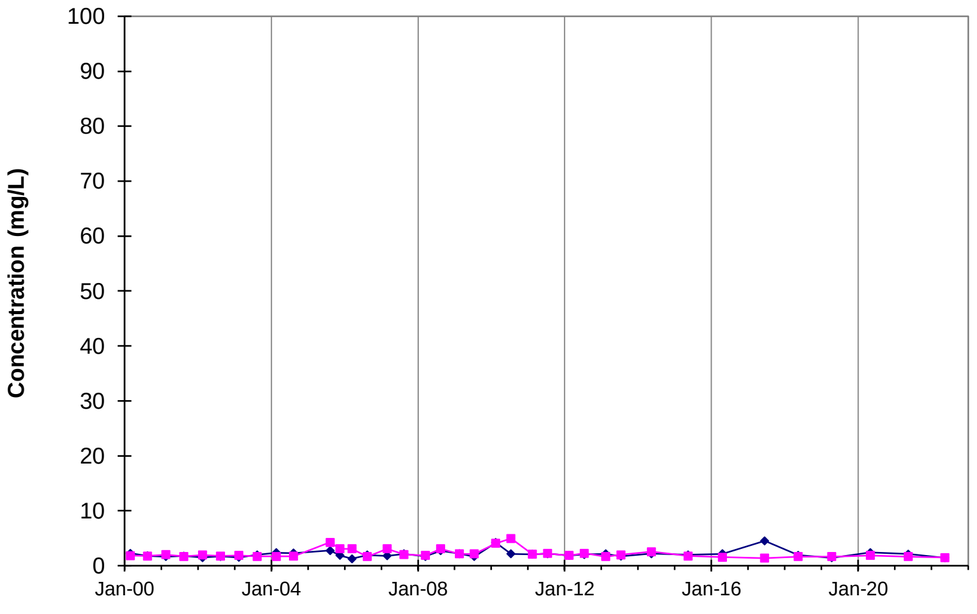
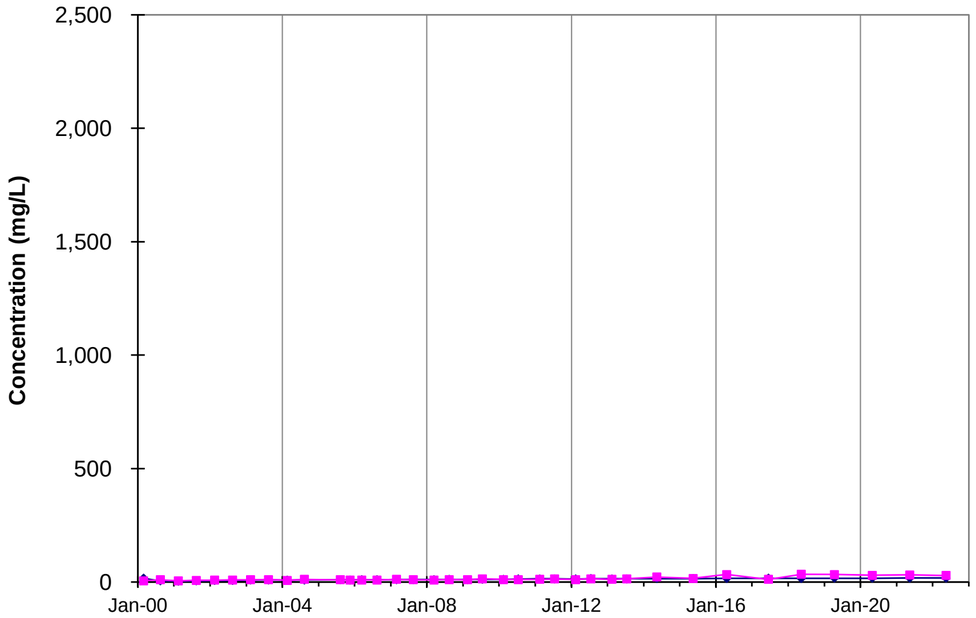


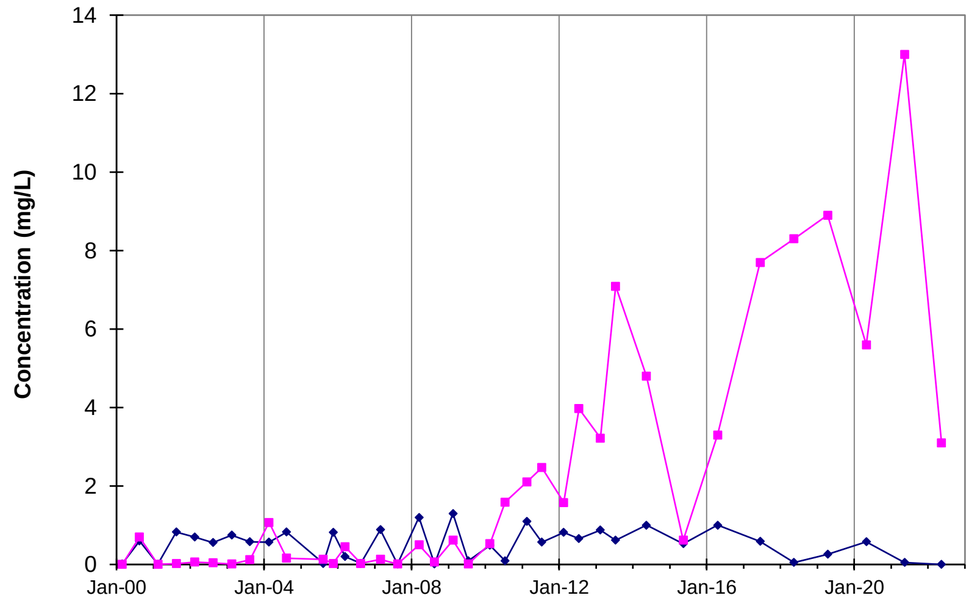
FIGURE C-19

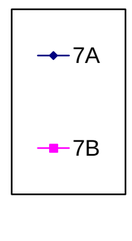
TIME CONCENTRATION GRAPHS - Meridian Brick : Borehole MW7

CHLORIDE

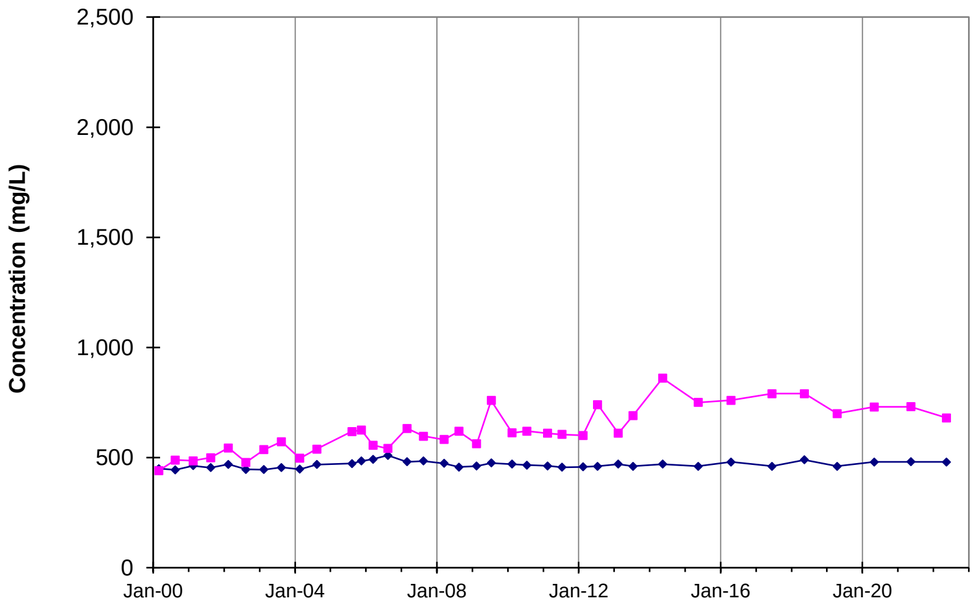


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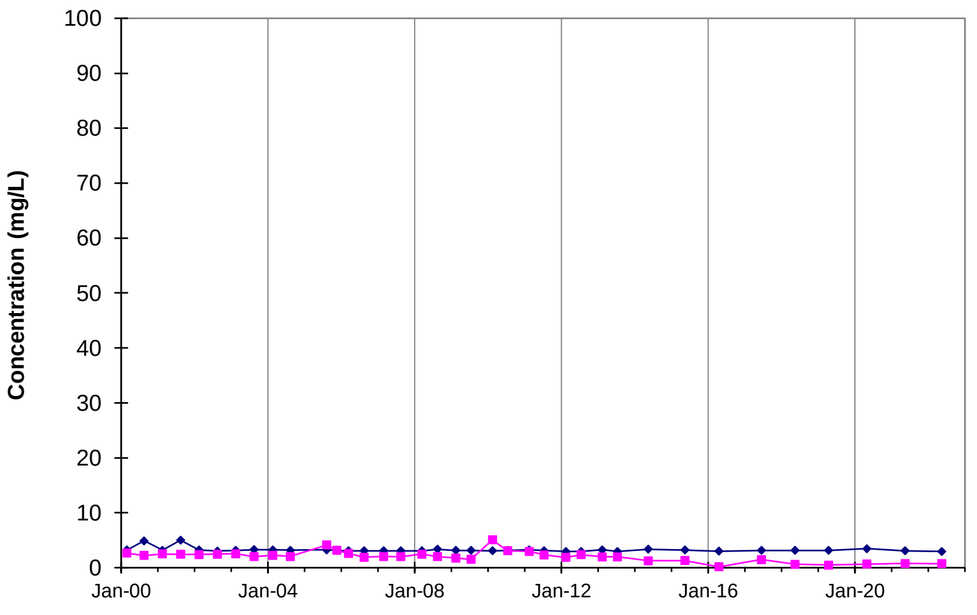
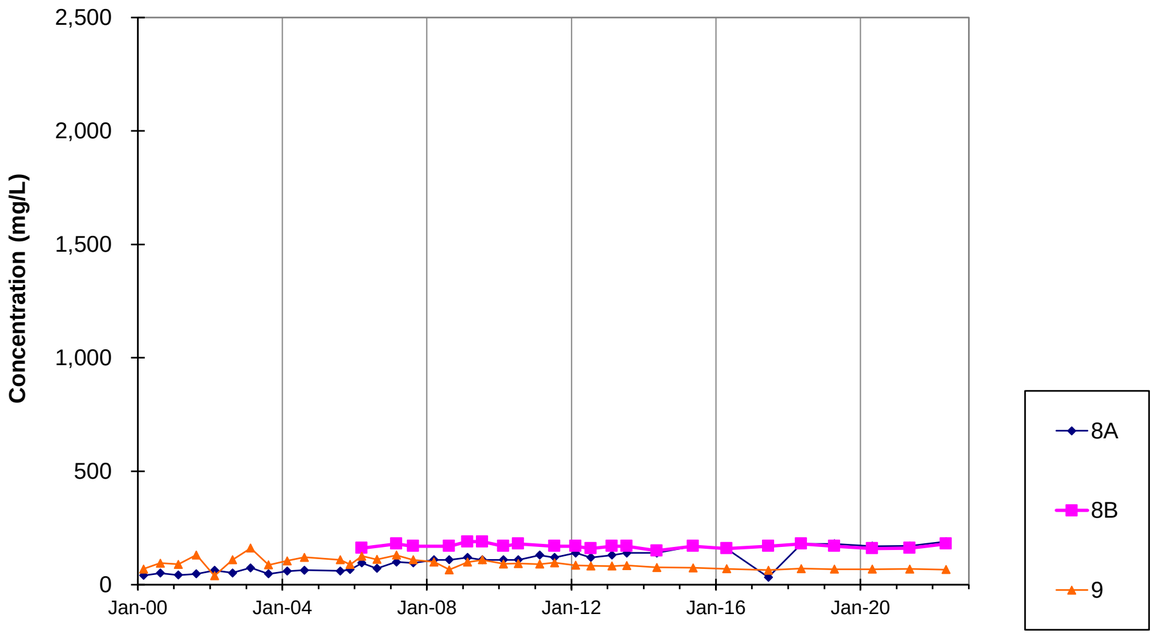


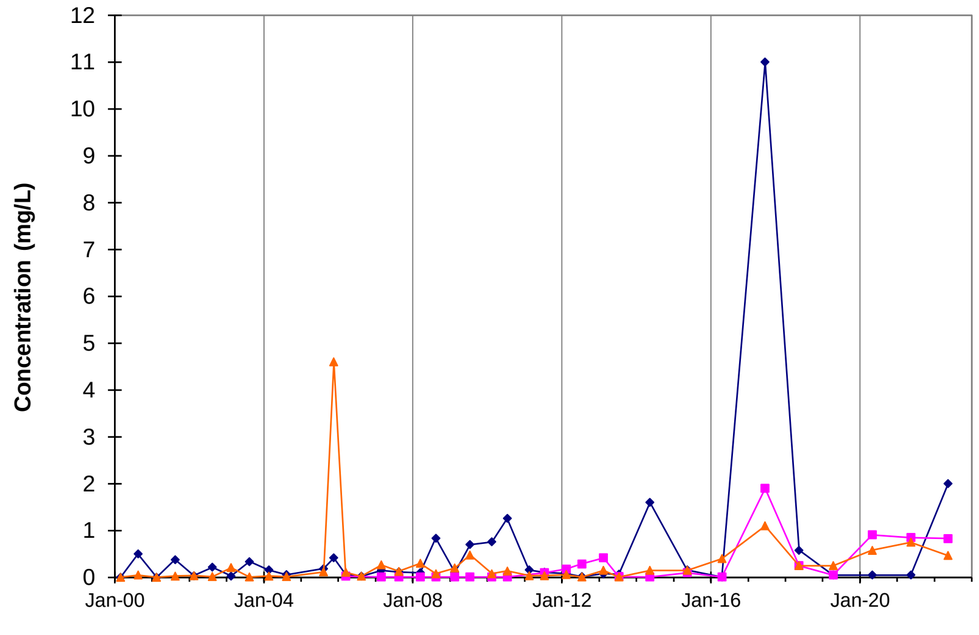
FIGURE C-20

TIME CONCENTRATION GRAPHS - Meridian Brick : Borehole MW8 & MW9

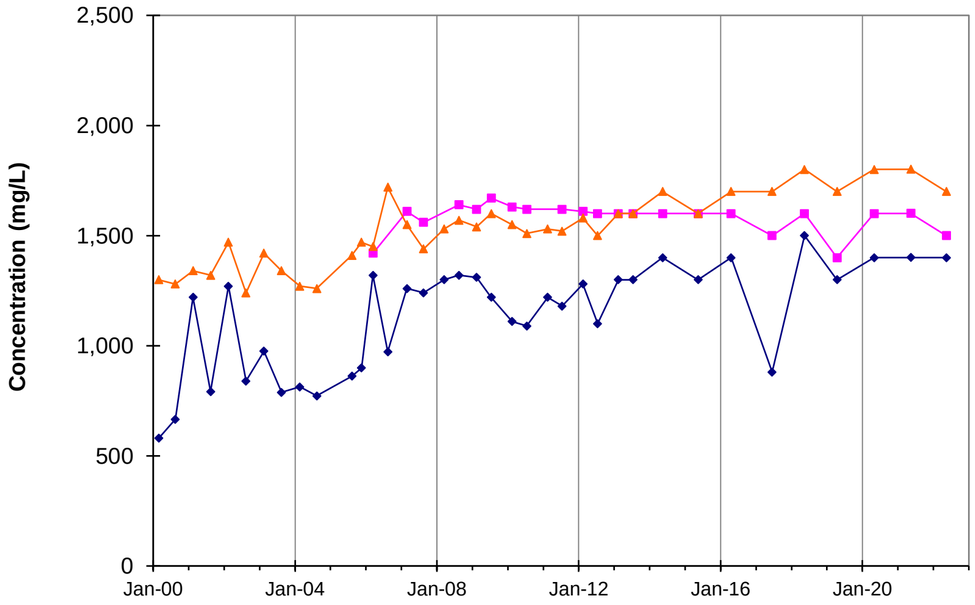
CHLORIDE



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ALKALINITY



NITROGEN

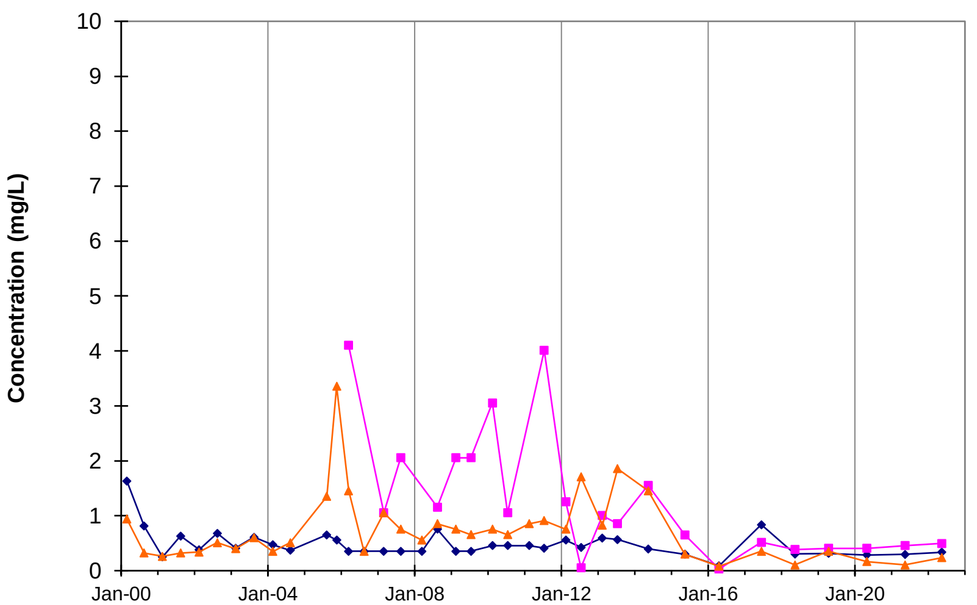
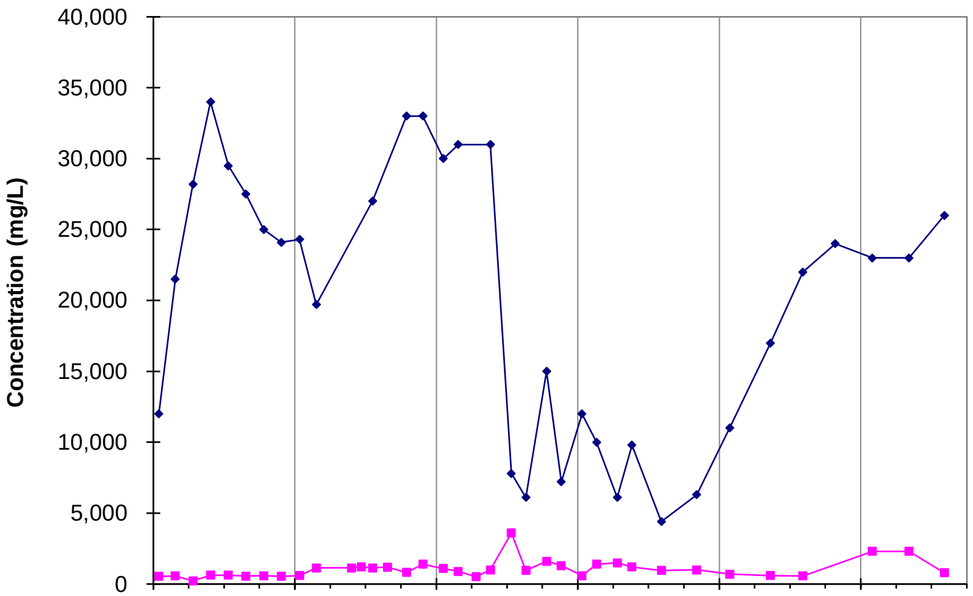
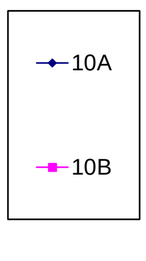


FIGURE C-21

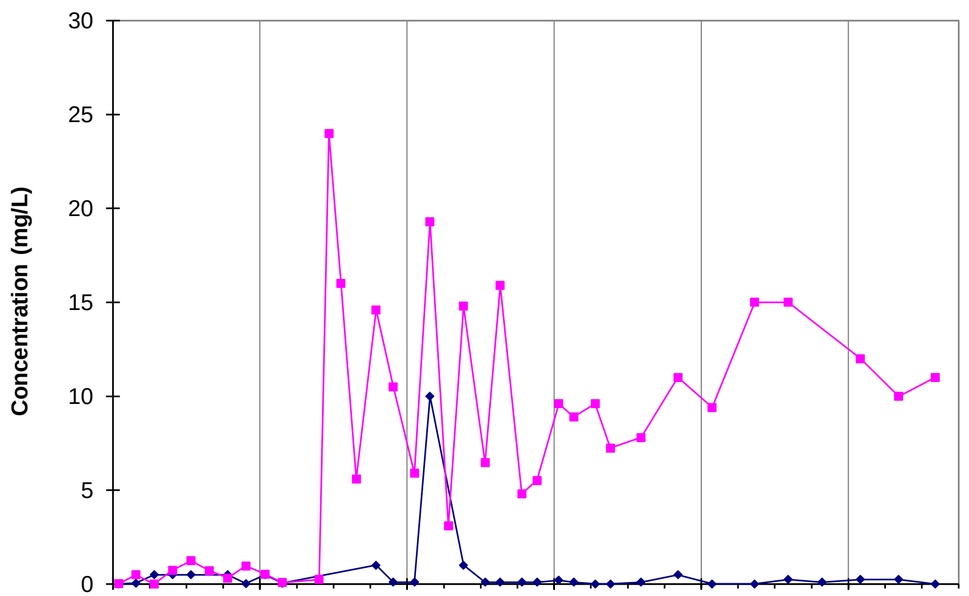
TIME CONCENTRATION GRAPHS - Meridian Brick : Borehole MW10

CHLORIDE

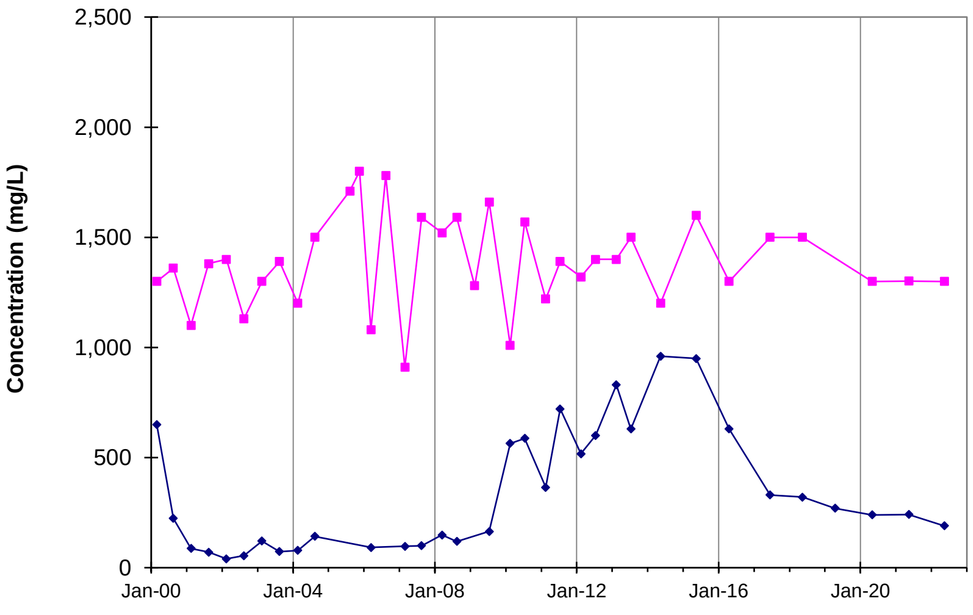




IRON



ALKALINITY



NITROGEN

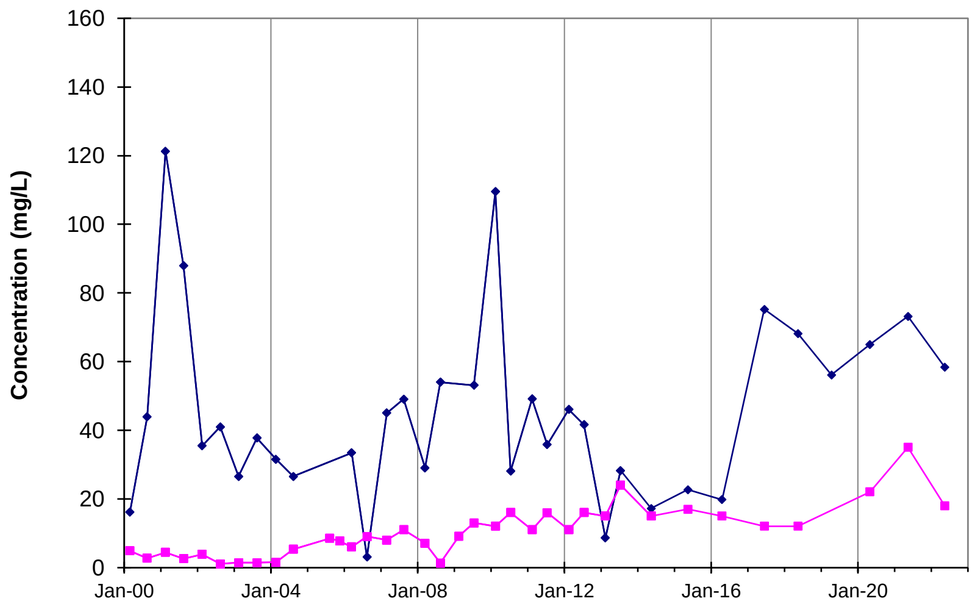
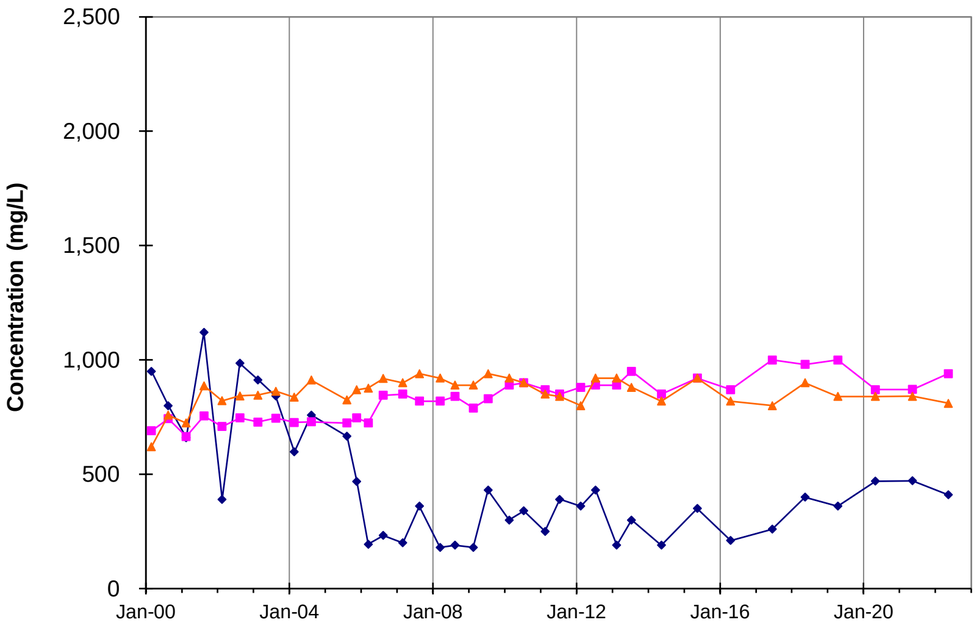
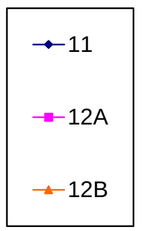


FIGURE C-22

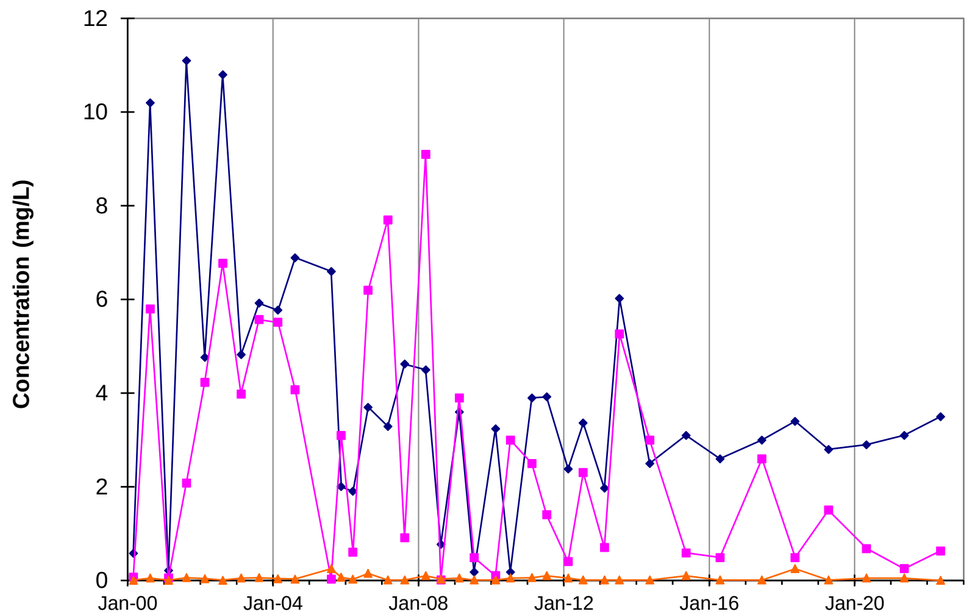
TIME CONCENTRATION GRAPHS - Meridian Brick : Borehole MW11 & 12

CHLORIDE

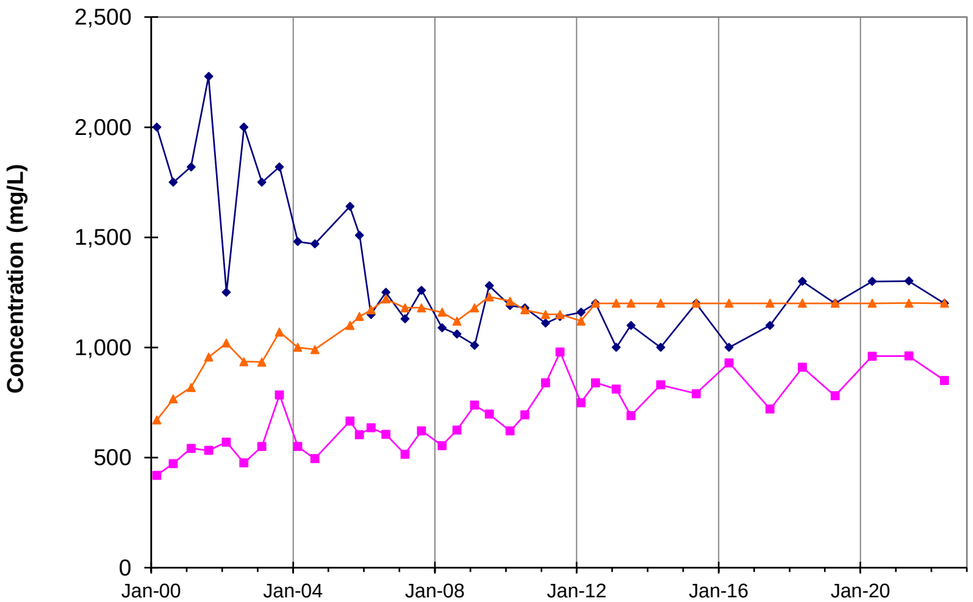




IRON



ALKALINITY



NITROGEN

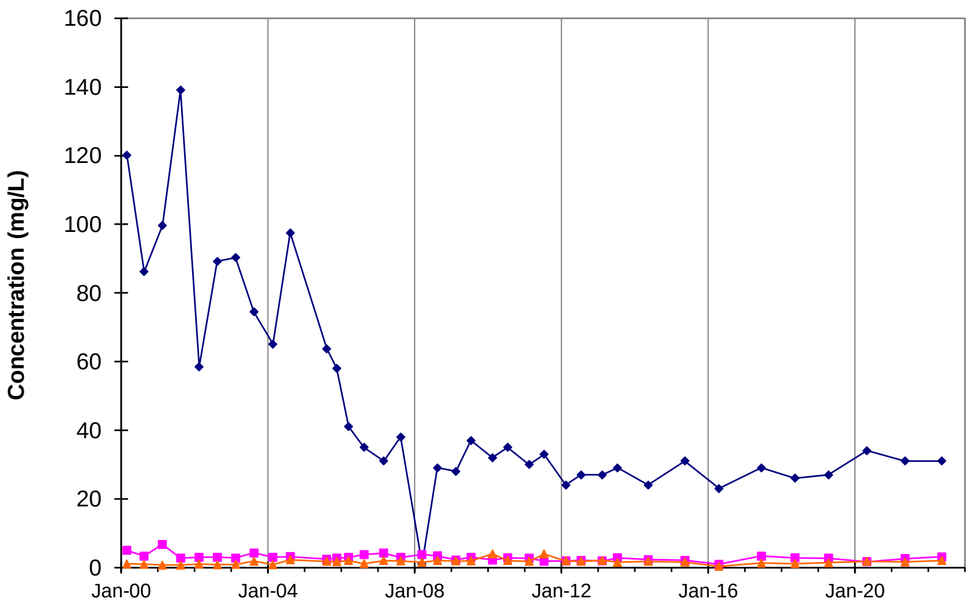


TABLE C-1
GROUNDWATER FIELD CHEMICAL RESULTS - September 2022
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

LOCATION	TEMPERATURE (°C)	pH (as units)	CONDUCTIVITY (µS/cm)
14-I **	8.1	7.7	5,450
14-II **	9.0	7.5	2,350
15-I	11.2	7.1	> 3,999
15-II	13.4	7.3	2,339
16-I	15.0	7.1	> 3,999
16-II	17.0	6.7	> 3,999
16-III	13.4	7.3	> 3,999
16-IV	14.9	7.5	3,188
18-IR	15.6	7.4	1,435
18-IIR	11.2	8.1	1,621
18-IIIR	11.4	7.6	1,130
21-IR	14.9	7.8	2,740
21-IIR	16.4	7.8	3,873
21-IIIR	12.2	7.3	2,149
22-IR	11.8	7.7	1,780
22-IIR	11.2	7.5	1,532
22-IIIR	16.8	7.9	1,291
23-I **	8.8	7.8	1,840
23-II **	8.9	7.3	1,560
23-III **	10.2	7.2	790
24-I	15.5	6.5	> 3,999
24-II	15.7	6.5	> 3,999
24-III	14.7	7.7	998
25-I	25.5	7.6	> 3,999
26-I	12.1	8.1	3,395
26-II	13.0	8.0	1,487
26-III	15.9	7.9	1,484
27-I	12.7	7.5	3,949
27-II	12.1	7.9	3,308
27-III	13.5	7.5	1,813
28-I	14.7	7.1	3,309
29-I	11.6	7.9	800
30-I	13.0	6.9	1,391
31-I	Insufficient Volume		
32-I	12.2	7.6	2,169
32-II	13.0	7.4	2,031
32-III **	9.5	8.0	2,280
33-I	21.4	7.3	2,972
34-I	16.7	7.9	1,625
35-IR	14.6	7.1	> 3,999
35-IIR	15.9	7.6	> 3,999
35-IIIR	12.4	7.8	3,224
35-IVR	15.4	7.6	3,347
36-I	Insufficient Volume		
37-I	26.8	7.4	> 3,999
38-I	-	-	-
39-I	27.2	7.4	> 3,999

NOTES: 1) "-" - Indicates monitor was blocked or inaccessible - no sample obtained.
2) "**" - Indicates the monitor was sampled in December 2022

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
14-I	Nov-85	7.16	7250	1585		114	2000	4.70	<0.05	4.70			2.8	2.9			
	Jul-86	8.07	7200	1612		115	1057	4.60	2.80	1.80			2.6	1.9			
	Sep-87	7.40	5280	2110		224	2287	2.00					2.0	2.0			
	Nov-87	7.39	5000	1510		340	2061	4.70	3.45	1.25			1.3	5.0			
	Jul-88	7.29	4880	1517		131	2044	3.60	4.19	<0.05							
	Nov-88		4400	1524		117	1970						<0.5	1.0			
	Oct-89	7.40	7050	1733		141	1705	5.40	4.50	0.90			<2.0	3.0		880	
	Oct-90		5950	1650		133		4.62	4.48	0.14	<0.2	<0.02	2.0			771	1.18
	Sep-91	7.20	7010	1660		122	2200	4.98	1.14	3.84	0.10	<0.01	<2.0	2.3		860	<0.08
	Aug-92	7.33	6490	1530		110	2100	6.11	5.85	0.26	<0.1	<0.01	<2.0	<0.5		760	1.53
	Aug-93	7.43	6780	1560		136	1900	5.48	3.79	1.69	0.04	<0.01	3.7	<0.3		792	2.62
	Aug-94	7.43	6540	1370		124	400	5.40	2.93	2.47	<0.02	0.06	3.0	1.0		890	1.12
	Sep-95	7.33	6650	1910	1740	152	2300	3.70	3.09	0.61	0.09	<0.01	<2.0	2.8		812	1.19
	Oct-96	7.22	5540	1290	1400	137	1710	1.69	1.56	0.13	3.50	<2.0	<0.5	0.7		763	<0.1
	Sep-98	7.26	5896	1370	1350	144	1680	1.22	0.72	0.50	0.40	<0.2	<1.0	6.2	52	728	0.04
	Sep-99	7.47	2155 *	568 *	143 *	122	625	2.43	2.16	0.27	0.20	<0.2	<1.0	5.8	21	212 *	1.25
	Sep-00	7.85	5387	1200	1290	177	1680	3.01	2.80	0.21	1.90	<0.2	<1.0	7.8	57	715	<0.01
	Sep-01		2430 *	64 *	653 *	925 *	1370	4.05	2.08	1.97	<0.2	<0.2	<1.0	1.3	4	126 *	<0.01
	Sep-02	7.16	6450	1400	1630	129	1750	1.14	1.04	0.10	1.30	<2.0	<1.0	<0.5	50	761	<0.01
	Sep-03	7.60	6490	1360	1590	122	1872	4.05	3.85	0.20	<0.2	<2.0	<1.0	0.7	51	815	<0.01
	Sep-04	7.88	6060	1160		139	1660	4.40	4.03	0.37	<10	<0.1	<1.0	12.0	57	940	2.51
	Sep-05	7.83	5470	1350	1740	124	2020	4.40	2.16	2.24	1.30	<3	<1	2.0	56	900	1.30
	Sep-06	7.70	6420	1380	1580	129	1900	1.20	1.24	<0.05	2.00	0.13	1.0	<2.0	55	810	0.35
	Sep-07	7.60	6460	1300	1530	134	2000	1.30	0.45	0.85	1.90	0.06	<1	<2.0	54	840	<0.10
	Oct-08	7.80	6480	1300	1530	127	1800	5.00	1.30	3.70	1.60	0.10	<1	<2.0	46	739	<0.02
	Sep-09	7.40	6650	1300	1600	126	1900	0.90	0.59	0.31	1.70	0.30	<1	4.0	47	773	<0.2
	Sep-10	7.60	6800	1400	1600	119	1800	3.00	1.80	1.20	2.00	1.10	<1	3.0	47	730	<0.2
	Sep-11	7.49	6680	1400	1500	118	1700	3.00	2.00	1.00	1.80	0.31	<1	<2.0	49	771	<0.02
	Sep-12	7.18	6700	1300	1400	120	1700	3.80	2.20	1.60	1.00	0.05	<1	<2.0	52	807	0.46
	Sep-13	7.63	6800	1300	1500	120	1900	1.70	1.20	0.50	1.70	0.12	<1	<2.0	50	790	<0.2
	Sep-14	7.75	6800	1400	1600	130	2000	2.00	1.40	0.60	1.08	0.07	<1	<1.0	53	850	0.30
	Sep-15	7.44	6900	1500	1600	130	2000	3.60	2.30	1.30	1.37	0.05	<1	<2.0	58	810	0.29
	Sep-16	7.56	6900	1400	1600	120	2000	3.80	3.10	0.70	0.95	0.28	<1	11.0	62	820	<0.02
	Sep-17	7.55	7200	1500	1600	120	1900	4.60	4.40	0.20	0.37	0.73	<10	<2	52	810	<0.2
	Sep-18	7.44	6900	1500	1600	130	1900	4.80	4.90	<0.05	<0.1	0.08	<1	<2	56	820	<0.02
	Sep-19	7.60	6900	1400	1500	110	2000	3.10	2.20	0.90	1.66	0.46	<1	3.0	61	840	0.71
	Sep-20	7.40	6800	1400	1600	130	2000	4.20	3.70	0.50	0.25	0.27	<1	13.0	54	820	<0.2
	Sep-21	7.50	6600	1300	1500	120	1900	1.50	0.13	1.37	1.34	0.68	<1	13.0	53	790	0.03
	Dec-22	7.39	6900	1400	1500	110	2100	4.40	3.80	0.60	1.59	0.73	<1	13.0	57	870	1.30

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
14-II	Nov-85	6.95	2950	220		537	1200	0.30	<0.05	0.30			<1	0.9			
	Jul-86	8.09	2670	232		527	1222	1.00	<0.05	1.00			<1	5.1			
	Sep-87	9.10	2040	630		1780	1153	<0.10					3.0	5.7			
	Nov-87	7.16	2000	370		820	1321	0.55	<0.01	0.55			1.8	5.0			
	Jul-88	6.99	1990	243		608	1278	<0.20	<0.01				2.1				
	Nov-88		2050	221		585	1402	0.29	<0.01	0.29			2.0	<1.0			
	Oct-89	7.40	2940	383		619	907	0.60	0.19	0.41			4.0	2.5		300	
	Oct-90		2970	271		630		0.18	<0.05	0.18	* 401	<0.02	2.0			232	0.16
	Sep-91	7.01	2930	255		608	1300	2.73	2.43	0.30	<0.1	<0.01	3.9	11.0		250	1.00
	Aug-92	6.98	2930	289		656	1300	0.34	0.03	0.31	<0.1	<0.01	<2.0	1.2		320	0.12
	Aug-93	7.02	2910	282		666	1200	5.18	1.98	3.20	0.02	<0.01	15.7	15.0		227	0.38
	Aug-94	7.01	3040	284		672	1300	3.88	2.26	1.62	<0.02	0.06	120	18.0		243	1.07
	Sep-95	7.02	3020	293	824	710	1400	3.40	2.78	0.62	<0.04	<0.01	12	26.0		234	<0.25
	Oct-96	7.01	2966	276	703	738	1350	2.59	2.22	0.37	<0.1	<0.2	61.1	7.3		232	0.30
	Sep-98	7.05	2743	276	631	802	1260	8.30	0.66	7.64	<0.2	<0.2	<1.0	7.7	21	207	0.15
	Sep-99	7.39	1327 *	211	156 *	209 *	466	1.13	0.34	0.79	0.70	<0.2	<1.0	2.2	7	104	0.57
	Sep-00	7.76	3010	319	675	858	1380	3.03	2.19	0.84	<0.2	<0.2	3.0	4.4	21	219	<0.01
	Sep-01		1760	38 *	641	415 *	1040	1.00	0.39	0.61	0.40	<0.2	<1.0	1.4	6	54 *	<0.01
	Sep-02	6.96	2987	295	646	898	1360	0.36	<0.03	0.36	<0.2	<0.2	<1.0	<0.5	22	205	<0.01
	Sep-03	7.50	3140	296	607	842	1348	0.26	0.03	0.36	<0.2	<0.2	1.0	1.1	24	204	<0.01
	Sep-04	7.87	2900	254		943	1380	1.20	<0.05	1.18	<0.1	<0.1	<1.0	11.0	22	218	1.21
	Sep-05	7.48	2930	265	621	913	1420	11.90	7.05	4.85	<0.2	<0.3	167	10.0	27	260	<0.05
	Sep-06	7.60	3140	283	519	974	1500	8.00	3.50	4.50	<0.1	<0.01	3.0	<2.0	25	230	0.15
	Sep-07	7.70	3140	250	579	941	1500	5.00	0.33	4.67	<0.1	<0.01	3.0	<2.0	25	240	<0.05
	Oct-08	7.70	3100	250	544	911	1300	4.00	0.13	3.87	<0.1	<0.01	<1	<2.0	23	211	<0.02
	Sep-09	7.30	3050	240	520	936	1300	9.00	0.52	8.48	<0.1	<0.01	33	<2.0	23	205	0.08
	Sep-10	7.30	3120	250	520	915	1300	3.00	0.11	2.89	<0.1	<0.01	2	<2.0	21	200	0.17
	Sep-11	7.35	3000	220	490	966	1300	2.00	0.23	1.77	<0.1	<0.01	4	<2.0	21	195	0.21
	Sep-12	7.09	3000	220	430	920	1300	3.30	0.23	3.07	<0.10	<0.01	11	<2.0	23	193	3.40
	Sep-13	7.33	3100	230	460	1000	1300	1.50	0.22	1.28	<0.1	<0.01	<1	3.0	25	200	0.89
	Sep-14	7.56	3100	220	480	1000	1400	0.52	0.06	0.46	<0.1	<0.01	<1	<1.0	25	220	0.44
	Sep-15	7.28	3200	230	480	1000	1400	<1.00	0.32	<0.68	<0.1	<0.01	32	<2.0	24	200	1.40
	Sep-16	7.32	3200	240	480	1000	1600	0.84	<0.05	0.83	<0.1	<0.01	<1	<2.0	28	230	0.03
	Sep-17	7.39	3100	210	450	1000	1500	0.28	0.08	0.20	<0.1	<0.01	<10	2.0	27	210	0.17
	Sep-18	7.14	3100	220	460	1100	1400	0.29	0.10	0.20	<0.1	<0.01	<1	<2	27	210	1.10
	Sep-19	7.64	2900	190	410	1000	1400	0.43	0.21	0.22	<0.10	<0.010	<1	3.0	26	200	0.79
	Sep-20	7.31	2900	190	460	1000	1400	0.28	0.06	0.22	<0.10	<0.010	<1	3.0	24	200	0.02
	Sep-21	7.40	2500	160	350	880	1000	0.41	0.06	0.35	<0.10	<0.010	<1	<2	20	140	<0.02
	Dec-22	7.30	2800	170	420	1000	1400	0.68	0.11	0.57	<0.10	0.01	<1	3.0	23	180	1.40

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
15-I	Nov-85	7.00	4460	1155		241	1230	3.00	<0.05	3.00			<1.0	6.5			
	Jul-86	7.99	4310	1105		195	976	3.20	2.70	0.50			2.4	5.5			
	Sep-87	9.20	3140	1370		730	1211	1.60					<1.0	3.3			
	Nov-87	7.24	3200	1210		520	1282	3.46	1.78	1.68			2.7	6.0			
	Jul-88	7.35	2900	1128		258	1196	2.50	3.15	-							
	Nov-88		2740	1184		238	1200	4.15	3.24	0.91			<0.5	5.0			
	Oct-89	7.50	4340	1282		247	1007	3.76	3.01	0.75			<2.0	<0.8		460	
	Oct-90		4230	1250		251		5.97	2.59	3.38	<0.2	<0.02	2.0			387	2.09
	Sep-91	7.14	4350	1070		241	1400	3.68	1.67	2.01	0.10	0.02	5.4	<0.7		420	0.13
	Aug-92	7.13	4230	1210		227	1700	4.59	3.15	1.44	<0.1	<0.01	<2.0	<0.5		370	2.51
	Aug-93	7.11	4470	1170		240	1300	4.67	2.71	1.96	0.08	<0.01	5.6	0.8		411	3.41
	Aug-94	7.25	4470	1080		246	1300	3.64	2.93	0.71	<0.02	<0.02	<5.	1.3		462	6.16
	Sep-95	7.30	4440	1190	330	250	1300	3.48	2.92	0.56	<0.04	<0.01	<2.0	1.5		416	2.48
	Sep-96	7.37	1516	349	95	99	374 *	1.05	1.01	0.04	0.90	<0.2	<0.5	0.8		118	0.50
	Dec-97	7.59	4220	1270		206	1140	3.00	3.00	0.00	2.70	<0.2	<1.0	7.2		368	0.23
	Sep-98	7.24	4357	1240	323	234	1220	2.46	2.58	<0.05	<0.2	<0.2	<1.0	7.2	39	406	0.45
	Sep-99	7.31	4165	985	285	201	1070	2.77	2.08	0.69	0.50	<2.0	<1.0	2.6	35	376	2.12
	Sep-00	7.81	3262	1200	314	240	1230	3.63	3.37	0.26	<0.2	<0.2	<1.0	1.1	39	403	<0.01
	Sep-01		1120 *	42 *	305	290	500 *	0.60	0.18	0.42	<0.2	<0.2	<1.0	<0.5	3	80 *	<0.01
	Sep-02	7.27	4166	1150	289	249	1120	3.08	2.81	0.27	<0.2	<2.0	<1.0	2.7	36	379	<0.01
	Sep-03	7.60	4410	1150	306	236	1196	2.97	2.98	<0.05	<0.2	<2.0	<1.0	4.0	38	396	<0.01
	Sep-04	7.94	4180	954		248	1210	2.80	2.53	0.27	<10	<0.1	<1.0	13.0	48	457	0.22
	Sep-05	7.94	3740	1100	257	234	1100	9.00	3.35	5.65	0.40	<0.3	7.0	5.0	40	420	1.70
	Sep-06	8.00	1970	434	126	214	580 *	0.60	0.06	0.54	0.10	0.05	<1	<2.0	15	150	<0.05
	Sep-07	7.90	4380	1100	289	230	1400	4.00	1.71	2.29	0.30	0.02	<1	<2.0	44	460	<0.05
	Oct-08	7.90	931 *	86 *	88	274	350 *	5.00	1.10	3.90	0.40	0.02	<1	<2.0	8	53 *	<0.02
	Sep-09	7.40	3500	890	250	205	920	6.00	3.20	2.80	1.30	0.11	3	<2.0	31	309	<0.02
	Sep-10	7.70	4480	1100	310	224	1100	17.00	3.40	13.60	0.10	0.15	7	<2.0	37	373	0.22
	Sep-11	7.45	4730	1200	330	240	1300	<10	6.90	<3.10	<0.1	<0.01	57	<2.0	38	390	0.67
	Sep-12	7.21	4800	1200	320	200	1300	3.80	3.60	0.20	<0.1	<0.01	<1	<2.0	43	442	2.34
	Sep-13	7.60	4800	1200	340	230	1300	3.70	2.80	0.90	<0.1	0.01	<1	<2.0	39	420	1.20
	Sep-14	7.73	5000	1300	370	220	1400	5.30	2.80	2.50	0.49	<0.01	<1	<1.0	46	420	<0.02
	Sep-15	7.62	4900	1300	360	220	1400	3.30	1.10	2.20	1.08	0.07	<1	3.0	46	440	<0.02
	Sep-16	7.64	5000	1300	360	230	1500	3.10	2.70	0.40	0.55	0.03	<1	9.0	48	460	<0.02
	Sep-17	7.49	5000	1200	310	240	1400	3.50	3.40	0.10	<0.1	0.01	<10	<2	46	420	0.49
	Sep-18	7.49	5000	1300	350	240	1400	3.50	3.40	0.10	0.14	<0.01	<1	<2	47	450	0.05
	Sep-19	7.66	4900	1300	350	220	1400	4.00	3.60	0.40	0.21	0.06	<1	10.0	47	460	1.30
	Sep-20	7.65	4800	1300	350	230	1500	3.60	3.50	0.10	<0.10	<0.010	<1	3.0	46	430	0.66
	Sep-21	7.59	4800	1300	310	220	1400	3.60	2.20	1.40	0.67	0.15	<1	10.0	46	430	0.66
	Sep-22	7.59	4900	1300	330	220	1400	2.50	2.00	0.50	0.45	0.05	2.1	8.0	45	430	0.03

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
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3) Blank indicates parameter not analysed.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
15-II	Nov-85	7.05	1970	189		396	733	0.60	<0.05	0.60			<1.0	0.6			
	Jul-86	7.84	2340	380		573	709	1.00	0.05	0.95			1.0	7.0			
	Sep-87	8.30	1900	730		388	766	0.10					<1.0	4.5			
	Nov-87	7.45	1700	440		500	818	0.67	<0.01	0.67			3.2	4.0			
	Jul-88	7.39	1500	252		401	833	<0.20	0.06	<0.14			2.2				
	Nov-88		1560	349		399	877	0.49	0.30	0.19			<0.5	<1.0			
	Oct-89	7.46	2440	610		347	627	0.84	0.48	0.36			<2.0	4.0		250	
	Oct-90		2490	466		422		0.67	0.21	0.46	<0.2	<0.02	2.0			176	0.17
	Sep-91	7.20	2400	470		328	780	0.68	0.47	0.21	<0.2	0.02	2.4	1.7		220	0.22
	Aug-92	7.18	1940	166		646	900	0.55	<0.02	0.55	<0.1	<0.01	<2.0	<0.5		130	0.85
	Aug-93	7.73	2320	388		398	800	0.90	0.52	0.38	<0.02	<0.01	2.7	1.3		181	2.73
	Aug-94	7.26	2360	431		348	830	1.04	0.63	0.41	<0.02	<0.02	4.0	2.1		200	1.49
	Sep-95	7.24	2420	454	333	386	900	1.14	0.80	0.34	<0.04	<0.01	5.3	6.8		199	0.79
	Sep-96	7.13	2361	271	379	528	965	4.10	3.50	0.60	<0.1	<0.2	20.5	14.2		169	0.90
	Dec-97	7.46	1860	173		519	720	1.36	0.26	1.10	<0.2	<0.2	<1.0	1.7		105	0.15
	Sep-98	7.20	2248	447	265	402	816	9.40	0.75	8.65	<0.2	<0.2	<1.0	61.5	15	189	0.69
	Sep-99	7.45	2348	394	320	416	760	2.19	0.69	1.50	<0.2	<0.2	<1.0	2.7	15	179	1.13
	Sep-00	7.79	2410	213	292	950	1040	26.20	24.10	2.10	<0.2	<0.2	12.0	14.5	17	152	0.16
	Sep-01		1690	185	143	562	814	2.90	1.93	0.97	1.60	<0.2	<1.0	1.4	9	78	<0.01
	Sep-02	7.14	2416	282	315	796	1020	0.95	0.42	0.53	<0.2	<0.2	<1.0	0.7	19	159	0.10
	Sep-03	7.70	2650	288	383	687	1100	1.52	0.65	0.87	<0.2	<0.2	1.0	19.5	20	170	<0.01
	Sep-04	8.06	2280	352		528	814	2.90	0.59	2.31	<0.1	<0.1	<1.0	28.0	19	197	0.14
	Sep-05	8.00	2260	408	258	435	883	5.80	0.73	5.07	<0.2	<0.3	71	3.0	18	210	0.83
	Sep-06	7.80	2580	245	263	890	1100	21.00	17.30	3.70	<0.1	0.02	170	18.0	21	180	1.30
	Sep-07	7.60	2500	370	698	588	1100	14.00	1.28	12.72	<0.1	<0.01	10	3.0	19	200	<0.05
	Oct-08	7.90	2560	210	297	898	1100	8.00	3.50	4.50	<0.1	<0.01	6	<2.0	18	162	<0.02
	Sep-09	7.60	2160	170	210	777	840	42.00	2.20	39.80 *	<0.1	<0.01	40	<2.0	16	135	0.29
	Sep-10	7.70	2420	390	190	449	780	2.00	0.40	1.60	<0.1	0.01	2	<2.0	15	167	<0.02
	Sep-11	7.54	2520	450	230	401	780	9.00	0.62	8.38	<0.1	<0.01	24	<2.0	16	180	0.30
	Sep-12	7.46	2500	450	210	330	840	2.80	0.61	2.19	0.88	<0.01	<1	<2.0	19	212	0.59
	Sep-13	7.69	2500	400	240	420	810	1.20	0.31	0.89	<0.1	<0.01	<1	<2.0	17	190	0.27
	Sep-14	7.71	2500	440	250	410	890	2.10	0.52	1.58	<0.1	<0.01	<1	<1.0	19	220	0.20
	Sep-15	7.60	2500	420	250	440	910	1.60	1.30	0.30	<0.1	<0.01	2	<2.0	20	210	0.16
	Sep-16	7.72	2600	460	240	400	920	1.10	0.52	0.58	<0.1	<0.01	<1	2.0	21	230	<0.02
	Sep-17	7.68	2600	470	210	400	810	0.91	0.81	0.10	<0.1	<0.01	<10	3.0	20	240	0.28
	Sep-18	7.59	2700	490	270	420	820	2.00	1.60	0.40	<0.1	<0.01	<1	<2	19	230	0.29
	Sep-19	7.68	2700	430	250	540	880	58.0	56.0	2.00	<0.10	<0.010	200	460	21	210	<0.02
	Sep-20	7.74	2600	500	270	410	890	7.60	7.10	0.50	<0.10	<0.010	9	37.0	20	220	0.27
	Sep-21	7.95	1400	110	220	410	560	1.10	0.44	0.76	<0.10	0.01	<1	5.0	20	220	0.27
	Sep-22	7.67	2500	410	240	450	910	2.50	2.20	0.30	<0.10	0.03	7	57.0	17	190	0.14

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TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
16-I	Nov-87	7.16	2380	15780		57	8913	15.97	17.24	<0.05			2.5	6.2			
	Jul-88	6.88		16620		30	9460	18.30	18.99	<0.05							
	Nov-88		2740	16396		33	4490	56.04	18.68	37.36			<0.5	3.0			
	Oct-89																
	Oct-89	6.71	43000	19025		220	8005	20.86	20.43	0.43				0.5		7300	
	Oct-90		59000	22100		19		24.30	24.00	0.30	<0.2	<0.02	<2.0			7530	7.97
	Sep-91	7.07	49600	18200		38	10000	27.00	21.50	5.50	<0.2	<0.01	<2.0	<0.5		10600	<0.08
	Aug-92	7.02	45000	22800		33	13000	32.90	21.70	11.20	<0.1	<0.01	* 68.9	<0.5		8560	2.99
	Aug-93	7.02	47500	21800		27	12000	30.50	19.40	11.10	<0.02	<0.01	3.4	<0.3		9010	9.17
	Aug-94	6.94	47800	19100		28	12000	45.20	22.90	22.30	<0.02	0.03	<5.0	1.3		11800	5.93
	Sep-95	6.97	48800	19600	1860	37	13000	21.90	21.90	0.00	<0.04	<0.01	<2.0	<0.5		9920	2.84
	Sep-96	6.67	43470	20300	1650	30	11000	21.70	21.80	<0.05	<1.0	<20.0	<0.5	2.8		8430	3.50
	Sep-97	6.29	41700	18300	1770	9	10800	21.10	20.40	0.70	<2.0	<20.0	<1.0	0.3		8180	6.45
	Sep-98	7.11	44760	18300	1740	15	11400	34.00	22.40	11.60	<2.0	<2.0	<1.0	1.4	178	7750	2.35
	Sep-99	6.81	48050	17600	1890	14	10200	20.70	21.60	<0.05	<0.2	<20.0	<1.0	2.0	176	8900	5.07
	Sep-00		32740	18200	1730	10	9330	21.00	21.90	<0.05	<0.2	<20.0	<1	1.6	162	7910	1.48
	Sep-01		59000	19600	1490	8	11400	20.20	19.80	0.40	<20	<20.0	<1.0	<0.5	164	7830	0.79
	Sep-02	6.86	55650	17700	1850	12	8650	19.50	19.80	<0.05	<2.0	<20.0	<1.0	<0.5	164	7180	0.22
	Sep-03	7.80	51700	19200	1760	14	9305	19.40	19.10	0.30	<2.0	<20.0	<1.0	<0.5	137	7710	0.79
	Sep-04	7.20	34900	13800		33	8250	20.30	21.80	<0.05	<200	<0.1	<1.0	<4.0	154	9120	11.30
	Sep-05	7.01	32100	16900	1640	27	8720	15.60	19.00	<0.05	<0.2		<1	<2.0	160	8000	<5
	Sep-06	7.00	46500	14500	1640	30	11000	22.00	20.80	1.20	<0.1	<0.01	5.0	<2.0	180	8300	7.10
	Sep-07	6.90	48500	19000	1650	28	11000	23.00	26.80	<0.05	<0.1	<0.01	3.0	<2.0	190	8800	<2.50
	Oct-08	7.00	48100	19000	1610	30	9700	23.00	28.00	<0.05	<0.1	<0.01	<1	<2.0	169	7960	1.30
	Sep-09	6.80	49200	19000	1600	29	10000	25.00	26.00	<0.05	0.10	<0.01	<1	<2.0	120	7420	<2
	Sep-10	7.00	48800	17000	1600	48	9800	44.00	24.00	20.00	<0.1	<0.01	4.0	<200.0	166	7360	0.40
	Sep-11	6.89	47900	18000	1600	28	10000	26.00	22.00	4.00	<0.1	<0.01	19.0	<2.0	157	7690	2.50
	Sep-12	6.32	48000	16000	1500	25	9700	20.00	22.00	<0.05	<1.0	<0.10	3.6	<2.0	164	7430	5.40
	Sep-13	6.90	50000	20000	1500	24	12000	20.00	21.00	<0.05	<0.1	<0.01	<1	<2.0	190	8100	4.00
	Sep-14	7.01	50000	20000	1700	28	11000	23.00	21.00	2.00	<0.1	<0.01	<1	<2.0	180	8300	3.60
	Sep-15	6.56	51000	21000	1600	23	11000	21.00	21.00	<0.05	<0.1	<0.05	3.5	<2.0	180	7800	<0.2
	Sep-16	6.82	52000	19000	1600	25	11000	21.00	22.00	<0.05	<0.5	<0.05	<5	<2.0	180	7700	2.30
	Mar-18	6.80	51000	20000	1500	26	11000	22.00	21.00	1.0	<0.5	<0.05	<5	<2	180	8100	<0.2
	Sep-18	6.96	50000	19000	1600	36	10000	22.00	19.00	0.5	<0.5	<0.05	2.1	<2	170	7600	<0.2
	Sep-19	7.23	48000	18000	1600	36	10000	19.00	21.00	<0.05	<0.10	<0.050	7.9	<2	180	8000	0.30
	Sep-20	6.93	47000	16000	1600	32	9600	20.00	20.00	<0.05	<0.10	<0.050	<1	<2	170	7500	<0.2
	Sep-21	7.13	44000	15000	1800	35	9700	21.00	20.00	1.0	<0.50	<0.050	1.7	<2	180	7700	<0.02
	Sep-22	7.31	48000	16000	1600	41	9700	24.00	19.00	5.0	<0.10	<0.010	31.0	<40	170	7900	<0.2

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GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
16-II	Nov-87	7.01	2810	21100		46	12877	21.24	20.35	0.89			2.7	5.1			
	Jul-88	6.81		22613		27	14240	20.10	23.02	-							
	Nov-88		3590	22115		38		52.98	18.85	34.13			<0.5	3.0			
	Oct-89	6.66	53400	28225		200	12991	24.87	23.78	1.09				0.3		9500	
	Oct-90		71900	27200		19		26.60	24.90	1.70	<0.2	<0.02	<2.00				7.38
	Sep-91	6.99	56400	23800		33	15000	35.80	23.00	12.80	<0.2	<0.01	<2.0	<0.5		11200	<0.08
	Aug-92	7.00	53900	25200		31	25000	33.50	23.80	9.70	<0.1	<0.01	30.1	<0.5		10400	5.68
	Aug-93	6.95	47600	19400		34	11000	30.40	17.90	12.50	<0.02	<0.01	4.2	<0.3		8550	2.10
	Aug-94	6.86	43600	15800		35	10000	29.30	19.20	10.10	<0.02	<0.02	<5.0	0.9		10100	0.18
	Sep-95	7.08	39500	15000	2260	39	9700	18.40	17.40	1.00	<0.04	<0.01	5.8	<0.5		7860	<0.25
	Sep-96	6.74	36990	16400	1980	36	8370	17.30	16.80	0.50	<1.0	<20.0	<0.5	2.5		7320	<0.1
	Sep-97	6.93	34600	14200	2130	26	7640	21.20	19.70	1.50	<2.0	<20.0	<1.0	1.1		7180	1.10
	Sep-98	7.19	31630	12000	2210	27	7420	15.90	15.90	0.00	<2.0	<2.0	<1.0	0.8	130	6650	0.03
	Sep-99	7.16	32190	12600	2190	21	7070	14.00	14.70	<0.05	2.80	<20.0	<1.0	2.6	126	6510	<0.01
	Sep-00		29520	15400	1860	20	7910	20.00	20.00	0.00	<0.2	<20.0	<1	0.5	147	7130	<0.10
	Sep-01		2787 *	16400	1810	17	8700	42.40	17.70	24.70	<20	<20.0	<1.0	<0.5	143	7330	<0.10
	Sep-02	7.05	46150	13800	2100	21	6880	16.40	17.00	<0.05	<2.0	<20.0	<1.0	<0.5	140	6200	<0.10
	Sep-03	7.50	43600	15400	1980	20	7212	20.90	17.10	3.80	<2.0	<20.0	<1.0	<0.5	138	6640	<0.01
	Sep-04	7.27	31400	11400		38	6900	18.80	19.00	<0.05	<200	<0.1	<1.0	<5.0	173	8560	2.61
	Sep-05	7.04	30100	15400	2060	25	7440	14.00	15.50	<0.05	1.50		<1	<2.0	150	7300	<5
	Sep-06	7.20	38700	12000	2020	37	7600	18.00	17.60	0.40	<0.1	0.10	3	<2.0	150	7200	<0.50
	Sep-07	6.90	39600	14000	2210	20	7700	17.00	19.30	<0.05	0.50	2.00	3	6.0	160	7800	<2.50
	Oct-08	7.00	36900	14000	2080	25	6300	15.00	18.00	<0.05	1.30	0.27	<1	3.0	143	6070	<0.02
	Sep-09	6.80	38500	14000	2100	35	6500	21.00	20.00	1.00	0.40	0.17	2	<2.0	117	6270	<2
	Sep-10	7.20	40900	14000	1800	66	7000	26.00	23.00	3.00	0.30	0.03	* 82	7.0	143	6750	0.40
	Sep-11	7.03	39900	14000	1900	42	6900	19.00	19.00	<0.05	0.20	0.05	11	<2.0	141	6180	0.70
	Sep-12	6.57	40000	13000	1800	36	7000	19.00	19.00	<0.05	<1.0	<0.10	1.2	<2.0	141	6390	1.10
	Sep-13	7.18	40000	14000	1900	30	7000	18.00	17.00	1.00	<0.1	<0.01	<1	<2.0	140	6700	<2
	Sep-14	7.27	42000	14000	2100	35	7400	18.00	18.00	<0.05	<0.1	<0.01	<1	<2.0	150	7500	0.40
	Sep-15	6.95	40000	14000	2100	32	7200	18.00	18.00	<0.05	<0.1	<0.01	3.7	<2.0	150	6900	<0.2
	Sep-16	7.07	41000	14000	2000	32	7200	18.00	18.00	<0.05	<0.1	0.21	5.7	23.0	150	6900	0.70
	Mar-18	7.05	40000	14000	1900	33	6600	16.00	15.00	1.0	0.62	0.03	<5	<2	150	7000	0.38
	Sep-18	6.92	37000	13000	2100	34	5700	16.00	15.00	1.0	0.43	0.25	1.6	<2	150	6100	<0.02
	Sep-19	7.13	39000	13000	1900	28	6700	18.00	18.00	0.0	0.77	0.03	<2	<2	150	6700	2.10
	Sep-20	6.92	39000	12000	2000	32	7000	17.00	18.00	<0.05	0.34	0.01	<2	<2	150	6800	1.00
	Sep-21	6.99	38000	13000	2000	23	7000	18.00	16.00	2.0	0.27	1.64	<1	4.0	160	6800	<0.02
	Sep-22	6.98	40000	15000	1900	23	7200	17.00	15.00	2.0	<0.10	1.79	25	<6	150	6300	<0.2

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TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
16-III	Nov-87	7.40	2880	23725		49	17324	21.05	20.44	0.61			3.8	5.6			
	Jul-88	7.33		24403		21	17480	25.10	21.85	3.25			1.4				
	Nov-88		3890	2346		25	17550	39.29	10.32	28.97			<0.5	3.0			
	Oct-89	7.29	55300	27190		40	14714	23.49	23.64	<0.05			<2	0.3		6000	
	Oct-90		73900	27400		12		24.50	23.20	1.30	<0.2	<0.02	<2				0.18
	Sep-91	7.15	63100	24400		30	18000	32.50	22.80	9.70	<0.2	0.01	<2.0	<0.5		10400	<0.08
	Aug-92	7.51	56700	28700		22	29000	34.00	22.70	11.30	<0.1	<0.01	16.0	<0.5		9920	0.22
	Aug-93	7.15	55600	28400		23	18000	33.10	20.40	12.70	<0.02	<0.01	8.0	<0.3		10500	0.25
	Aug-94	7.14	59200	25600		23	19000	49.70	24.20	25.50	<0.02	0.03	<5.0	1.2		13900	0.20
	Sep-95	7.03	56000	25200	1330	34	18000	24.70	22.90	1.80	<0.04	0.01	7.1	0.6		11000	<0.25
	Sep-96	6.76	52420	25700	1240	47	16300	24.40	23.30	1.10	<1.0	<20.0	1.8	3.0		8290	0.10
	Sep-97	6.81	27800	24100	1410	5	16200	22.60	20.40	2.20	<2.0	<20.0	<1.0	0.9		8710	<0.10
	Sep-98	7.15	54050	24000	1460	8	16000	26.00	21.90	4.10	<2.0	<2.0	<1.0	1.1	204	7900	<0.10
	Sep-99	7.11	61470	24700	1500	3	17700	23.20	23.00	0.20	<0.2	<20.0	<1.0	2.2	204	9310	0.04
	Sep-00		38950	24600	1220	26	15800	37.00	22.90	14.10	<0.2	<20.0	<1	0.8	193	8450	<0.1
	Sep-01		72000	24400	1290	5	16700	21.80	19.90	1.90	<20	<20.0	<1.0	<0.5	185	8440	<0.1
	Sep-02	7.07	77300	23800	1380	5	16100	22.70	21.30	1.40	<2.0	<20.0	1.0	<0.5	202	8250	<0.1
	Sep-03	7.70	67500	26200	1300	6	17380	18.70	20.60	<0.05	<2.0	<20.0	<1.0	<0.5	188	8890	<0.01
	Sep-04	7.11	44300	21100		33	15700	22.20	24.00	<0.05	<200	<0.1	<1.0	<4.0	187	8570	<0.11
	Sep-05	7.04	41500	26000	1430	28	16600	27.00	21.80	5.20	1.30		<1	<2.0	210	9300	<5
	Sep-06	6.90	59200	24800	1340	61	16000	24.00	22.50	1.50	<0.1	<0.01	12	35.0	200	8100	<3
	Sep-07	7.20	60600	24000	1300	33	18000	25.00	28.20	<0.05	<0.1	<0.01	6	<2.0	240	10000	<2.5
	Oct-08	7.10	61000	24000	1270	59	15000	33.00	30.00	3.00	<0.1	<0.01	11	13.0	197	7530	<0.02
	Sep-09	7.00	61100	24000	1300	33	16000	25.00	25.00	0.00	<0.1	<0.01	2	<2.0	205	8350	<2
	Sep-10	7.10	62400	24000	1300	26	16000	25.00	23.00	2.00	0.10	<0.01	2	<200	213	8610	<0.2
	Sep-11	7.10	58200	23000	1300	30	15000	23.00	22.00	1.00	<0.1	<0.1	34	<2.0	183	8020	<0.2
	Sep-12	6.49	59000	24000	1200	31	15000	21.00	22.00	<0.05	0.35	<0.01	4	<2.0	204	8470	<0.2
	Sep-13	7.14	61000	26000	1300	32	16000	21.00	20.00	1.00	0.52	0.77	<1	<2.0	220	8500	<2
	Sep-14	7.17	63000	26000	1400	32	17000	23.00	22.00	1.00	0.65	0.16	<1	<2.0	220	9500	<0.2
	Sep-15	6.95	61000	26000	1300	35	16000	23.00	21.00	2.00	0.11	<0.05	<5	<2.0	210	8400	<0.2
	Sep-16	7.10	62000	24000	1300	31	16000	21.00	20.00	1.00	1.02	0.04	<1	5.0	210	8500	<0.2
	Mar-18	6.92	61000	24000	1300	34	16000	22.00	20.00	2.00	0.66	0.02	<5	<2	200	8700	<2
	Sep-18	6.99	61000	24000	1300	37	16000	22.00	20.00	2.00	<1.0	<0.1	4	<2	220	8700	<0.2
	Sep-19	7.17	60000	23000	1300	30	16000	20.00	19.00	1.00	2.52	<0.050	<2	2.0	220	8800	<0.2
	Sep-20	7.01	58000	25000	1400	34	16000	21.00	21.00	<0.05	0.31	0.23	2	<2	210	8300	<0.2
	Sep-21	7.16	55000	26000	1300	35	16000	24.00	22.00	2.00	0.10	0.13	3	<2	230	8800	0.05
	Sep-22	7.11	59000	24000	1300	37	17000	23.00	20.00	3.00	0.12	0.03	110	<40	210	7900	<2

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TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
16-IV	Nov-85	7.04	2780	283		470	899	0.50	<0.05	0.50			0.6	<1.0			
	Jul-86	7.79	3090	322		529	997	0.20	<0.05	0.20			0.8	3.3			
	Sep-87	8.10	1690	500		1314	795	<0.10					<1.0	2.7			
	Aug-93	7.19	1510	99		477	600	0.37	<0.01	0.37	<0.02	<0.01	<2.0	0.8		111	0.16
	Aug-94	7.21	1400	94		445	540	0.56	<0.02	0.56	<0.02	<0.02	<1.0	1.2		87	<0.10
	Sep-95	7.24	2090	208	278	498	1200	0.37	<0.03	0.37	<0.04	<0.01	<2.0	1.5		172	<0.25
	Sep-96	7.18	1186	56	119	453	534	0.31	0.24	0.07	<0.1	<0.2	3.2	6.0		69	0.10
	Sep-97	7.10	1320	61	122	464	524	1.50	0.20	1.30	<0.2	<0.2	<1.0	1.6		69	0.14
	Sep-98	7.53	1302	109	169	475	718	1.05	0.07	0.98	<0.2	<0.2	<1.0	1.5	13	83	0.37
	Sep-99	7.51	1648	177	238	452	690	0.88	0.08	0.80	0.20	<0.2	<1.0	2.2	13	120	0.05
	Sep-00		1583	299	296	364	727	0.70	0.04	0.66	<0.2	<0.2	<1	1.3	11	102	<0.01
	Sep-01		2274	758 *	297	296	935	0.58	0.29	0.29	<0.2	<0.2	<1.0	<0.5	15	312 *	<0.01
	Sep-02	7.24	2170	464	216	293	609	0.43	0.03	0.40	0.50	<0.2	<1.0	<0.5	12	205	<0.01
	Sep-03	7.70	2480	465	286	397	726	0.44	<0.03	0.44	<0.2	<0.2	<1.0	0.7	11	239	<0.01
	Sep-04	7.93	1480	147		428	515	2.30	0.18	2.12	<1	<0.1	<1.0	9.0	10	173	0.46
	Sep-05	7.90	1420	142	188	439	541	4.00	<0.05	4.00	<0.2		<1	<2.0	11	140	<0.05
	Sep-06	7.90	1280	83	148	477	460	5.20	4.41	0.79	<0.1	<0.01	* 52	<2.0	10	110	0.27
	Sep-07	8.00	1320	90	145	462	500	13.00	0.74	12.26	<0.1	0.02	6.0	<2.0	11	120	<0.05
	Oct-08	8.10	1040	39	63	456	400	2.00	0.18	1.82	<0.1	<0.01	<1	<2.0	8	70	<0.02
	Sep-09	7.60	918	37	56	402	350	9.00	0.40	8.60	<0.1	<0.01	1.0	<2.0	9	56	<0.02
	Sep-10	7.70	1100	47	79	436	400	3.00	0.11	2.89	<0.1	<0.01	2.0	<2.0	9	66	<0.02
	Sep-11	7.60	1120	60	95	421	430	3.00	0.06	2.94	<0.1	<0.01	1.0	<2.0	10	67	0.14
	Sep-12	7.44	1200	75	110	390	480	2.30	0.16	2.14	0.36	<0.01	<1	<2.0	11	85	0.05
	Sep-13	7.87	960	42	55	390	380	1.50	<0.05	1.45	<0.1	<0.01	1.5	<2.0	9	57	<0.02
	Sep-14	7.96	1100	65	90	430	470	6.10	0.08	6.02	<0.1	<0.01	<1	<2.0	10	68	<0.02
	Sep-15	7.77	1200	72	96	450	500	0.33	<0.05	0.32	<0.1	0.02	<1	<2.0	12	76	<0.2
	Sep-16	7.77	1400	110	140	460	610	0.62	<0.05	0.61	<0.1	<0.01	<1	<2.0	16	98	<0.02
	Mar-18	7.77	780	36	38	340	340	0.15	0.13	0.02	0.12	<0.01	<5	<2	7	38	<0.02
	Sep-18	7.69	1200	79	120	480	510	0.18	0.07	0.11	<0.1	<0.01	<1	<2	14	84	<0.02
	Sep-19	8.02	930	34	47	410	410	0.46	0.09	0.37	<0.10	0.01	1.1	4.0	10	49	<0.02
	Sep-20	7.96	1100	69	89	440	520	0.42	0.32	0.10	<0.10	<0.010	6.3	<2	13	71	<0.02
	Sep-21	7.76	1100	85	99	430	460	0.70	0.07	0.63	<0.10	<0.010	1.2	6.0	12	71	<0.02
	Sep-22	7.73	1100	59	67	440	500	0.28	0.26	0.02	0.15	<0.010	<1	3.0	11	56	<0.02

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BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
18-I R	Sep-20	7.95	1100	20	200	450	620	0.22	0.07	0.15	0.11	<0.010	<1	5.0	10	43	<0.02
	Sep-21	7.96	1100	27	180	440	560	0.61	0.15	0.46	0.10	<0.010	<1	4.0	9	40	<0.02
	Sep-22	7.87	1100	22	160	460	610	0.29	0.30		<0.10	<0.010	<1	<20	9	42	<0.02
18-II	Dec-85	7.34	2980	376		569	938	3.70	2.30	1.40				3.2			
	Jul-86	7.73	1600	113		642	617	1.20	0.75	0.45			<1.0	6.2			
	Sep-87	7.40	1750	490		461	1647	0.50					9.0	22.0			
	Nov-87	7.31	2100	455		600	1065	1.44	<0.01	1.44			9.2	8.0			
	Jul-88	7.52	2250	487				1.20					<0.5				
	Nov-88		1390	199		436	794	0.85	0.57	0.28				2.0			
	Oct-89	7.42	1770	200		510	652	0.59	0.32	0.27				0.3		140	
	Oct-90		1600	115		437		0.38	0.23	0.15	0.30	<0.02	<2.0			154	<0.08
	Sep-91	7.65	2870	383		377	930	1.07	0.92	0.15	<0.2	<0.01	<2.0	2.8		260	<0.08
	Aug-92	7.26	1660	136		438	690	0.72	0.44	-	<0.1	<0.01	<2.0	0.9		140	<0.08
	Aug-93	7.40	1330	73		427	560	0.70	0.28	0.42	0.29	<0.01	<2.0	5.3		86	<0.10
	Aug-94	7.35	1440	74		393	580	0.67	0.28	0.39	0.06	<0.02	<5.0	<0.3		83	<0.10
	Sep-95	7.35	1570	109	327	405	750	0.26	0.13	0.13	0.16	<0.01	<2.0	0.6		93	<0.25
	Sep-96	7.23	1357	80	252	399	612	0.54	0.22	0.32	<0.4	<0.2	<0.5	0.4		89	<0.1
	Sep-97	7.28	1430	115	332	336	551	0.86	0.06	0.80	1.30	<0.2	<1.0	0.5		125	0.31
	Sep-98	7.46	2257	266	633	334	830	1.79	0.98	0.81	2.70	<0.2	5.0	1.8	20	230	0.08
	Sep-99	7.38	3254	437	900	338	1090	0.66	0.58	0.08	2.60	<0.2	<1.0	1.8	26	362	0.53
	Sep-00	7.88	1688	156	504	416	750	1.37	1.28	0.09	0.30	<0.2	<1	1.2	16	168	<0.01
	Sep-01		1620	53	484	439	970	0.49	<0.03	0.49	<0.2	<0.2	<1.0	<0.5	4	31	<0.01
	Sep-02	7.36	1937	161	496	387	697	0.83	0.65	0.18	<0.2	<0.2	<1.0	<0.5	16	167	<0.01
	Sep-03	7.50	2390	252	684	387	800	1.19	1.03	0.16	0.80	<0.2	<1.0	5.3	19	210	<0.01
	Sep-04	7.64	2710	334		32 *	945	1.50	1.14	0.36	<1	0.30	1.0	8.0	7	239	0.15
	Sep-05	8.10	1300	169	295	426	585	4.50	0.64	3.86	1.60	<0.3	<1	<2.0	13	110	<0.05
	Sep-06	8.10	1880	175	535	234	630	0.60	0.34	0.26	0.90	0.05	<1	<2.0	16	160	<0.05
	Oct-08	8.00	1390	56	266	407	550	9.00	4.50	4.50	1.50	0.03	* 13	3.0	13	91	<0.02
	Sep-10	7.80	1120	30	150	418	480	<2	<0.05	<2	3.70	<0.01	<1	<2.0	8	50	<0.02
	Sep-11	7.71	1150	32	150	441	530	9.00	<0.05	8.98	1.80	<0.01	<1	<2.0	8	50	<0.02
	Sep-12	7.42	1100	30	140	410	530	1.40	0.06	1.34	2.10	<0.01	<1	<2.0	8	48	<0.02
	Sep-13	7.90	1100	31	150	440	530	1.30	0.43	0.87	2.40	<0.01	<1	<2.0	8	51	<0.02
	Sep-14	7.78	1100	34	140	430	550	2.30	0.07	2.23	3.02	<0.01	<1	<2.0	8	54	<0.02
	Sep-15	7.71	1200	27	160	450	630	0.77	0.10	0.67	1.69	<0.01	<1	<2.0	8	50	<0.02
	Sep-16	7.91	1200	38	180	460	650	0.51	0.11	0.40	2.23	<0.01	<1	2.0	10	59	<0.02
18-II R	Sep-17	7.66	2500	170	750	360	880	1.10	0.90	0.20	0.19	0.08	<1	<2	27	240	<0.02
	Sep-18	7.74	2200	130	690	390	880	1.10	1.00	0.10	0.12	0.04	<1	<2	20	150	<0.02
	Sep-19	7.93	1600	88	430	370	730	1.20	1.10	0.10	0.10	0.18	<1	7.0	18	110	<0.1
	Sep-20	7.83	2900	280	850	350	790	2.00	2.20	<0.05	0.22	0.09	<1	10.0	23	200	<0.02
	Sep-21	7.82	1700	100	440	380	730	1.40	1.00	0.40	<0.10	0.11	<1	6.0	19	110	<0.02
	Sep-22	7.90	1900	130	480	370	880	1.10	1.00	0.10	0.27	0.08	<1	8.0	22	170	<0.02

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
18-III	Dec-85	7.18	935	6		502	534	1.00	<0.05	1.00				4.2			
	Jul-86	8.10	954	20		373	490	1.00	<0.05	1.00			<1.0	3.1			
	Nov-87	7.26	700	240		540	542	0.43	<0.01	0.43			2.2	6.0			
	Jul-88	6.92	774			496	540		<0.01				1.0				
	Nov-88		853	61		477	724	0.34	0.01	0.33				7.0			
	Oct-90		1200	13		520		0.25	<0.05	0.25	<0.2	<0.02	<2.0			42	<0.08
	Sep-91	7.74	1310	33		466	630	1.13	0.08	1.05	<0.2	0.04	<2.0	<0.5		53	<0.08
	Aug-92	7.24	1170	35		494	650	0.13	<0.02	<0.13	<0.1	<0.01	<2.0	<0.5		53	<0.08
	Aug-93	7.29	1100	33		464	570	0.26	<0.01	0.26	0.25	<0.01	<2.0	<0.3		46	<0.10
	Aug-94	7.40	1260	44		423	590	0.17	0.03	0.14	<0.02	<0.02	<5.0	<0.3		61	<0.10
	Sep-95	7.44	1480	93	286	422	680	0.13	0.09	0.04	0.20	<0.01	<2.0	0.8		83	<0.25
	Sep-96	7.30	1209	35	177	436	496	1.10	0.11	0.99	0.40	<0.2	<0.5	0.3		24	<0.1
	Sep-97	7.44	999	38	184	448	555	0.91	0.12	0.79	0.30	<0.2	<1.0	0.7		27	<0.10
	Sep-98	7.58	1086	25	188	452	546	2.07	0.07	2.00	0.60	<0.2	4.0	1.1	7	36	0.02
	Sep-99	7.59	1204	48	212	397	591	0.20	0.04	0.16	1.20	<0.2	<1.0	1.9	8	62	0.05
	Sep-00	8.09	907	20	145	432	525	0.44	0.04	0.40	2.60	<0.2	<1	0.5	8	39	<0.01
	Sep-01		1293	10	265	546	798	0.55	<0.03	0.55	<0.2	<0.2	<1.0	<0.5	4	21	<0.01
	Sep-02	7.35	1251	54	216	431	555	0.43	<0.03	0.43	0.30	<0.2	<1.0	<0.5	8	67	<0.01
	Sep-03	7.80	1119	28	218	469	578	0.59	0.06	0.53	0.80	<0.2	<1.0	0.6	8	44	<0.01
	Sep-04	8.10	834	4		379	447	0.90	<0.05	<0.90	0.30	<0.1	1.0	<5.0	2	28	0.44
	Sep-05	8.11	1190	63	223	444	560	4.80	0.07	4.73	1.00	<0.3	<1	<2.0	10	78	<0.05
	Sep-06	7.90	1170	27	178	497	630	1.70	0.81	0.89	0.80	0.05	8.0	<2.0	7	34	0.17
	Sep-07	7.90	2450 *	220 *	664 *	307	850	7.00	2.33	4.67	0.60	0.05	12.0	<2.0	21	230 *	<0.05
	Oct-08	8.00	1110	25	161	445	500	19.00	0.14	18.86	0.60	0.08	<1	5.0	8	44	0.04
18-III R	Sep-17	7.76	1200	47	160	420	510	2.00	0.12	1.88	4.66	<0.01	<10	<2	15	67	<0.02
	Sep-18	7.89	1200	59	160	420	500	0.86	0.16	0.70	6.67	<0.01	<1	<2	12	64	<0.02
	Sep-19	8.06	930	42	130	390	510	0.72	<0.050	0.70	6.38	<0.010	<1	<2	11	60	<0.1
	Sep-20	7.95	1100	48	150	410	530	0.38	<0.050	0.38	5.52	<0.010	<1	<2	11	61	<0.02
	Sep-21	8.10	1200	68	150	400	500	1.90	<0.050	1.90	6.82	<0.010	<1	<2	10	61	<0.02
	Sep-22	7.95	1100	45	130	400	510	0.46	0.29	0.17	6.36	<0.010	<1	<2	10	52	<0.02

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.

Monitor 18-III has been reported as dry since 2012.
Monitor 18-III was decommissioned in the fall of 2016.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
21-I	Jul-86	8.07	4220	10		177	2260	8.80	7.70	1.10			5.0	23.7			
	Sep-87	8.20	2880	865		144	2102	2.00					<1.0	7.0			
	Nov-87	7.76	3000	240		94	1799	3.44	1.94	1.50			<0.1	7.0			
	Jul-88	7.81	3040			104	2318	3.40	3.22	0.18			<0.5				
	Nov-88		2860	34.0		88	2158	3.33	2.04	1.29				2.0			
	Oct-89	7.88	4000	20.5		150	1919	2.90	2.81	0.09				0.3		285	
	Oct-90		1350	2.0		200		0.99	0.56	0.43	<0.2	0.02	<2.0			81	<0.08
	Sep-91	7.81	489	1.6		264	300	0.47	<0.05	0.47	<0.2	<0.01	2.2	<0.7		3	<0.08
	Aug-92	7.55	1980	5.7		169	1000	1.43	1.14	0.29	<0.1	<0.01	<2.0	<0.5		140	<0.08
	Aug-93	7.44	581	<2.6		247	300	0.52	0.11	0.41	0.52	<0.01	<2.0	0.3		15	0.12
	Aug-94	7.38	460	<2.6		234	240	0.61	0.04	0.57	0.06	<0.02	<1.0	0.5		3	0.15
	Sep-95	7.86	456	<2.6	77	218	250	0.67	0.16	0.51	0.33	<0.01	<2.0	1.7		7	<0.25
	Sep-96	7.13	465	0.5	6	211	240	1.20	0.15	1.05	1.80	<0.2	<0.5	0.8		2	<0.1
	Sep-97	7.26	385	0.6	7	224	238	3.18	1.25	1.93	2.40	0.10	<1.0	0.3		1	0.49
	Sep-98	7.47	460	0.7	6	249	266	1.81	0.51	1.30	<0.2	<0.2	<1.0	4.6	1	2	0.30
	Sep-99	7.45	435	0.6	11	211	244	0.14	0.08	0.06	0.20	<0.2	<1.0	2.0	3	8	<0.01
	Sep-00	8.01	584	1.8	102	254	285	1.75	1.52	0.23	<0.2	<0.2	<1.0	2.3	8	26	<0.01
	Sep-01		773	2.7	287	228	413	2.00	1.44	0.56	<0.2	<0.2	<1.0	3.8	12	49	<0.01
	Sep-02	7.47	1319	3.4	564	195	576	1.68	1.39	0.29	<0.2	0.30	<1.0	<0.5	15	72	<0.01
	Sep-03	7.70	445	1.4	14	221	245	0.31	<0.03	0.31	1.10	<0.2	<1.0	2.4	2	3	<0.01
	Sep-04	8.30	378	1.6		214	216	1.80	<0.05	<1.80	0.60	<0.1	<1.0	<5.0	3	5	0.66
	Sep-05	8.13	325	2.0	12	177	187	10.00	0.41	9.59	0.30	<0.3	<1	<2.0	2	4	0.06
	Sep-06	8.10	402	2.0	10	222	220	0.50	<0.05	0.50	1.40	0.01	1.0	<2.0	2	7	<0.05
	Sep-07	7.90	419	2.0	10	217	230	1.20	<0.05	1.18	0.50	<0.01	<1	<2.0	1	3	<0.05
	Oct-08	8.00	356	3.0	11	176	190	6.00	0.11	5.89	1.40	<0.01	<1	3.0	2	3	<0.02
	Sep-09	7.70	384	3.0	7	197	180	10.00	1.60	8.40	1.10	0.08	<1	<2.0	3	3	<0.02
	Sep-10	7.90	450	2.0	37	185	180	4.00	1.10	2.90	1.20	0.21	3.0	<2.0	7	17	<0.02
	Sep-11	7.87	356	2.0	4	183	180	5.00	0.95	4.05	0.70	0.07	9.0	4.0	6	2	<0.02
	Sep-12	7.49	440	2.0	11	210	220	7.50	0.42	7.08	0.72	<0.01	<1	<2.0	3	2	<0.02
	Sep-13	7.89	450	2.0	8	230	240	8.50	0.77	7.73	0.65	<0.01	<1	<2.0	4	2	<0.02
	Sep-14	8.04	440	2.0	9	230	230	2.70	0.45	2.25	0.49	0.01	<1	<2.0	6	5	0.02
	Sep-15	7.70	440	5.0	12	210	250	1.10	0.15	0.95	0.85	0.04	<1	<2.0	5	8	0.02
	Sep-16	7.82	320	3.9	11	160	180	1.60	0.27	1.33	0.42	0.01	1.5	8.0	4	2	<0.02
21-I R	Sep-17	7.73	5000	12.0	3100	180	1900	2.10	1.10	1.00	4.25	0.09	<1	7.0	46	630	<0.02
	Sep-18	7.97	4800	9.0	2800	240	1700	1.70	1.50	0.20	1.01	0.12	<1	<2	36	590	<0.02
	Sep-19	8.30	4100	7.8	1600	650	720	0.27	0.15	0.12	0.39	0.02	<1	3.0	10	770	<0.1
	Sep-20	8.18	3800	7.6	1500	650	760	0.28	0.19	0.09	0.26	<0.010	<1	<2	11	660	<0.02
	Sep-21	8.19	3200	8.3	1200	650	680	0.34	0.18	0.16	0.15	0.01	<1	4.0	10	590	<0.02
	Sep-22	8.13	3500	7.4	1500	470	1100	0.11	<0.050	0.11	0.40	0.06	<1	3.0	19	500	<0.2

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
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TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
21-II	Sep-87	8.30	1210	625		576	1182	0.30					3.0	43.0			
	Nov-87	8.22	1300	105		680	1183	1.48	<0.01	1.48			1.7	1.2			
	Jul-88	8.08	1290			546	910	0.10					<0.5				
	Nov-88		1200	30		478	917	0.79	0.56	0.23				2.0			
	Oct-89	7.91	1570	17.5		550	736	0.73	0.58	0.15				0.4		95	
	Oct-90		1660	3.9		550	0	0.50	0.33	0.17	<0.2	<0.02	<2.0			88	<0.08
	Sep-91	7.89	7090	1.6		352	550	3.08	1.22	1.86	0.80	0.25	* 67.2	4.8		60	<0.08
	Aug-92	7.38	1520	3.0		503	840	2.65	2.06	0.59	<0.1	0.02	<2.0	12.0		84	
	Aug-93	7.42	1750	<2.6		492	870	0.27	0.04	0.23	0.35	0.02	<2.0	<0.3		98	0.21
	Aug-94	7.59	1540	<2.6		387	900	0.92	0.54	0.38	0.23	<0.02	<1.0	0.7		83	0.38
	Sep-95	7.79	1980	<2.6	795	446	1000	1.67	0.49	1.18	0.23	0.03	<2.0	2.6		107	<0.25
	Sep-96	7.52	1650	4.5	635	329	840	0.38	0.14	0.24	1.60	<0.2	<0.5	0.3		105	<0.1
	Sep-97	7.52	1650	5.1	685	432	930	0.68	0.30	0.38	0.30	<0.2	<1.0	1.0		104	0.18
	Sep-98	7.30	524	5.4	52	218	200	10.70	5.70	5.00	0.30	0.60	<1.0	34.2	19	10	0.24
	Sep-99	7.71	1466	9.5	445	389	689	5.20	5.70	<0.05	4.60	0.30	<1.0	25.5	16	109	0.05
	Sep-00	7.99	1517	9.5	345	702	812	12.20	12.20	0.00	<0.2	<0.2	1.0	32.7	14	101	0.04
	Sep-01		1340	5.0	540	555	899	4.80	4.24	0.56	<0.2	<0.2	<1.0	5.3	12	49	<0.01
	Sep-02	7.49	1814	4.8	664	484	893	1.63	1.49	0.14	<0.2	<0.2	<0.1	0.6	10	100	<0.01
	Sep-03	7.50	1830	4.7	662	485	245	2.99	<0.03	2.99	<0.2	<0.2	<1.0	7.0	2	3	<0.01
	Sep-04	8.20	775	4.0		292		6.20	5.84	0.36	1.90	<0.1	1.0	29.0	8	75	0.10
	Sep-05	7.93	708	5.0	114	217	319	2.70	1.64	1.06	11.80	<0.3	<1	4.0	9	61	1.30
	Sep-06	8.10	510	4.0	56	228	280	2.50	1.25	1.25	0.80	0.03	2.0	<2.0	4	18	1.80
	Sep-07	7.60	285	8.0	42	83 *	140	1.00	0.12	0.88	2.70	0.08	<1	<2.0	3	8	<0.05
	Oct-08	8.10	1260	5.0	380	281	560	9.00	1.10	7.90	0.30	0.13	* 79	7.0	8	62	<0.02
	Sep-09	7.80	1550	6.0	500	378	730	5.00	0.81	4.19	0.90	0.09	7.0	<2.0	9	85	<0.02
	Sep-10	7.90	1750	6.0	540	424	790	5.00	1.20	3.80	1.50	0.52	1.0	<2.0	10	91	<0.02
	Sep-11	7.83	955	6.0	250	261	410	4.00	2.50	1.50	1.20	0.34	<1	<2.0	9	43	<0.02
	Sep-12	8.02	1800	8.0	570	420	850	2.40	0.90	1.50	0.87	0.05	7.3	4.0	11	103	<0.02
	Sep-16	7.91	580	7.0	38	250	260	10.00	9.20	0.80	0.42	0.12	11.0	32.0	13	13	0.28
21-II R	Sep-17	7.98	8500	20.0	4800	410	1700	1.80	0.26	1.54	6.18	0.05	<1	<2	18	1700	<0.02
	Sep-18	8.09	8300	15.0	5000	410	1700	1.20	0.39	0.81	1.80	0.02	<1	<2	17	1600	<0.02
	Sep-19	8.12	7200	12.0	3900	460	1500	0.80	0.33	0.47	0.91	0.01	<1	9.0	15	1400	<0.1
	Sep-20	7.96	5900	9.6	2900	540	1300	0.33	0.06	0.27	0.47	0.02	<1	4.0	13	1100	<0.02
	Sep-21	8.10	5200	9.7	2700	580	1100	0.80	0.27	0.53	2.72	0.02	<1	14.0	11	1000	<0.02
	Sep-22	8.02	4600	9.5	1800	600	1000	0.67	0.44	0.23	0.39	<0.010	<1	11.0	10	780	<0.2
21-III	Sep-05	7.99	525	2.0	18	287	288	106.00 *	2.71	103.29 *	<0.2	<0.3	51.0	6.0	2	7	0.32
	Sep-06	8.00	542	2.0	12	319	310	0.90	0.53	0.37	<0.1	<0.01	5.0	<2	4	9	<0.05
	Sep-07	7.90	794	6.0	8	452	460	5.00	1.15	3.85	<0.1	0.02	12.0	5.0	4	9	<0.05
	Oct-08	7.90	789	4.0	3	442	410	10.00	4.40	5.60	<0.1	<0.01	125.0	20.0	3	6	0.25
	Sep-09	7.40	975	7.0	2	570	480	13.00	11.00	2.00	<0.1	0.01	5.0	8.0	5	7	1.34
	Sep-10	7.70	905	5.0	20	491	460	12.00	4.30	7.70	<0.1	0.01	34.0	9.0	5	11	<0.02
	Sep-11	7.72	1000	6.0	28	550	530	34.00	4.80	29.20	<0.1	<0.01	4.0	3.0	6	10	<0.02
	Sep-12	7.31	990	4.0	32	470	550	4.30	2.30	2.00	<0.1	<0.01	<1	2.0	5	10	<0.02
	Sep-13	7.87	850	3.0	31	460	470	4.30	0.72	3.58	<0.5	<0.05	<1	<2.0	5	10	0.02
	Sep-14	7.74	880	3.0	33	460	510	2.90	0.48	2.42	<0.1	0.01	<1	<2.0	5	12	<0.02
	Sep-15	7.72	800	3.1	37	420	470	0.81	0.35	0.46	<0.1	0.02	<1	<2.0	5	10	0.04
	Sep-16	7.99	820	2.6	32	440	510	0.77	0.19	0.58	<0.1	<0.01	<1	2.0	6	13	<0.02
21-III R	Sep-17	7.78	2400	6.4	950	660	1400	0.15	0.08	0.07	<0.1	0.02	<1	<2	13	170	<0.02
	Sep-18	7.94	2400	5.2	920	700	1300	0.10	<0.050	0.10	<0.1	<0.01	<1	<2	11	150	<0.02
	Sep-19	8.05	2500	5.3	830	650	1200	0.16	<0.050	0.14	<0.10	<0.010	<1	<2	9	150	<0.1
	Sep-20	7.92	2400	3.7	910	650	1300	<0.10	<0.050	<0.05	<0.10	<0.010	<1	<2	10	160	<0.02
	Sep-21	8.18	2200	5.3	750	650	1200	0.13	<0.050	0.13	<0.10	<0.010	<1	<2	9	140	<0.02
	Sep-22	8.13	2200	6.4	710	630	1200	0.13	<0.050	0.13	0.25	<0.010	<1	2.0	9	160	<0.2

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.

Monitor 21-II was blocked at approximately 10 m below grade in 2013.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
22-I	Jul-86	8.50	2110	15		483	470	3.40	2.40	1.00			3.2	31.7			
	Sep-87	8.20	1080	1160		570	359	1.20					3.0	39.0			
	Nov-87												<0.1				
	Jul-88	8.17	1050			565	322	1.70	2.13	-			<0.5				
	Nov-88		916			525	337	3.53	1.94	1.59			<0.5	4.0			
	Oct-90		8630	12		<1.0	358	0.37	<0.05	0.37	<0.2	<0.02	2.0			16	<0.08
	Sep-91	7.78	789	10		261	260	0.54	0.07	0.47	<0.1	<0.01	11.0	2.9		60	<0.08
	Aug-92	7.84	878	27		348	380	19.10	1.60	17.50	0.60	0.32	<2.0			160	149.00
	Aug-93												<2.0				
	Aug-94	7.41	578	9		228	290	0.31	0.04	0.27	0.32	<0.02	<1.0	0.7		7	<0.10
	Sep-95	7.91	1200	15	336	421	540	3.15	0.39	2.76	0.25	0.05	<2.0	2.0		83	<0.25
	Sep-96	7.31	933	4	82	445	550	0.70	0.17	0.53	0.40	<0.2	<0.5	1.7		12	<0.1
	Sep-97	7.42	665	8	73	420	485	2.10	1.31	0.79	<0.2	<0.2	10.0	0.6		35	0.57
	Sep-98	7.52	703	4	54	366	529	0.83	0.04	0.79	0.20	<0.2	<1.0	2.4	3	6	0.05
	Sep-99	7.68	713	4	76	315	423	0.52	0.05	0.47	0.20	<0.2	<1.0	2.0	3	8	<0.01
	Sep-00	8.27	659	4	77	355	402	0.58	0.05	0.53	0.40	<0.2	<1	0.6	3	14	<0.01
	Sep-01		671	5	98	363	407	0.80	0.11	0.69	0.30	<0.2	<1.0	1.3	7	34	<0.01
	Sep-02	7.70	713	6	59	339	393	0.51	<0.03	0.51	0.60	<0.2	<1.0	<0.5	3	6	<0.01
	Sep-03	7.80	665	8	53	328	387	0.40	<0.03	0.40	0.90	<0.2	<1.0	0.9	3	6	<0.01
	Sep-04	8.19	782	6		406	434	13.40 *	2.92 *	10.48 *	0.10	<0.1	1.0	16.0			
	Sep-05	8.06	357	3	17	191	205	0.80	0.20	0.60	0.60	<0.3	<1	<2.0	6	5	0.05
	Sep-06	7.90	276	3	15	142	160	0.50	<0.05	0.50	0.60	<0.01	<1	<2.0	5	6	<0.05
	Sep-07	7.80	389	3	14	188	210	2.50	0.06	2.44	0.80	0.02	<1	2.0	4	3	<0.05
	Oct-08	7.90	300	20	18	127	140	1.60	0.07	1.53	1.50	0.02	<1	<2.0	5	5	<0.02
	Sep-09	7.90	1270	9	190	515	280	5.00	2.90	2.10	0.30	0.27	2.0	2.0	24	167	<0.02
	Sep-10		1220	8	170		270								25	146	<0.02
	Sep-11	8.18	1190	7	140	501	300	2.00	1.60	0.40	1.40	0.07	<1	5.0	27	148	<0.02
	Sep-12	8.01	1300	9	120	530	290	13.00	6.20	6.80	0.31	0.02	51.0	15.0	27	152	<0.02
	Sep-13	8.05	870	8	87	370	260	1.60	1.30	0.30	1.10	0.53	<1	<2.0	18	88	<0.02
	Sep-14	7.94	570	4	36	270	280	11.00	0.48	10.52	0.29	0.02	<1	<2.0	7	19	<0.02
	Sep-15	7.66	480	5	35	220	240	0.66	0.13	0.53	0.36	0.03	<1	<2.0	6	21	0.07
22-I R	Sep-17	7.81	2400	11	670	690	810	3.00	2.70	0.30	1.23	0.17	<10	<2	38	280	<0.02
	Sep-18	8.01	3000	11	1100	700	870	1.50	1.50	<0.05	0.51	0.02	<1	<2	33	400	<0.02
	Sep-19	8.15	2400	9	740	710	790	0.34	0.11	0.23	0.39	0.09	<1	4.0	22	380	<0.1
	Sep-20	7.99	2700	10	940	660	800	2.40	2.40	<0.05	0.18	0.09	<1	3.0	33	330	<0.02
	Sep-21	8.11	2200	8	540	730	740	0.82	0.74	0.08	0.43	0.05	<1	12.0	28	310	<0.02
	Sep-22	8.05	1900	6	370	710	670	0.59	0.40	0.19	0.52	0.07	<1	5.0	16	230	<0.02

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
22-II	Jul-86	7.90	911	7		462	517	0.40	0.05	0.35			<1.0	6.5			
	Sep-87	7.30	590	290		470	630	<0.10					<1.0	34.0			
	Nov-87	7.45	700	145		780	611	0.38	<0.01	0.38			<0.1	4.7			
	Jul-88	7.92	743			484	554	<0.20	<0.01				<0.5				
	Nov-88		688			482	566	0.19	<0.01	0.19			<0.5	4.0			
	Oct-89	7.25	837	42		400	472	0.17	0.05	0.12			3.0	0.3		11	
	Oct-90		4080	17		1	1487	0.18	<0.05	0.18	<0.2	<0.02	2.0			12	<0.08
	Sep-91	7.71	1040	20		339	510	0.26	<0.05	0.26	<0.2	<0.01	4.4	<0.7		14	<0.08
	Aug-92	7.08	1230	22		510	790	0.49	<0.02	0.49	<0.1	<0.01	<2.0	1.2		21	<0.08
	Aug-93	7.34	1140	<2.6		508	650	0.46	<0.01	0.46	0.08	<0.01	<2.0	8.0		18	<0.10
	Aug-94	7.18	1110	<2.6		470	630	0.61	0.05	0.56	<0.02	<0.02J	<1.0	0.6		14	<0.10
	Sep-95	7.48	1090	<2.6	259	464	650	0.93	0.05	0.88	<0.04	<0.01	<2.0	1.8		7	<0.25
	Sep-96	7.19	884	7	84	409	555	0.60	0.09	0.51	<0.1	<0.2	<0.5	0.8		11	<0.1
	Sep-97	7.29	711	7	91	355	456	7.10	0.37	6.73	1.20	<0.2	<1.0	7.1		9	0.15
	Sep-98	7.48	781	5	86	384	467	1.56	0.08	1.48	<0.2	<0.2	<1.0	6.3	3	9	0.29
	Sep-99	7.57	855	7	113	357	506	0.47	0.08	0.39	0.20	<0.2	<1.0	1.5	4	11	0.29
	Sep-00	7.92	828	5	97	466	533	0.35	0.04	0.31	<0.2	<0.2	<1	<0.5	3	10	<0.01
	Sep-01		741	9	44	449	488	2.30	9.73	-	<0.2	<0.2	* 258	30.4 *	6	8	0.05
	Sep-02	7.40	890	7	59	452	470	6.00	5.28	0.72	<0.2	<0.2	9.0	2.2	5	9	0.03
	Sep-03	7.60	845	8	69	433	432	11.90	11.70	0.20	<0.2	<0.2	1.0	7.7	6	8	0.04
	Sep-04	8.29	647	5		365	372	0.60	<0.05	<0.60	0.20	<0.1	1.0	<4.0	3	5	0.11
	Sep-05	8.12	761	5	84	373	450	1.80	0.06	1.74	<0.2	<0.3	<1	<2.0	4	9	0.20
	Sep-06	8.20	848	6	76	448	490	0.40	0.06	0.34	0.50	<0.01	<1	<2.0	5	12	<0.05
	Sep-07	8.10	962	6	84	480	580	2.70	0.24	2.46	0.10	0.01	1.0	<2.0	4	11	<0.05
	Oct-08	8.00	775	5	72	363	430	4.00	1.10	2.90	<0.1	0.01	<1	<2.0	4	7	<0.02
	Sep-09	7.70	903	5	69	455	490	11.00	0.38	10.62	<0.1	<0.01	6.0	<2.0	3	9	<0.02
	Sep-10	7.70	1020	7	75	496	530	2.00	<0.05	1.98	<0.1	<0.01	<1	<2.0	4	10	<0.02
	Sep-11	7.76	924	6	71	448	520	4.00	<0.05	3.98	<0.1	<0.01	<1	<2.0	4	9	<0.02
	Sep-12	7.47	930	6	68	410	500	1.10	<0.05	1.08	<0.10	<0.01	<1	2.0	3	9	<0.02
	Sep-13	7.91	880	5	63	430	490	0.94	0.23	0.71	<0.1	<0.01	<1	<2.0	4	8	<0.02
	Sep-14	7.78	870	5	54	430	500	<1.00	<0.05	<0.05	<0.1	<0.01	<1	<2.0	3	8	<0.02
	Sep-15	7.74	870	6	61	420	530	0.44	0.06	0.38	<0.1	0.01	<1	<2.0	4	9	<0.02
	Sep-16	7.87	840	5	64	420	540	0.29	0.07	0.22	<0.1	<0.01	<1	<2.0	4	9	<0.02
22-II R	Sep-17	7.88	1700	7	300	730	890	0.20	0.11	0.09	<0.1	0.05	<10	<2	19	100	<0.2
	Sep-18	7.89	1700	7	320	720	850	0.28	0.21	0.07	0.12	<0.01	<1	<2	14	92	<0.02
	Sep-19	8.11	1600	6	350	680	910	0.22	0.10	0.12	<0.10	<0.010	<1	5.0	13	110	<0.1
	Sep-20	7.87	1700	7	360	680	960	0.21	0.12	0.09	<0.10	<0.010	<1	<2	14	100	<0.02
	Sep-21	8.01	1600	7	310	650	780	0.18	<0.050	0.18	<0.10	<0.010	<1	5.0	11	110	<0.02
	Sep-22	8.07	1700	7	310	630	750	0.10	0.15	-	<0.10	<0.010	<1	3.0	11	310	<0.2

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
22-III	Jul-86	8.21	779	6		349	423	1.00	<0.05	1.00			<1.0	5.2			
	Sep-87	8.30	710	390		1066	533	<0.10					1.0	2.9			
	Nov-87	7.45	700	150		710	680	0.52	<0.01	0.52			<0.1	<1.0			
	Jul-88	7.77	774			528	604	<0.20	<0.01				<0.5				
	Nov-88		671			505	576	0.15	<0.01	0.15			<0.5	2.0			
	Oct-90		3040	27		<1	1671	0.20	<0.05	0.20	<0.2	<0.02	2.0				
	Aug-92	7.19	1130	15		497	730	0.26	<0.02	0.26	<0.1	<0.01	<2.0	<0.5		18	<0.08
	Sep-95	7.65	1080	<2.6	252	460	600	0.30	<0.03	0.30	0.06	<0.01	<2.0	0.7		14	<0.25
	Sep-96	7.19	904	8	89	418	507		0.07		<0.1	<0.2	<0.5	1.0		10	<0.1
	Sep-00	7.99	863	5	91	513	579	0.27	<0.03	0.27	<0.2	<0.2	<1	<0.5	2	9	<0.01
22-III R	Sep-17	8.01	1300	15	160	560	680	0.11	<0.050	0.09	<0.1	<0.01	<10	<2	9	37	0.02
	Sep-18	7.88	1100	14	130	570	670	0.13	<0.050	0.13	<0.1	<0.01	<1	<2	8	20	<0.02
	Sep-19	8.05	960	14	120	540	640	0.23	<0.050	0.21	<0.10	<0.010	<1	<2	7	17	<0.1
	Sep-20	7.91	1100	13	140	550	640	0.10	<0.050	0.10	<0.10	<0.010	<1	<2	7	17	<0.02
	Sep-21	7.99	1100	14	130	530	660	<0.10	<0.050	<0.050	<0.10	<0.010	<1	3.0	7	20	<0.02
	Sep-22	7.96	1100	14	130	520	650	0.11	0.077	0.04	<0.10	<0.010	<1	3.0	7	16	<0.2

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.

Monitor 22-III is reported as dry to near-dry between 1999 and 2005, and blocked since 2007.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
23-I	Dec-85	8.57	3340	6.6	1920	371	1140		4.00				0.6	4.1		250	
	Dec-85	7.10	3330	6.6	1520	246	267	2.85	1.60	1.25			1.6	1.8		328	
	Jul-86	8.43	3220	11.9		99	1406	2.60	2.15	0.45			2.4	1.5			
	Sep-87	7.60	2260	230.0		276	1812	1.00					2.0	44.0			
	Nov-87	7.67	2410	250.0		259	1528	1.91	0.89	1.02			2.3	9.2			
	Dec-87												0.9				
	Dec-87												6.5				
	Jul-88	7.54	2180			290			1.83				1.2				
	Nov-88		2240	32.1		240	1767	2.03	1.76	0.27			<0.5	2.0			
	Oct-89	7.58	3410	32.5		266	1501	2.62	1.94	0.68			<2.0	3.3		275	
	Oct-90		3530	5.5		263		1.60	1.19	0.41	<0.2	0.52	<2.0			221	<0.08
	Sep-91	8.33	2360	6.8		66	1100	1.23	1.30	<0.05	<0.2	0.25	<2.0	<0.7		170	<0.08
	Aug-92	7.43	3220	6.4		254	1800	2.17	2.13	0.04	<0.1	<0.01	<2.0	<0.5		240	0.90
	Aug-93	7.47	3470	6.6		261	1800	2.78	2.11	0.67	<0.02	<0.01	3.9	0.6		236	1.57
	Aug-94	7.57	3090	8.2		179	1600	2.78	2.31	0.47	<0.02	0.05	<1.0	1.1		214	0.31
	Sep-95	7.65	2600	6.8	1750	183	1200	5.37	5.10	0.27	2.51	1.36	<2.0	17.0		170	<0.25
	Sep-96	7.57	2438	4.7	1300	156	1110	35.00 *	1.77	33.23 *	2.40	<0.2	<0.5	1.4		165	0.10
	Sep-97	7.44	3130	8.0	2000	261	1780	2.70	2.10	0.60	<0.2	<0.1	<1.0	1.1		239	0.88
	Sep-98	7.78	3122	6.8	2020	236	1770	2.38	2.38	0.00	<0.2	<0.2	<1.0	5.0	29	241	0.03
	Sep-99	7.69	3120	6.8	1880	158	1610	2.80	2.35	0.45	0.20	<0.2	<1.0	1.9	27	248	0.02
	Sep-00	8.01	2539	7.5	2060	240	1750	2.79	2.51	0.28	<0.2	<0.2	<1	2.1	29	240	<0.01
	Sep-01		2308	34.8 *	2120	244	1880	3.10	2.63	0.47	0.60	<0.2	<1.0	1.0	28	243	<0.01
	Sep-02	7.50	3291	7.7	2050	251	1770	3.04	2.80	0.24	<0.2	<0.2	<1.0	<0.5	28	229	0.01
	Sep-03	7.60	3230	7.9	1820	215	1568	2.73	2.76	<0.05	<0.2	<0.2	<1.0	0.6	26	211	<0.01
	Sep-04	8.03	3060	7.8		232	1660	3.70	3.08	0.62	<1	<0.1	3.0	14.0	31	268	0.43
	Sep-06	8.10	1230	7.0	409	223	500	8.00	5.40	2.60	1.10	0.14	2.0	<2.0	17	65	<0.05
	Sep-07	8.00	2770	7.0	1480	212	1300	5.20	2.55	2.65	0.30	0.02	<1	<2.0	25	190	<0.05
	Oct-08	8.00	805 *	5.0	937	393	840	4.90	3.30	1.60	0.40	1.30	<1	2.0	18	130	<0.02
	Sep-09	7.50	3460	9.0	1900	249	1600	4.00	2.50	1.50	<0.1	0.01	3.0	<2.0	32	247	<0.02
	Sep-10	7.70	3480	9.0	1900	246	1700	5.00	2.50	2.50	<0.1	<0.01	<1	<2.0	30	244	<0.02
	Sep-11	7.75	2950	8.0	1500	233	1400	6.00	4.50	1.50	1.80	0.13	<1	<2.0	28	213	<0.02
	Sep-12	7.44	2900	9.0	1400	200	1300	3.00	2.80	0.20	1.90	<0.01	<1	<2.0	26	204	<0.02
	Sep-13	7.89	3000	8.0	1600	210	1500	3.40	2.60	0.80	<0.1	0.12	5.3	<2.0	30	220	0.06
	Sep-14	7.73	3000	8.0	1600	190	1400	4.00	3.30	0.70	<0.1	0.01	<1	<2.0	29	220	0.06
	Sep-15	7.62	3400	8.9	1800	240	1800	2.90	2.60	0.30	<0.1	0.05	1.7	<2.0	34	270	<0.02
	Sep-16	7.81	3500	8.7	1900	250	1800	3.00	2.40	0.60	<0.1	0.04	<1	8.0	34	260	<0.02
	Sep-17	7.84	3200	9.5	1700	210	1600	2.50	2.10	0.40	0.52	1.04	<10	2.0	30	230	<0.02
	Sep-18	7.85	3400	8.6	1900	260	1700	4.00	3.10	0.90	<0.1	0.04	18.0	<2	31	250	<0.02
	Sep-19	8.22	2700	7.3	1400	160	1300	5.00	4.30	0.70	<0.10	0.54	<1	13.0	25	190	<0.1
	Sep-20	7.65	3200	8.7	1900	250	1800	2.40	2.60	<0.05	<0.10	0.06	<1	<2	32	250	<0.02
	Sep-21	7.93	2900	8.2	1600	200	1300	3.40	2.90	0.50	<0.10	0.43	12.0	13.0		190	<0.02
	Dec-22	7.74	2800	7.3	1300	170	1500	3.30	2.90	0.40	<0.10	0.23	1.8	9.0	27	220	0.51

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
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3) Blank indicates parameter not analysed.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
23-II	Dec-85	7.37	1620	1.8	150	805	718	1.70	1.20	0.50			<1.0	3.1		64	
	Dec-85	8.12	1583	1.2	116	839	722	1.50	1.00	0.50			<1.0	1.5		64	
	Jul-86	8.41	1320	3.5		753	705	2.00	<0.05	2.00			<1.0	31.1			
	Sep-87	7.20	950	230.0		718	775	0.30					2.0	75.0			
	Nov-87	7.50	1010	110.0		631	598	0.77	<0.01	0.77			1.8	11.9			
	Dec-87												1.4				
	Dec-87												5.7				
	Jul-88	7.72				790			0.51				<0.5				
	Nov-88		853	25.7		497	771	0.49	0.34	0.15			<0.5	2.0			
	Oct-89	7.70	1210	132.5		748	686	0.77	0.29	0.48			<2.0	3.6		44	
	Oct-90		1510	2.6		760		0.51	0.24	0.27	<0.2	<0.02	<2.0			40	0.11
	Sep-91	8.10	1370	<1.6		747	810	0.25	<0.05	0.25	<0.1	<0.01	<2.0	1.4		42	<0.08
	Aug-92	7.44	1370	<1.6		741	840	0.44	0.18	0.26	<0.1	<0.01	<2.0	<0.5		43	<0.08
	Aug-93	7.71	1460	<2.6		763	790	0.33	0.09	0.24	0.15	<0.01	<2.0	<0.3		45	<0.10
	Aug-94	7.65	1480	<2.6		720	840	0.61	0.14	0.47	<0.02	<0.02	<1.0	0.6		44	<0.10
	Sep-95	7.47	1480	<2.6	282	725	810	0.40	0.13	0.27	0.08	<0.01	<2.0	2.2		49	<0.25
	Sep-96	7.72	1381	3.2	138	715	758	0.35	0.19	0.16	0.60	<0.2	<0.5	1.4		45	<0.1
	Sep-97	7.74	1190	3.4	132	728	768	0.70	0.06	0.64	0.30	<0.1	<1.0	0.1		43	<0.10
	Sep-98	8.20	1256	2.9	132	696	753	0.08	<0.02	0.08	0.40	<0.2	<1.0	2.8	8	46	0.02
	Sep-99	7.65	1453	2.3	170	781	814	0.41	0.11	0.30	<0.2	<0.2	<1.0	2.2	10	51	0.01
	Sep-00	7.91	1205	3.2	141	756	742	3.33	2.72	0.61	<0.2	<0.2	1.0	6.5	8	50	<0.01
	Sep-01		1068	3.2	130	798	819	1.65	0.98	0.67	0.20	<0.2	<1.0	5.1	9	51	<0.01
	Sep-02	7.75	1371	4.1	116	796	734	2.27	1.89	0.38	0.20	0.30	<1.0	2.4	9	47	<0.01
	Sep-03	7.50	1490	4.4	119	742	752	0.71	0.44	0.27	0.30	0.20	<1.0	2.3	10	51	<0.01
	Sep-04	8.26	1360	2.5		838	848	2.00	0.46	1.54	<0.1	0.20	<1.0	8.0	13	67	0.42
	Sep-06	8.10	1490	5.0	103	898	820	4.50	3.15	1.35	0.10	0.02	4.0	3.0	12	63	<0.05
	Sep-07	8.10	1470	5.0	100	818	790	3.60	2.22	1.38	0.10	0.05	11.0	2.0	9	56	<0.05
	Oct-08	8.10	1490	4.0	128	785	720	2.80	1.20	1.60	<0.1	0.09	<1	3.0	8	61	<0.02
	Sep-09	7.70	1450	4.0	120	778	720	1.80	1.30	0.50	<0.1	0.06	3.0	<2.0	8	60	<0.02
	Sep-10	7.70	1460	4.0	110	753	700	5.70	2.90	2.80	<0.1	0.12	32.0	16.0	7	57	<0.02
	Sep-11	7.82	1470	4.0	120	753	750	5.00	0.73	4.27	0.10	0.08	4.0	<2.0	9	63	<0.02
	Sep-12	7.65	1500	4.0	130	750	720	4.70	0.80	3.90	<0.1	0.05	<1	<2.0	8	62	<0.02
	Sep-13	8.09	1500	4.0	140	750	780	0.88	0.62	0.26	0.59	0.10	<1	<2.0	9	68	<0.02
	Sep-14	7.88	1500	4.0	140	750	790	1.20	0.59	0.61	<0.1	0.02	<1	<2.0	9	71	<0.02
	Sep-15	7.98	1500	3.8	140	750	830	0.45	0.18	0.27	0.38	0.20	<1	<2.0	9	71	<0.02
	Sep-16	8.00	1500	3.9	160	750	880	1.10	0.48	0.62	<0.1	0.03	<1	<2.0	10	79	<0.02
	Sep-17	7.88	1500	6.6	160	760	810	0.98	0.72	0.26	0.23	0.52	<10	<2	9	70	<0.02
	Sep-18	7.99	1400	4.1	150	790	770	0.30	0.11	0.19	0.20	0.06	<1	<2	9	66	<0.02
	Sep-19	8.15	1300	4.3	110	760	780	0.94	0.80	0.14	0.22	0.31	<1	17.0	9	68	<0.1
	Sep-20	8.15	1400	4.8	150	750	790	0.41	0.27	0.14	0.23	0.09	<1	5.0	9	73	<0.02
	Sep-21	7.99	1400	4.1	140	770	730	1.80	1.60	0.20	<0.10	0.06	<1	15.0	8	64	<0.02
	Dec-22	7.75	1500	3.3	98	780	750	2.90	2.40	0.50	<0.10	0.02	1.2	10.0	10	67	0.11

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
23-III	Nov-85	7.44	959	4.8	49	493	516	0.50	0.05	0.45			41.0	3.6		14	
	Dec-85	7.23	941	3.2	50	487	466	0.30	0.05	0.25			7.8	1.7		21	
	Dec-85	7.28	915	4.2	37	495	506	0.40	0.10	0.30			3.6	1.3		14	
	Jul-86	8.10	871	4.5		487	475	0.40	<0.05	0.40			<1.0	0.6			
	Sep-87	7.30	110	220.0		444	572	<0.10					2.0	4.0			
	Nov-87	7.61	659	13.5		386	391	0.02	<0.01	0.02			2.3	5.6			
	Dec-87												<0.1				
	Dec-87												2.3				
	Jul-88	7.32				488	514	<0.20					<0.5				
	Nov-88		578	27.5		490	527	0.20	<0.01	0.20			0.7	1.0			
	Oct-89	7.45	883	23.5		476	385	0.32	0.05	0.27			<2.0	5.2		10	
	Oct-90		861	2.5		478	0	0.19	<0.05	0.19	<0.2	<0.02	<2.0			12	0.10
	Sep-91	7.63	908	<1.6		449	490	0.15	<0.05	0.15	<0.2	<0.01	<2.0	<0.7		11	1.69
	Aug-92	7.40	862	<1.6		443	490	0.15	<0.02	-	<0.1	<0.01	<2.0	<0.5		11	<0.08
	Aug-93	7.42	832	<2.6		460	500	0.09	<0.01	0.09	0.13	<0.01	<2.0	<0.3		11	<0.10
	Aug-94	7.42	842	<2.6		414	460	0.45	0.19	0.26	<0.02	<0.02	<1.0	0.4		9	<0.10
	Sep-95	7.54	845	<2.6	111	387	450	0.13	<0.03	0.13	0.15	<0.01	<2.0	0.5		12	<0.25
	Sep-96	7.32	863	3.1	46	440	479	0.40	0.18	0.22	0.10	<0.2	<0.5	0.2		11	0.10
	Sep-97	7.44	711	2.6	81	398	442	1.90	0.12	1.78	0.30	<0.1	<1.0	0.6		10	0.39
	Sep-98	7.39	776	3.0	53	421	439	1.51	0.86	0.65	<0.2	<0.2	<1.0	4.9	5	11	0.54
	Sep-99	7.62	835	2.5	58	421	499	0.19	0.17	0.02	<0.2	<0.2	<1.0	2.3	4	12	0.11
	Sep-00	8.11	732	2.5	56	446	464	0.14	0.04	0.10	<0.2	<0.2	<1	1.0	4	11	<0.01
	Sep-01		656	3.1	51	440	470	0.40	0.10	0.30	<0.2	<0.2	<1.0	1.4	5	10	<0.01
	Sep-02	7.49	796	2.7	62	408	421	0.26	13.00 *	-	<0.2	<0.2	<1.0	<0.5	4	11	<0.01
	Sep-03	7.50	802	4.2	57	411	455	0.16	0.11	0.05	<0.2	<0.2	<1.0	2.0	4	11	0.04
	Sep-04	8.18	757	2.7		401	421	0.30	<0.05	<0.30	<0.1	<0.1	<1.0	<4	4	19	0.21
	Sep-06	8.00	829	4.0	66	443	420	0.40	0.08	0.32	<0.1	<0.01	<1	<2	6	20	<0.05
	Sep-07	8.10	803	4.0	63	399	410	0.90	<0.05	0.88	0.10	0.03	<1	<2	5	25	<0.05
	Oct-08	8.20	775	4.0	59	379	350	1.10	0.20	0.90	<0.1	<0.01	<1	<2	3	40	<0.02
	Sep-09	7.70	784	4.0	49	402	370	0.90	<0.05	0.90	0.10	<0.01	<1	<2	4	31	<0.02
	Sep-10	7.90	828	4.0	42	414	370	0.90	<0.05	0.88	<0.1	<0.01	<1	<2	2	41	<0.02
	Sep-11	7.96	812	3.0	39	405	380	1.00	<0.05	0.98	<0.1	<0.01	<1	<2	3	40	<0.02
	Sep-12	7.62	770	5.0	33	350	350	0.21	<0.05	0.19	<0.10	<0.01	<1	<2.0	3	35	<0.02
	Sep-13	8.02	720	5.0	30	370	330	0.43	0.08	0.35	<0.1	<0.01	<1	<2	4	35	<0.02
	Sep-14	7.86	750	6.0	28	380	350	0.60	<0.05	0.55	<0.1	<0.01	<1	<2	3	35	<0.02
	Sep-15	7.83	770	4.9	34	400	430	0.22	<0.05	0.21	<0.1	<0.01	<1	<2	4	34	<0.02
	Sep-16	7.93	790	5.0	34	410	460	0.62	0.05	0.58	<0.1	<0.01	<1	<2	5	26	<0.02
	Sep-17	8.03	740	7.1	28	380	360	0.16	0.06	0.10	0.18	0.01	<10	<2	4	28	0.02
	Sep-18	8.05	770	5.6	32	420	390	<0.10	<0.050	<0.10	<0.1	<0.01	<1	<2	4	23	<0.02
	Sep-19	8.15	530	6.1	22	340	330	0.11	<0.050	0.09	<0.10	<0.010	<1	<2	3	28	<0.1
	Sep-20	7.74	690	6.7	26	380	390	0.59	0.26	0.33	0.15	0.02	<1	12.0	5	24	<0.02
	Sep-21	8.13	690	4.8	28	370	350	0.25	0.17	0.08	<0.10	0.05	<1	4.0	3	21	<0.02
	Dec-22	7.60	690	4.3	24	370	360	1.60	1.60	-	<0.10	0.04	17.0	25.0	4	19	5.60

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TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
24-I	Dec-85	6.52	76400	34820	1300	104	23100		31.50				25.0	1.8		12400	
	Dec-85	7.38	57800	24340	1500	94	15800		22.00				10.6	1.3		8550	
	Jul-86	5.84	79400			1	25773		31.50				3.4	0.9			
	Sep-87	6.80	35800	41730		550	25291	9.57					7.0	1.8			
	Nov-87	6.87	34300	38860		39	27765	29.90	24.98	4.92			2.5	9.0			
	Dec-87												<0.1				
	Dec-87												4.0				
	Jul-88	6.49	56000	42195		21	27910	31.40	32.20	<0.05			2.0				
	Nov-88		56500	36289		36	27100	30.89					<0.5	9.0			
	Oct-89	6.57	89300	42470		21	22748	36.78	32.72	4.06			<2.0	2.9		14000	
	Oct-90		112000	44500		<1.0		35.20	33.60	1.60	<0.2	<0.02	13.0			13700	18.5
	Sep-91	6.25	74000	42500		30	29000	44.60	34.00	10.60	<0.2	<0.01	<2.0	<0.7		23300	18.2
	Aug-92	6.73	81900	47900		56	30000	44.60	33.20	11.40	<0.1	<0.01	<2.0	<0.5		17700	15.0
	Aug-93	6.41	85500	52600		28	28000	43.50	28.90	14.60	<0.02	<0.01	5.3	0.6		18100	22.1
	Aug-94	6.27	84800	42000		24	63000	45.90	35.10	10.80	<0.02	<0.02	6.0	2.1		27400	25.9
	Sep-95	6.41	87900	42200	1340	18	28000	31.00	33.80	<0.05	<0.04	<0.01	11.0	<0.5		21500	15.7
	Sep-96	6.18	82490	45500	1070	22	28300	29.70	32.00	<0.05	<1.0	<20.0	<0.5	3.5		15200	24.9
	Sep-97	6.34	73000	43300	1330	6		36.80	27.30	9.50	<2.0	<20.0	<1.0	0.2		14800	21.4
	Sep-98	6.56	79540	40200	1290	2	25700	28.00	28.00	0.00	<2.0	<2.0	<1.0	4.4	260	13400	32.4
	Sep-99		87590	41200	1290	17	27600	33.70	33.40	0.30	<2.0	<20.0	<1.0	6.9	263	15000	29.7
	Sep-00		61280	43600	1230	14	25900	34.00	33.10	0.90	<2.0	<20.0	<1	2.4	249	14700	12.5
	Sep-01		114500	45300	1190	33	26900	46.00	29.90	16.10	<20.0	<20.0	<1.0	0.8	300	14300	6.6
	Sep-02	6.40	124200	42300	1250	33	26400	30.60	<0.03	30.60	<2.0	<20.0	<1.0	1.3	268	13200	9.8
	Sep-03	7.50	106000	45100	1080	<1.0	27420	45.30	32.00	13.30	<2.0	<20.0	<1.0	1.0	237	14500	16.3
	Sep-04	6.44	63400	37200		12	26700	36.00	34.60	1.40	<200	<0.1	<1.0	<5	304	15200	44.4
	Sep-05	6.63	54300	34300	<1000	23		46.00	36.50	9.50	<200	<0.3	2.0	<2	320	16000	* <5
	Sep-06	6.80	89400	43200	1190	47	27000	36.00	33.00	3.00	<0.1	0.02	32.0	<2	270	15000	42.0
	Sep-07	6.40	92500	44000	1180	24	31000	36.00	43.60	<0.05	<0.1	0.01	11.0	3.0	310	17000	61.0
	Oct-08	6.50	94900	41000	1090	34	25000	50.00	42.00	8.00	<0.1	0.01	<1	3.0	142	13300	51.0
	Sep-09	6.50	94600	38000	1300	44	25000	39.00	37.00	2.00	<0.1	0.02	6.0	<2	191	13300	5.0
	Sep-10	6.60	94800	41000	1200	31	26000	28.00	34.00	<0.05	<0.1	<0.01	2.0	<200	181	14400	17.0
	Sep-11	6.55	91800	41000	1200	37	27000	35.00	33.00	2.00	<0.1	<0.1	60.0	<2	297	14400	5.0
	Sep-12	6.24	93000	42000	1100	25	24000	37.00	34.00	3.00	<0.10	<0.10	58.0	<2.0	131	13700	20.0
	Sep-13	6.52	94000	44000	1200	24	26000	32.00	33.00	<0.05	<0.5	<0.05	<1	3.0	260	14000	18.0
	Sep-14	6.43	95000	44000	1200	23	27000	38.00	33.00	5.00	<0.5	<0.05	<1	<2	270	15000	14.0
	Sep-15	6.17	94000	43000	1200	23	27000	27.00	31.00	<0.05	<0.1	<0.05	11.0	<2	290	15000	20.0
	Sep-16	6.67	94000	42000	1200	39	27000	35.00	33.00	2.0	<0.5	<0.05	22.0	<2	290	15000	6.5
	Sep-17	6.58	94000	42000	1200	38	27000	38.00	33.00	5.00	<1.0	<0.01	17.0	3.0	280	14000	28.0
	Sep-18	6.47	94000	43000	1200	32	27000	34.00	36.00	<0.05	<1.0	<0.01	0.0	<2	290	15000	15.0
	Sep-19	6.34	90000	39000	1100	24	26000	38.00	35.00	3.00	<0.10	0.05	11.0	9.0	290	13000	69.0
	Sep-20	6.33	89000	40000	1200	23	26000	37.00	38.00	<0.05	<0.10	<0.050	<5	<40	290	14000	79.0
	Sep-21	6.42	91000	44000	1100	26	27000	35.00	35.00	<0.05	<0.10	<0.010	<5	6.0	260	15000	25.0
	Sep-22	6.31	94000	34000	1100	22	27000	40.00	36.00	4.00	<1.0	<0.10	35.0	<40	280	15000	37.0

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TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
24-II	Dec-85	7.68	25900	9320	1750	131	6240	11.70	11.30	0.40			4.6	3.2		3650	
	Dec-85	6.66	78800	35860	1300	36	23800		33.00				10.6	1.9		12400	
	Jul-86	7.15	88200			28	23170		30.50				3.4	2.7			
	Sep-87	6.70	34500	17025		220	24603	4.41					4.0	1.1			
	Nov-87	6.83	33300	33045		56	24334	28.55	26.45	2.10			0.1	9.3			
	Dec-87												<0.1				
	Dec-87												2.7				
	Jul-88	6.47	50000	35685		28	24130	30.50	30.99	<0.05			1.8				
	Nov-88		49000	32181		24	23750	38.33					<0.5	7.0			
	Oct-89	6.61	79100	36388		74	19721	37.02	30.90	6.12			<2.0	2.9		11400	
	Oct-90		99000	36800		4		35.70	31.70	4.00	<0.2	<0.02	<2.0			11700	19.5
	Sep-91	6.48	70700	37500		29	25000	40.10	33.10	7.00	<0.2	<0.01	<2.0	2.3		19100	9.3
	Aug-92	6.63	71700	37600		60	24000	42.80	31.90	10.90	<0.1	<0.01	<2.0	<0.5		15400	17.3
	Aug-93	6.63	76400	49100		25	27000	45.10	28.50	16.60	<0.02	<0.01	3.5	0.6		15400	26.8
	Aug-94	6.62	77900	35600		26	28000	40.60	32.90	7.70	<0.02	<0.02	<5.0	1.6		22700	28.8
	Sep-95	6.40	78800	149	1390	21	25000	31.10	32.50	<0.05	<0.04	<0.01	25.0	<0.5		17700	10.3
	Sep-96	6.38	73900	38700	1140	25	25300	30.20	29.00	1.20	<1.0	<20.0	<0.5	2.5		13200	8.9
	Sep-97	6.08	66600	38500	1290	1	23000	30.70	28.30	2.40	<2.0	<20.0	<1.0	0.7		12800	17.8
	Sep-98	7.12	72100	36100	1360	<1	24000	31.00	32.00	<0.05	<2.0	<2.0	<1.0	1.2	251	12100	6.2
	Sep-00		55620	37400	1280	33	22700	31.00	31.50	<0.05	<2.0	<20.0	<1	<0.5	235	12800	<0.10
	Sep-01		102000	38900	1220	34	24000	10.00	0.04	9.96	<20.0	<20.0	<1.0	<0.5	334	12500	<1.0
	Sep-02	6.58	112700	39700	1270	24	24000	37.00	0.47	36.53	<2.0	<20.0	11.0	15.4	312	11700	38.9
	Sep-03	7.60	96000	40500	1070	27	25290	40.50	43.20	<0.05	<2.0	<20.0	<1.0	3.3	244	13100	17.9
	Sep-04	7.06	58800	33200		63	22700	40.30	37.20	3.10	<200	<0.1	<1.0	<6	283	12500	12.0
	Sep-05	6.40	58700	45200	2330	18	26800	27.00	31.00	<0.05	<0.2		2	<2	* 7	200 *	<0.05
	Sep-06	6.70	82700	39600	1180	27	26000	35.00	29.40	5.60	<0.1	0.02	31	<2	280	15000	<3.00
	Sep-07	6.60	85600	37000	1200	24	29000	34.00	39.90	<0.05	<0.1	<0.01	8	<2	300	15000	18.0
	Oct-08	6.60	86700	38000	1160	26	25000	33.00	37.00	<0.05	<0.1	0.02	<1	<2	272	13000	12.2
	Sep-09	6.40	87600	33000	1300	27	23000	36.00	40.00	<0.05	<0.1	0.02	2	<2	201	12000	<2
	Sep-10	6.60	87100	38000	1200	25	24000	37.00	42.00	<0.05	<0.1	<0.01	2	<200	215	12600	10.0
	Sep-11	6.47	84700	38000	1200	17	24000	42.00	32.00	10.00	<0.1	<0.1	* 106	<2	235	12500	9.0
	Sep-12	6.54	83000	37000	1100	100	23000	58.00	56.00	2.00	<0.10	<0.10	26	130.0 *	195	12500	12.0
	Sep-13	6.82	87000	39000	1200	46	24000	35.00	35.00	<0.05	<0.5	<0.05	4	14	260	13000	12.0
	Sep-14	6.63	88000	39000	1200	32	25000	35.00	32.00	3.00	<0.5	<0.05	<1	<2	260	13000	13.0
	Sep-15	6.66	87000	37000	1200	120	25000	46.00	52.00	<0.05	<0.1	<0.05	16.0	8.0	300	13000	16.0
	Sep-16	6.63	88000	37000	1200	25	25000	32.00	32.00	<0.05	<0.5	<0.05	21.0	<2.0	280	13000	10.0
	Sep-17	6.73	88000	39000	1200	45	25000	34.00	34.00	<0.05	<1	<0.01	18	<2	280	13000	9.6
	Sep-18	6.63	89000	39000	1200	36	25000	33.00	35.00	<0.05	<1	<0.01	0	<2	300	13000	12.0
	Sep-19	6.80	86000	37000	1200	38	26000	35.00	34.00	1.00	<0.50	<0.050	<20	<2	290	12000	<1
	Sep-20	6.72	84000	38000	1300	48	24000	36.00	36.00	<0.05	<0.10	<0.010	<5	<40	280	13000	0.5
	Sep-21	6.82	82000	38000	1100	40	26000	41.00	35.00	6.00	<0.10	<0.010	<5	<2	270	13000	11.0
	Sep-22	6.70	89000	39000	1100	89	25000	76.00	68.00	8.00	<1.0	<0.10	22.0	20.0	280	14000	28.0

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TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
24-III	Nov-85	7.24	3930	492	1000	816	1210	3.30	0.60	2.70				6.8		406	
	Dec-85	7.31	2210	127	500	509	568	0.70	0.20	0.50			<1.0	1.9		266	
	Dec-85	7.37	2150	121	460	562	564	0.70	0.10	0.60			<1.0	2.3		272	
	Jul-86	8.30	2280	209		1	550	1.00	0.05	0.95			<1.0	5.9			
	Sep-87	7.90	1250	480		530	659	<0.05	<1.00	-			2.7	24.0			
	Nov-87	7.34	1800	640		800	740	0.47	<0.01	0.47			3.0	10.0			
	Dec-87												<0.1				
	Dec-87												1.7				
	Jul-88	7.55		127		630	496	<0.20	0.01	-			4.1				
	Nov-88		1550			578							<0.5	3.0			
	Oct-89	7.76	1790	228		606	389	0.20	0.05	0.15			<2.0	3.5		200	
	Oct-90		1320	73		590		0.17	<0.05	0.17	<0.2	<0.02	<2.0			178	<0.08
	Sep-91	7.53	1800	112		577	480	0.33	<0.05	0.33	0.30	<0.01	<2.0	<0.7		410	<0.08
	Aug-92	7.46	1500	72		598	600	0.41	<0.02	0.41	<0.1	<0.01	81.7	<0.5		150	<0.08
	Aug-93	7.50	1730	114		620	560	0.29	<0.01	0.29	0.11	<0.01	3.8	0.5		401	0.11
	Aug-94	7.33	1980	145		568	560	0.39	<0.02	0.39	<0.02	<0.02	<5.0	1.1		213	<0.10
	Sep-95	7.52	1990	174	180	577	620	0.73	<0.03	0.73	0.25	0.01	<2.0	<0.5		184	<0.25
	Sep-96	7.22	1840	203	181	587	665	0.46	<0.02	0.46	1.70	<0.2	<0.5	2.9		183	<0.1
	Sep-97	7.30	1780	184	188	608	686	0.47	0.04	0.43	1.50	<0.2	<1.0	0.2		184	0.44
	Sep-98	7.53	1795	187	167	618	648	1.51	0.03	1.48	3.40	<0.2	<1.0	2.0	28	185	0.14
	Sep-99		1803	220	135	611	590	1.80	0.28	1.52	2.20	<0.2	<1.0	15.4 *	27	192	1.34
	Sep-00		1476	198	124	594	548	0.36	0.03	0.33	2.00	<0.2	<1	1.2	26	178	<0.01
	Sep-01		1414	180	165	544	637	0.39	<0.03	0.39	1.20	<0.2	<1.0	<0.5	25	163	<0.01
	Sep-02	7.32	1637	184	144	543	545	0.32	0.88	<0.05	0.80	<0.2	<1.0	<0.5	24	150	<0.01
	Sep-03	7.60	1750	206	126	506	521	0.37	0.10	0.27	1.10	<0.2	<1.0	0.7	24	156	<0.01
	Sep-04	8.08	1610	149		563	538	1.20	<0.05	<1.20	2.00	<0.1	<1.0	<5	26	184	0.28
	Sep-05	8.11	1640	174	131	611	652	3.00	0.18	2.82	3.00		<1	<2	29	170	0.45
	Sep-06	8.00	1840	189	162	648	640	0.40	0.05	0.35	1.40	0.01	<1	<2	30	190	<0.05
	Sep-07	7.90	1800	180	146	602	660	2.00	<0.05	1.98	0.70	<0.01	<1	<2	30	180	<0.05
	Oct-08	8.10	1880	180	197	554	590	<2	0.09	<1.91	1.20	0.01	<1	<2	28	162	<0.02
	Sep-09	7.80	1790	150	200	563	520	2.00	0.05	1.95	2.80	<0.01	<1	<2	26	139	<0.02
	Sep-10	7.90	1700	130	180	563	520	4.00	0.05	3.95	1.10	<0.01	<1	<2	25	144	<0.02
	Sep-11	7.74	1700	120	200	564	560	5.00	0.08	4.92	0.70	<0.01	<1	<2	27	150	<0.02
	Sep-12	7.98	1000	28	57	450	340	<1.0	0.14	<0.86	0.24	<0.01	<1	<2	19	69	<0.02
	Sep-13	8.05	1100	36	78	430	350	1.70	0.06	1.64	<0.5	<0.05	<1	<2	21	95	<0.02
	Sep-14	7.91	1100	39	64	430	370	1.20	0.09	1.11	0.31	<0.01	<1	<2	19	78	<0.02
	Sep-15	7.77	1500	110	160	510	550	0.76	0.07	0.69	0.33	<0.01	<1	<2	27	140	<0.02
	Sep-16	8.08	1200	62	94	450	440	0.74	<0.05	0.73	0.32	<0.01	<1	<2	26	120	<0.02
	Sep-17	7.95	1100	43	60	440	370	0.30	0.070	0.23	0.30	0.02	<10	<2	22	87	<0.02
	Sep-18	7.95	1000	40	58	460	370	0.15	<0.050	0.15	0.26	<0.01	<1	<2	22	89	<0.02
	Sep-19	8.05	930	41	54	460	390	0.30	<0.050	0.28	0.24	<0.010	<1	<2	20	77	<0.1
	Sep-20	7.98	1000	40	52	440	340	0.22	<0.050	0.22	0.19	<0.010	<1	<2	21	83	<0.02
	Sep-21	8.09	880	31	32	400	320	0.27	<0.050	0.27	0.17	<0.010	<1	4.0	17	55	<0.02
	Sep-22	7.97	950	38	38	450	410	0.34	0.11	0.23	0.13	<0.010	<1	<2	20	74	<0.02

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BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
25-I	Oct-90		3600	227		1.00	1366	7.8	4.35	3.41	<0.2	<0.02	32.0			123	10.50
Leachate	Sep-91	7.09	2710	227		1210	1300	9.0	6.38	2.63	<0.2	<0.01	52.4	7.1		110	2.12
	Aug-92	6.82	2500	195		1250	1400	25.7	4.47	21.23	<0.1	<0.01	18.4	10.0		100	18.30
	Aug-93	6.95	2710	184		1520	1500	5.8	3.57	2.21	0.03	<0.01		14.0		102	21.80
	Aug-94	7.34	2630	165		1320	1400	5.7	3.43	2.31	<0.02	<0.02				87	23.20
	Sep-95	6.90	2510	164		1290	3300	9.3	5.32	3.96	<0.04	<0.01	15.0	12.0		79	75.40
	Sep-96	6.62	2321	116	1	1171	1160	8.0	6.50	1.50	<0.1	<0.2	68.2	30.1		59	27.40
	Sep-97	6.97	2180	13	2	1310	1230	11.7	6.60	5.10	<0.2	<0.2	25.0	0.6		64	17.70
	Sep-98	6.83	2058	107	2	1150	1190	26.1	6.98	19.12	<0.2	<0.2	25.0	26.4	26	68	0.22
	Sep-99	7.16	2366	128	2	1340	1350	10.1	5.81	4.29	<0.2	<0.2	29.0	26.4	29	61	0.30
	Sep-00	7.66	2140	199	3	1250	1220	14.5	10.30	4.20	<0.2	<0.2	30.0	57.7	28	62	0.03
	Sep-01		5910 *	923 *	14	1880	1270	304.0 *	212.00 *	92.00 *	<0.2	<0.2	<1.0	17.8	122	534 *	0.19
	Sep-02	7.65	3263	308	664 *	1040	1420	47.0	40.20	6.80	0.60	<0.2	<2.0	4.0	67	221	<0.10
	Sep-03	7.40	2500	192	1	1150	1192	51.7	32.20	19.50	<0.2	<0.2	0.9	99.0	28	58	0.09
	Sep-04	7.76	7100 *	1150 *		<1 *	1020	423.0 *	293.00 *	130.00 *	<0.1	<0.1	10.0	254.0	206	901 *	0.80
	Sep-05	7.61	2010	139	<10	1160	1230	10.0	4.86	5.14	<0.2		15.0	50.0	29	54	13.00
	Sep-06	7.50	2250	166	<20	1230	1100	12.0	7.52	4.48	<0.1	0.01	24.0	18.0	28	52	4.30
	Sep-07	7.40	3030	190	<1	1600	1700	28.0	24.5	3.50	<0.1	<0.01	19.0	12.0	45	97	0.11
	Oct-08	7.50	5130	460	<20	2340	1500	170.0	150.0	20.0	<0.1	<0.01	27.0	19.0	163	255	0.51
	Sep-09	7.20	4370	530	<10	1810	1500	92.0	79.0	13.00	<0.1	<0.01	25.0	15.0	89	213	0.29
	Sep-10	7.40	3560	360	<1	1510	1400	54.0	45.0	9.00	<0.1	<0.01	16.0	25.0	59	125	0.34
	Sep-11	7.40	6690	540	<1	3040	1900	190.0	190.0	0.00	<1	<0.1	72.0	42.0	280	463	2.25
	Sep-13	7.43	5100	370	<1	2300	1500	140.0	130.0	10.00	<0.5	<0.05	15.0	30.0	210	310	1.10
	Sep-14	7.36	9600	1500	<1	3400	2400	280.0	270.0	10.00	<0.5	<0.05	<1	35.0	500	730	2.10
	Sep-15	7.33	14000	2500	<1	4700	2900	400.0	360.0	40.00	<0.1	0.04	25.0	73.0	950	1200	7.5
	Sep-16	7.56	15000	2400	<10	6400	2600	560.0	410.0	150.00	<0.5	<0.05	20.0	59.0	1100	1300	3.3
	Sep-17	7.46	11000	1600	<10	3700	2000	330.0	310.0	20.00	<0.5	<0.05	120.0	78.0	750	940	2.7
	Sep-18	7.36	15000	2000	<50	5700	2800	440.0	400.0	40.00	<1	<0.01	0.0	56.0	1000	1400	5.0
	Sep-19	7.88	15000	2100	<20	6200	2900	390.0	280.0	110.00	<0.10	0.04	20.0	72.0	1000	1500	4.1
	Sep-20	7.68	15000	2000	<50	5800	2900	520.0	450.0	70.00	<1.0	<0.10	24.0	96.0	1000	1600	5.6
	Sep-21	7.64	17000	2200	<20	7300	3000	710.0	510.0	200.00	<0.50	<0.050		71.0	1200	1700	8.7
	Sep-22	7.79	17000	2300	120	6100	3000	710.0	510.0	200.00	98.3	0.87	4.00	170.0	1200	1800	22.0

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
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TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
26-I	Dec-85	7.60	4130	526	1290	223	473	4.20	4.10	0.10			<1.0	2.2		685	
	Dec-85	8.10	4020	526	1140	163	437	4.00	4.00	0.00			1.0	1.2		658	
	Jul-86	8.16	3980	487		214	598	4.20	3.70	0.50			2.0	3.7			
	Sep-87	8.00	2990	820		420	756	2.00					5.0	<1.0			
	Nov-87	7.78	2700	452		410	611	3.51	1.51	2.00			<0.1	4.7			
	Dec-87												<0.1				
	Dec-87												2.0				
	Jul-88	7.80	3000	503		220	684	3.10	3.50	<0.05							
	Nov-88		2340	588		224	510						0.5	4.0			
	Oct-89	7.79	3590	525		228	497	3.48	3.15	0.33			<2.0	1.3		550	
	Oct-90		4190	560		186		4.57	3.68	0.89	<0.2	<0.02	<2.0			581	0.35
	Sep-91	7.99	3330	485		204	580	4.11	3.66	0.45	<0.2	<0.01	<2.0	<0.7		710	<0.12
	Aug-92	7.63	3910	520		220	690	5.07	3.40	1.67	<0.1	<0.01	<2.0	<0.5		630	0.21
	Aug-93	7.65	4040	545		182	650	4.40	3.32	1.08	0.08	<0.01	<2.0	0.7		638	0.88
	Aug-94	7.70	3980	499		176	680	4.10	3.37	0.73	<0.02	<0.02	<1.0	<0.3		711	0.63
	Sep-95	7.69	4000	525	1210	193	710	3.65	<0.03	3.65	<0.04	<0.01	<2.0	0.8		657	0.60
	Sep-96	7.58	3699	510	965	204	553	3.60	3.20	0.40	<0.1	<0.2	<0.5	0.3		633	0.50
	Sep-97	7.45	3910	493	1370	183	877	3.77	3.60	0.17	<0.2	<0.2	<1.0	0.6		736	1.30
	Sep-98	7.83	3853	499	1200	188	597	3.40	3.70	<0.05	<0.2	<0.2	<1.0	8.3	31	660	0.11
	Sep-99	7.81	3932	538	1210	182	659	3.91	3.69	0.22	<0.2	<0.2	<1.0	2.2	29	682	0.38
	Sep-00	8.01	3441	515	1440	172	750	4.00	3.72	0.28	<0.2	<0.2	<1.0	0.5	32	727	<0.01
	Sep-01		3057	548	1280	182	703	4.45	3.66	0.79	<0.2	<0.2	<1.0	1.5	30	696	<0.01
	Sep-02	7.72	4128	529	1350	181	662	5.07	3.69	1.38	<0.2	<0.2	<2.0	<0.5	31	673	<0.01
	Sep-03	7.50	4110	524	1350	172	686	3.81	3.63	0.18	0.70	2.20	<1.0	1.8	33	676	<0.01
	Sep-04	7.66	5980	1030 *		33	1600 *	5.70	0.97	4.73	<0.1	<0.1	<1.0	<5	14	943	0.11
	Sep-05	7.97	3400	476	966	200	575	3.50	3.32	0.18	<0.2	<0.3	<1	5.0	29	630	0.63
	Sep-06	8.00	3750	488	1000	213	590	3.60	3.49	0.11	<0.1	<0.01	<1	<2	32	720	0.61
	Sep-07	8.00	3880	520	1040	209	660	3.80	3.48	0.32	<0.1	<0.01	<1	<2	34	710	<0.05
	Oct-08	8.10	3790	490	967	205	510	3.90	3.20	0.70	<0.1	<0.01	<1	<2	31	618	<0.02
	Sep-09	7.70	3890	450	1100	216	590	3.70	3.20	0.50	<0.1	<0.01	<1	<2	23	610	<0.2
	Sep-10	7.90	3680	450	910	211	460	3.00	3.20	<0.05	<0.1	<0.01	<1	<2	27	598	<0.02
	Sep-11	8.01	3740	440	1000	216	540	3.10	3.30	<0.05	<0.1	<0.01	<1	<2	30	613	<0.02
	Sep-12	8.01	3500	430	760	240	460	3.60	3.60	0.00	<0.1	<0.01	<1	<2	23	579	<0.2
	Sep-13	7.90	3500	440	820	250	450	3.60	3.20	0.40	<0.1	<0.01	<1	<2	27	570	<0.2
	Sep-14	8.11	3700	460	890	240	500	3.80	3.40	0.40	<0.1	<0.01	<1	<2	29	630	<0.2
	Sep-15	7.90	3600	470	840	250	520	3.40	3.30	0.10	<0.1	<0.01	<1	<2	33	610	<0.02
	Sep-16	7.97	3600	450	830	240	510	3.40	3.30	0.10	<0.1	<0.01	<1	<2	32	560	<0.02
	Sep-17	7.89	3700	460	920	230	520	3.60	3.30	0.30	<0.1	<0.01	<1	<2	32	620	<0.02
	Sep-18	7.97	3600	480	850	260	470	3.10	3.30	<0.05	<0.1	<0.01	<1	<2	30	590	<0.02
	Sep-19	8.03	3600	440	840	230	470	3.40	3.60	<0.05	<0.10	<0.010	<1	<2	31	610	<0.02
	Sep-20	7.80	3400	470	910	240	500	3.50	3.40	0.10	<0.10	<0.010	<1	<2	31	570	<0.02
	Sep-21	7.92	3500	450	840	230	500	3.50	3.40	0.10	<0.10	<0.010	<1	<2	29	590	<0.02
	Sep-22	8.09	3600	470	870	220	540	3.40	3.40	-	<0.10	<0.010	<1	<2	30	560	<0.02

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
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3) Blank indicates parameter not analysed.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
26-II	Nov-85	9.04	1970	44	515	532	357	3.75	3.80	<0.05			2.0	5.6		213	
	Dec-85	7.69	1840	42	600	1584	486	12.00	4.30	7.70			<1.0	2.4		192	
	Dec-85	8.04	1840	52	485	481	458		2.90				<1.0	2.1		200	
	Jul-86	8.23	1700	88		386	424	2.60	2.35	0.25			<1.0	<1.0			
	Sep-87	8.00	1280	500		421	475	0.97					3.0	2.6			
	Nov-87	7.57	1300	95		880	710	2.57	0.57	2.00			0.8	6.0			
	Dec-87												<0.1				
	Dec-87												1.8				
	Jul-88	7.57	1190	39		424	535	1.70	2.28	<0.05							
	Nov-88		1110	205		442	550	1.64	2.40	<0.05			1.0	8.0			
	Oct-89	7.75	1460	58		442	431	2.51	2.28	0.23			<2.0	2.8		150	
	Oct-90		1740	306		457		2.20	2.33	<0.05	<0.2	<0.02	<2.0			155	<0.08
	Sep-91	7.81	1580	30		399	520	1.42	0.26	1.16	0.50	<0.01	<2.0	3.9		200	<0.08
	Aug-92	7.49	1580	35		442	560	2.53	2.08	0.45	<0.1	<0.01	<2.0	1.1		190	0.36
	Aug-93	7.52	1600	4 *		441	600	1.84	1.46	0.38	0.27	<0.01	<2.0	0.6		170	<0.10
	Aug-94	7.66	1660	<2.6		424	530	1.53	1.36	0.17	0.11	<0.02	<1.0	0.3		178	0.64
	Sep-95	7.75	1880	37	514	447	520	2.40	<0.03	2.40	<0.04	<0.01	<2.0	6.2		189	0.31
	Sep-96	7.51	1604	29	438	414	518	0.63	0.50	0.13	1.90	<0.2	<0.5	0.8		179	<0.1
	Sep-97	7.64	1470	27	425	429	517	0.46	0.17	0.29	0.80	<0.2	<1.0	0.7		166	<0.10
	Sep-98	7.84	1480	26	431	448	505	0.68	0.14	0.54	1.40	<0.2	<1.0	13.1	29	168	0.03
	Sep-99	8.08	1650	32	541	349	549	0.67	0.25	0.42	1.80	<0.2	<1.0	5.7	26	174	0.02
	Sep-00	7.46	1379	30	428	467	504	1.41	1.40	0.01	<0.2	<0.2	1.0	7.6	27	172	<0.01
	Sep-01		1244	25	464	486	532	2.25	1.52	0.73	<0.2	<0.2	<1.0	6.8	27	168	0.03
	Sep-02	7.38	1506	27	373	490	479	3.60	3.32	0.28	<0.2	0.70	<1.0	2.2	26	151	<0.01
	Sep-03	7.70	1590	28	392	487	484	0.43	0.29	0.14	0.40	<0.2	<1.0	2.3	27	159	<0.01
	Sep-04	8.01	4190	269 *		419	2580 *	0.40	<0.05	<0.40	<1	<0.1	<1.0	<5	6	316	1.09
	Sep-05	8.12	1480	22	337	527	504	2.90	1.82	1.08	<0.2	<0.3	<1	5.0	30	180	0.34
	Sep-06	7.90	1630	31	345	569	540	6.20	3.50	2.70	<0.1	0.04	19.0	19.0	30	190	0.46
	Sep-07	8.10	1580	26	394	444	550	2.00	1.12	0.88	0.50	0.05	<1	<2	30	180	<0.05
	Oct-08	8.10	1660	31	370	488	510	3.90	1.70	2.20	<0.1	0.09	1.0	9.0	28	172	<0.02
	Sep-09	7.70	1600	26	370	497	440	10.00	4.90	5.10	<0.1	0.02	24.0	9.0	26	140	<0.02
	Sep-10	7.80	1560	23	380	424	460	2.40	1.90	0.50	0.20	0.07	<1	<2	25	149	<0.02
	Sep-11	7.85	1540	24	360	477	470	2.50	2.80	<0.05	0.20	0.10	9.0	<2	27	155	<0.02
	Sep-12	8.03	1600	24	350	460	460	2.20	1.20	1.00	0.14	0.05	<1	<2	27	159	<0.02
	Sep-13	7.76	1600	25	360	440	460	2.80	2.00	0.80	<0.1	0.07	<1	<2	26	160	<0.02
	Sep-14	8.08	1600	24	350	480	500	0.59	0.41	0.18	0.19	0.14	<1	<2	28	180	<0.02
	Sep-15	7.78	1600	25	310	540	500	5.70	5.30	0.40	<0.1	0.02	44.0	7.0	32	170	0.07
	Sep-16	7.84	1500	24	320	510	490	4.60	4.20	0.40	<0.1	<0.01	6.4	<2	30	170	<0.02
	Sep-17	7.82	1500	25	330	520	490	4.30	3.80	0.50	<0.1	0.14	<10	<2	30	170	0.03
	Sep-18	7.87	1500	25	330	530	460	3.10	3.00	0.10	<0.1	0.02	<1	<2	28	160	<0.02
	Sep-19	7.90	1500	25	260	530	450	5.70	5.70	0.00	<0.10	0.03	<1	9.0	29	170	<0.02
	Sep-20	7.88	1400	25	320	500	460	0.76	0.43	0.33	0.34	0.16	<1	11.0	27	160	<0.02
	Sep-21	7.99	1500	28	330	470	440	1.60	1.40	0.20	0.21	0.44	<1	16.0	26	160	<0.02
	Sep-22	8.23	1400	25	320	440	500	0.49	0.19	0.30	1.38	0.14	<1	10.0	29	160	<0.02

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TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
26-III	Nov-85	7.24	2290	10	530	888	1180	0.40	0.10	0.30			<1.0	<1.0		112	
	Dec-85	7.80	2690	16	890	896	1500	0.50	0.20	0.30			<1.0	<1.0		132	
	Dec-85	7.63	2590	16	760	904	1440	0.40	0.10	0.30			<1.0	0.6		130	
	Jul-86	8.45	2380	19		714	1243	0.60	0.05	0.55			<1.0	13.3			
	Sep-87	7.70	2150	575		959	1667	<0.05					5.0	6.2			
	Nov-87	7.34	2000	100		1160	1795	0.35	<0.01	0.35			1.9	1.0			
	Dec-87												1.2				
	Dec-87												2.3				
	Jul-88	7.77	1940	25		920	1558	<0.20	<0.01								
	Nov-88		1670	184		837	1520	0.14	0.14	0.00			1.1	3.0			
	Oct-89	7.89	2760	37		960	1338	0.68	0.05	0.63			5.0	1.1		125	
	Oct-90		2100	75		910		0.14	<0.05	0.14	<0.2	<0.02	<2.0			134	<0.08
	Sep-91	7.71	2720	<1.6		838	1500	0.15	<0.05	0.15	<0.2	<0.01	<2.0	<0.7		150	<0.08
	Aug-92	7.43	2210	<1.6		740	1300	0.13	<0.02	0.13	<0.1	<0.01	<2.0	<0.5		120	<0.08
	Aug-93	7.36	2430	<2.6		840	1400	0.16	<0.01	0.16	0.09	<0.01	<2.0	0.8		127	<0.10
	Aug-94	7.45	2500	<2.6		789	1400	0.14	<0.02	0.14	<0.02	<0.02	<1.0	<0.3		135	<0.10
	Sep-95	7.70	2730	20		2310 *	3200	0.52	0.08	0.44	<0.04	0.16	<2.0	2.2		131	* 330
	Sep-96	7.32	2592	20	817	801	1560	0.29	0.09	0.20	0.40	<0.2	<0.5	0.4		145	0.10
	Sep-97	7.32	2420	23	869	832	1510	0.48	0.09	0.39	0.10	<0.2	<1.0	0.8		131	0.57
	Sep-98	7.57	2381	21	860	869	1480	0.74	<0.02	0.74	<0.2	<0.2	<1.0	2.2	13	136	0.02
	Sep-99	7.63	2665	23	950	909	1490	0.82	0.24	0.58	0.20	<0.2	<1.0	2.1	11	143	0.01
	Sep-00	8.10	2005	21	883	856	1400	0.15	0.05	0.10	<0.2	<0.2	1.0	0.4	12	135	<0.01
	Sep-01		1769	21	823	942	1510	0.55	0.20	0.35	0.20	<0.2	<0.1	<0.5	13	137	<0.01
	Sep-02	7.37	2376	23	834	864	1350	1.07	0.79	0.28	<0.2	<0.2	<1.0	<0.5	12	124	<0.01
	Sep-03	7.70	2450	22	849	832	1326	0.44	0.15	0.29	0.40	<0.2	<1.0	1.4	12	131	<0.01
	Sep-04	8.05	2880	214 *		415 *	1680	0.70	0.17	0.53	<0.1	<0.1	<1.0	7.0	8	233 *	1.16
	Sep-05	8.06	2210	22	757	835	1390	3.60	0.97	2.63	<0.2	<0.3	7.0	4.0	13	130	0.37
	Sep-06	7.90	2340	21	659	860	1300	0.70	0.62	0.08	0.10	<0.01	<1	<2	13	140	<0.05
	Sep-07	8.00	2260	20	601	791	1300	6.00	0.99	5.01	<0.1	0.06	<1	<2	14	130	<0.05
	Oct-08	8.10	2220	19	578	769	1100	7.00	0.44	6.56	0.10	0.04	<1	2.0	11	113	<0.02
	Sep-09	8.00	1840	14	430	689	870	3.00	0.49	2.51	0.20	<0.01	<1	<2	9	90	<0.02
	Sep-10	7.80	1960	16	440	706	930	3.00	0.18	2.82	<0.1	0.02	<1	<2	10	99	<0.02
	Sep-11	8.04	1890	16	450	722	970	3.00	0.13	2.87	0.10	<0.01	<1	<2	11	103	<0.02
	Sep-12	7.62	2200	19	530	750	1100	1.70	0.40	1.30	<0.1	<0.01	<1	4.0	12	111	<0.02
	Sep-13	7.65	2100	17	510	710	1000	0.84	0.14	0.70	<0.1	<0.01	<1	<2	11	100	<0.02
	Sep-14	8.11	2000	18	510	720	1100	2.00	0.10	1.90	0.16	0.02	<1	<2	11	120	<0.02
	Sep-15	7.88	2100	17	520	740	1100	0.31	0.18	0.13	<0.1	<0.01	<1	<2	12	120	<0.02
	Sep-16	7.97	2100	18	530	770	1200	<0.1	<0.05	<0.05	<0.1	<0.01	<1	<2	14	130	<0.02
	Sep-17	7.93	2100	16	530	730	1200	0.30	0.09	0.21	0.15	<0.01	<1	<2	12	120	<0.02
	Sep-18	7.94	2000	16	510	760	1100	0.30	0.17	0.13	0.22	<0.01	<1	<2	12	110	<0.02
	Sep-19	8.09	1700	14	380	640	860	1.20	0.48	0.72	<0.10	<0.010	<1	2.0	10	92	0.08
	Sep-20	7.88	1700	15	390	680	890	0.18	<0.050	0.18	<0.10	<0.010	<1	3.0	11	93	<0.02
	Sep-21	7.74	1500	13	270	600	760	4.10	2.70	1.40	<0.10	0.02	21.0	9.0	10	77	<0.02
	Sep-22	8.19	1500	14	290	640	830	0.43	0.46	-	0.23	0.03	<1	4.0	11	77	<0.2

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
27-I	Dec-85	8.51	9690	2878	810	50	1750	10.00	10.00	<0.05			1.0	3.2		1340	
	Dec-85	7.78	10430	3220	840	98	2040		9.80				0.8	16.0		1480	
	Jul-86	7.84	11110	2195		166	2246	8.80	8.55	0.25			1.6	<1.0			
	Sep-87	8.90	8120	4350		210	2374	1.97	3.61	<0.05			3.0	5.3			
	Nov-87												1.0				
	Nov-87												2.7				
	Dec-87												<0.1				
	Dec-87												4.6				
	Jul-88	7.23	7220	3593		210	2380	6.70	7.86	<0.05			2.2				
	Nov-88		6970	3140		193	2340						<0.5	3.0			
	Oct-89	7.18	10800	3425		192	1969	8.89	8.11	0.78			4.0	3.5		1200	
	Oct-90		10070	3270		192		10.00	7.40	2.60	<0.2	<0.02	<2.0			1400	6.54
	Sep-91	7.32	11100	3340		189	2500	10.10	7.34	2.76	<0.2	<0.01	<2.0	<0.7		1720	<0.08
	Aug-92	7.09	10500	3280		218	2500	11.30	8.87	2.43	<0.1	<0.01	<2.0	<0.5		1490	3.65
	Aug-93	7.07	9460	5150		197	2300	16.50	6.98	9.52	0.02	<0.01	15.3	0.8		1500	8.06
	Aug-94	7.21	11200	3490		186	2400	9.87	7.92	1.95	<0.02	0.14	<1.0	0.4		1820	6.38
	Sep-95	7.23	11500	3430	918	188	2400	7.24	7.13	0.11	<0.04	0.12	<2.0	14.0		1600	5.03
	Sep-96	7.08	10730	3540	890	182	2230	7.70	7.00	0.70	<0.1	<2.0	<0.5	0.4		1530	5.40
	Sep-97	7.09	9740	3450	957	173	2250	5.80	5.10	0.70	<2.0	<2.0	<1.0	0.1		1490	3.41
	Sep-98	7.20	10400	3710	864	194	2110	6.10	5.60	0.50	<2.0	<0.2	<1.0	7.4	73	1510	1.96
	Sep-99	7.25	11050	3180	912	204	2400	6.05	6.18	<0.05	<2.0	<0.2	<1.0	4.1	69	1600	9.48
	Sep-00	7.73	9292	3410	867	191	2160	7.79	7.84	<0.05	<0.2	<0.2	<1	11.7	69	1490	0.25
	Sep-01		8881	3270	842	195	2240	9.20	6.63	2.57	<2.0	<2.0	<1.0	<0.5	64	1520	<0.10
	Sep-02	7.14	12080	3550	873	209	2230	7.61	7.19	0.42	<2.0	<0.2	<1.0	<0.5	65	1460	<0.10
	Sep-03	7.70	10790	3410	888	182	2124	7.20	7.08	0.12	<0.2	<2.0	<1.0	<0.5	72	1490	0.34
	Sep-04	7.76	10000	3160		189	2080	8.20	8.00	0.20	<0.1	<0.1	<1.0	20.0	70	1490	1.35
	Sep-05	7.79	8780	3450	809	202	2300	8.00	7.30	0.70	<0.2		<1	<2	73	1600	5.90
	Sep-06	7.60	10800	3230	843	183	2300	6.00	5.99	0.01	0.50	0.01	<1	<2	80	1700	4.50
	Sep-07	7.50	11100	3400	825	182	2600	7.40	7.82	<0.05	0.50	0.06	<1	<2	85	1800	0.31
	Oct-08	7.70	11100	3400	792	191	2100	7.60	8.80	<0.05	<0.1	0.02	<1	<2	74	1440	0.83
	Sep-09	7.40	11000	3200	810	199	2100	9.00	8.80	0.20	<0.1	<0.01	<1	<2	68	1490	<0.2
	Sep-10	7.40	11100	3400	810	187	2100	6.60	6.60	0.00	<0.1	<0.01	<1	<2	61	1440	2.80
	Sep-11	7.50	10900	3200	810	189	2200	7.60	7.10	0.50	0.30	0.06	4.0	<2	68	1450	2.60
	Sep-12	7.07	11000	3100	730	200	2100	7.60	7.30	0.30	<0.1	<0.01	<1	<2.0	73	1470	7.40
	Sep-13	7.63	11000	3100	800	190	2300	8.20	7.40	0.80	<0.5	<0.05	<1	<2	77	1600	2.80
	Sep-14	7.66	11000	3200	830	190	2200	8.00	7.80	0.20	<0.1	<0.01	<1	<2	72	1500	0.20
	Sep-15	7.37	11000	3400	810	190	2200	4.80	4.90	<0.05	0.55	0.23	<1	8.0	82	1500	2.10
	Sep-16	7.57	11000	3200	800	190	2200	7.50	6.60	0.9	0.34	0.28	<1	27.0	80	1500	0.53
	Sep-17	7.49	11000	3200	820	190	2200	6.40	6.20	0.20	<0.1	0.12	1.4	11.0	82	1500	0.85
	Sep-18	7.49	11000	3300	830	220	2100	7.20	7.80	<0.05	<0.1	<0.01	<1	<2	77	1500	2.10
	Sep-19	7.63	11000	3200	780	190	2100	7.60	7.40	0.20	0.11	0.07	<1	4.0	83	1500	3.00
	Sep-20	7.46	11000	2700	840	190	2000	7.20	7.20	<0.05	<0.10	<0.010	<1	5.0	75	1400	0.49
	Sep-21	7.46	10000	3300	760	190	2100	6.70	7.20	<0.05	<0.10	<0.010	<1	11.0	74	1500	1.70
	Sep-22	7.66	11000	2900	750	170	2100	6.90	5.80	1.10	0.25	0.23	18.0	7.0	76	1400	0.43

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TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
27-II	Dec-85	7.58	3460	795	350	175	643		4.10				<1.0	4.3		420	
	Dec-85	7.51	3370	810	335	163	625		2.70				0.6	11.7		420	
	Jul-86	8.09	3500	822		172	635	4.20	3.80	0.40			1.2	0.9			
	Sep-87	9.80	2980	1355		160	950	1.97	2.65	<0.05			4.5	3.2			
	Nov-87	7.68	2920	995		176	659	4.73	3.48	1.25			1.9	7.9			
	Dec-87												<0.1				
	Dec-87												2.3				
	Jul-88	7.49	2430	953		180		3.50	3.48	0.02							
	Nov-88			1092		158	960						<0.5	3.0			
	Oct-89	7.57	4280	1162		150	815	4.97	4.42	0.55			<2.0	0.3		455	
	Oct-90		3710	963		160		8.02	3.58	4.44	<0.2	<0.02	<2.0			452	0.20
	Sep-91	7.65	3440	905		145	820	3.93	4.18	<0.05	<0.2	<0.01	<2.0	2.0		510	<0.08
	Aug-92	7.47	3790	923		272	840	5.36	5.45	<0.05	<0.1	<0.01	<2.0	<0.5		440	0.68
	Aug-93	7.39	3840	1080		169	820	6.88	3.61	3.27	0.29	<0.01	<2.0	0.8		479	1.12
	Aug-94	7.43	3780	853		161	850	2.10	1.19	0.91	0.83	<0.02	<1.0	0.3		502	0.61
	Sep-95	7.49	4080	1010	432	159	900	4.55	4.34	0.21	<0.04	<0.01	<2.0	6.0		533	<0.25
	Sep-96	7.47	3775	935	395	147	699	1.80	1.59	0.21	2.20	<0.2	<0.5	2.6		474	0.50
	Sep-97	7.33	3520	907	412	155	706	4.40	3.20	1.20	0.70	<2.0	<1.0	0.4		452	<0.10
	Sep-98	7.87	3257	873	362	153	760	4.10	0.37	3.73	3.80	<0.2	<1.0	4.2	40	459	4.47
	Sep-99	7.48	3732	920	419	191	811	3.23	3.09	0.14	1.20	<2.0	<1.0	1.8	37	560	3.75
	Sep-00	7.82	2933	914	231	351	729	10.80	9.70	1.10	<0.2	<0.2	<1	42.2 *	43	447	0.21
	Sep-01		2656	981	226	266	718	18.00	14.80	3.20	<0.2	<0.2	<1.0	7.7	35	434	0.35
	Sep-02	7.12	3489	947	316	243	689	15.20	12.70	2.50	<0.2	<0.2	<1.0	1.3	40	413	0.11
	Sep-03	7.70	3550	822	318	173	642	2.93	2.75	0.18	3.30	<0.2	<1.0	0.8	38	442	<0.01
	Sep-04	8.04	3300	814		194	625	4.40	2.45	1.95	<0.1	0.10	1.0	7.0	42	610	13.20
	Sep-05	7.77	3150	831	345	198	696	4.20	3.76	0.44	<0.2		<1	3.0	42	550	2.00
	Sep-06	7.90	3760	895	322	186	770	3.50	2.12	1.38	3.70	0.07	1.0	<2	43	500	0.48
	Sep-07	7.60	3850	920	304	198	850	7.50	4.78	2.72	1.00	0.25	<1	<2	46	540	<0.05
	Oct-08	7.90	3830	880	329	171	700	4.00	2.50	1.50	3.70	0.08	<1	<2	40	442	<0.02
	Sep-09	7.50	3800	910	370	199	710	5.00	2.80	2.20	1.00	0.26	<1	<2	40	457	<0.02
	Sep-10	7.50	3880	950	370	165	710	6.00	3.90	2.10	1.00	1.30	<1	<2	40	451	0.11
	Sep-11	7.62	3700	870	340	167	660	6.00	3.30	2.70	0.50	0.03	<1	<2	37	420	<0.02
	Sep-12	7.25	3900	890	340	180	740	4.10	3.60	0.50	0.67	<0.01	<1	<2.0	41	474	2.99
	Sep-13	7.75	3900	950	360	160	720	4.20	4.10	0.10	0.59	0.04	<1	<2	42	460	0.02
	Sep-14	7.67	4100	960	360	160	790	3.70	3.20	0.50	0.81	<0.01	<1	<2	42	480	<0.02
	Sep-15	7.67	4100	1000	380	170	850	4.50	4.20	0.30	0.72	0.02	<1	<2	47	490	0.04
	Sep-16	7.73	3800	850	360	180	760	4.00	4.00	<0.05	0.33	0.08	<1	15.0	44	470	<0.02
	Sep-17	7.76	3700	810	360	170	680	4.10	3.80	0.30	0.23	0.01	<1	6.0	42	450	<0.02
	Sep-18	7.57	4100	1000	330	170	730	4.70	4.90	<0.05	<0.1	<0.01	<1	<2	41	480	<0.02
	Sep-19	7.73	3700	880	360	150	700	1.60	1.70	<0.05	0.78	0.02	<1	9.0	43	470	1.20
	Sep-20	7.53	4100	980	380	160	860	3.80	3.40	0.40	0.90	0.02	<1	9.0	44	500	<0.02
	Sep-21	7.70	3700	810	300	160	740	2.50	1.90	0.60	2.40	0.06	<1	9.0	40	470	<0.02
	Sep-22	8.07	3700	850	300	160	710	1.70	1.00	0.70	3.97	0.03	<1	<2	40	430	<0.02

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TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
27-III	Nov-85	6.98	2790	540	300	592		1.90	0.05	1.85			<1.0	10.0		78	
	Dec-85	6.88	2810	585	270	386	1130	0.50	<0.05	0.50			<1.0	1.1		152	
	Dec-85	7.32	2740	558	273	483	1130	0.80	<0.05	0.80			<1.0	8.7		150	
	Jul-86	7.72	2410	430		820	995	0.40	<0.05	0.40			<1.0	0.7			
	Sep-87	9.40	2030	885		315	1105	<0.05						17.0			
	Nov-87												2.5				
	Nov-87												6.0				
	Dec-87												<0.1				
	Dec-87												1.5				
	Jul-88	7.13		502		411		<0.20	0.08	<0.12							
	Nov-88		1700	647		369	1040	0.24	0.18	0.06			<0.5	12.0			
	Oct-89	7.13	2450	640		354	861	0.35	0.05	0.30			<2.0	0.3		120	
	Oct-90		2690	526		391		0.20	<0.05	0.20	<0.2	<0.02	<2.0			156	<0.08
	Sep-91	7.14	2440	550		356	1000	0.25	<0.05	0.25	<0.1	<0.01	<2.0	1.4		160	1.13
	Aug-92	7.08	2240	449		392	1000	0.27	<0.02	0.27	0.10	<0.01	<2.0	<0.5		140	<0.08
	Aug-93	7.10	2530	547		357	1000	0.40	<0.01	0.40	0.36	<0.01	<2.0	0.7		155	0.40
	Aug-94	6.92	2430	492		294	1100	0.43	0.07	0.36	0.02	<0.02	<1.0	0.4		155	19.3
	Sep-95	7.26	2070	541	303	385	830	0.08	<0.03	0.08	0.26	<0.01	<2.0	0.8		135	<0.25
	Sep-96	7.17	2542	467	270	449	939	0.20	<0.02	0.20	<0.1	<0.2	<0.5	2.1		201	0.10
	Sep-97	7.17	2190	381	248	479	859	0.55	0.05	0.50	0.10	<0.2	<1.0	1.2		184	<0.10
	Sep-98	7.37	1852	338	215	365	773	2.80	<0.02	2.80	0.40	<0.2	<1.0	1.3	7	136	0.03
	Sep-99	7.37	1858	290	204	387	718	2.32	0.14	2.18	0.30	<0.2	<1.0	1.9	5	130	0.13
	Sep-00	7.83	1700	373	231	414	799	0.19	0.04	0.15	0.20	<0.2	<1	<0.5	6	152	<0.01
	Sep-01		1721	430	227	438	882	0.48	0.30	0.18	<0.2	<0.2	<1.0	<0.5	6	158	<0.01
	Sep-02	7.32	2164	385	266	433	808	1.74	1.53	0.21	<0.2	<0.2	<1.0	<0.5	7	149	<0.10
	Sep-02	7.32	2164	385	266	433	808	1.74	1.53	0.21	<0.2	<0.2	<1.0	<0.5	7	149	<0.10
	Sep-03	7.60	2280	365	279	440	765	0.12	<0.03	0.12	<0.2	<0.2	<1.0	<0.5	6	157	<0.01
	Sep-04	8.02	1990	249		433	736	1.70	<0.05	<1.70	<0.1	<0.1	<1.0	<5	7	201	<0.11
	Sep-05	7.78	2050	251	365	553	937	7.00	0.14	6.86	<0.2		1.0	<2	* 56	120	0.18
	Sep-06	7.80	2160	233	322	555	860	0.50	0.26	0.24	0.40	0.01	<1	<2	7	180	<0.05
	Sep-07	7.70	1880	190	237	479	720	9.00	0.19	8.81	<0.1	<0.01	<1	<2	6	150	<0.05
	Oct-08	7.80	2040	180	288	531	750	<2	<0.05	<2	0.20	<0.01	<1	<2	6	155	<0.02
	Sep-09	7.60	1970	190	300	519	720	3.20	<0.05	3.20	<0.1	<0.01	<1	<2	6	149	<0.02
	Sep-10	7.60	1880	170	240	515	670	2.00	<0.05	1.98	<0.1	<0.01	<1	<2	6	142	<0.02
	Sep-11	7.68	1800	180	240	513	650	<2	<0.05		<0.1	<0.01	<1	<2	6	133	<0.02
	Sep-12	7.40	1800	160	220	430	690	0.79	0.13	0.66	<0.1	<0.01	<1	<2.0	7	139	<0.02
	Sep-13	7.78	1900	190	250	490	710	2.10	0.08	2.02	<0.1	<0.01	<1	<2	6	140	<0.02
	Sep-14	7.88	1900	190	250	490	700	0.89	<0.05	0.84	<0.1	<0.01	<1	<2	6	150	<0.02
	Sep-15	7.64	2000	230	240	520	840	0.30	<0.05	0.25	<0.1	0.03	<1	<2	7	170	<0.02
	Sep-16	7.63	2000	210	250	530	880	0.66	<0.05	0.65	<0.1	<0.01	<1	<2	8	180	<0.02
	Sep-17	7.62	2200	250	270	550	850	0.13	<0.050	0.11	<0.1	<0.01	<1	<2	8	170	<0.02
	Sep-18	7.62	2200	270	260	560	800	0.21	0.08	0.13	<0.1	<0.01	<1	<2	7	160	<0.02
	Sep-19	7.85	2100	230	250	540	810	0.17	0.09	0.08	<0.10	<0.010	<1	<2	7	170	<0.02
	Sep-20	7.65	2000	220	240	560	750	0.20	<0.050	0.20	<0.10	<0.010	<1	<2	7	150	<0.02
	Sep-21	7.71	2000	260	210	550	770	0.13	<0.050	0.13	<0.10	<0.010	<1	<2	7	150	<0.02
	Sep-22	7.79	1800	170	200	540	740	0.32	0.11	0.21	<0.10	<0.010	<1	<2	6	140	<0.02

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TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
28-I	Nov-85	7.16	3240	311		524	1300	0.60	<0.05	0.60			0.4	4.3			
	Jul-86	8.19	3180	327		587	1303	0.20	<0.05	0.20			0.4	0.8			
	Sep-87	7.40	1970	545		871	1455	<0.05					5.0	5.9			
	Nov-87	7.27	2190	194		672	1218	<0.05	<0.01				2.1	8.2			
	Jul-88	7.11	1940	214		734	1302	0.10					1.1				
	Nov-88		1630	281		576	1424	0.16	<0.01	0.16			<0.5	8.0			
	Oct-89	7.20	3360	358		572	1237	0.49	0.05	0.44			<2.0	0.3		185	
	Oct-90		3060	250		690		0.29	<0.05	0.29	<0.2	<0.02	<2.0			200	0.26
	Sep-91	7.80	3520	325		680	1600	0.49	0.07	0.42	<0.2	<0.01	5.3	2.0		220	<0.08
	Aug-92	7.06	3000	309		786	1600	0.53	<0.02	0.53	<0.1	<0.01	<2.0	<0.5		200	0.27
	Aug-93	7.06	3260	502		763	1500	0.62	<0.01	0.62	<0.02	<0.01	<2.0	0.8		208	1.42
	Aug-94	7.04	3030	221		811	1500	0.53	0.08	0.45	<0.02	<0.02	<5.0	0.5		184	1.51
	Sep-95	7.22	3120	246	940	760	1600	0.55	<0.03	0.55	<0.04	<0.01	<2.0	1.2		181	0.42
	Sep-96	6.81	2435	150	545	700	1010	1.70	0.13	1.57	<0.1	<0.2	<0.5	3.5		127	1.35
	Sep-97	6.92	2730	242	741	736	1470	0.63	0.30	0.33	<0.2	<0.2	<1.0	0.4		151	0.80
	Sep-98	7.29	2738	404	824	715	1510	4.10	0.15	3.95	<0.2	<0.2	<1.0	1.2	31	156	0.60
	Sep-99	7.26	2877	254	760	678	1450	0.39	0.12	0.27	0.20	<0.2	<1.0	1.9	29	152	0.41
	Sep-00	7.75	2084	180	732	708	1300	1.24	0.92	0.32	<0.2	<0.2	1.0	0.9	29	139	<0.01
	Sep-01		2149	228	896	802	1650	1.10	0.43	0.67	<0.2	0.20	<1.0	1.2	30	173	<0.01
	Sep-02	7.14	2694	182	874	728	1380	1.77	1.26	0.51	0.40	<0.2	<1.0	<0.5	31	152	<0.01
	Sep-03	7.60	3040	161	907	749	1659	0.94	0.54	0.40	0.80	<0.2	<1.0	7.3	31	155	0.26
	Sep-04	8.00	2510	106		752	1420	2.30	0.06	2.24	0.30	<0.1	<1.0	7.0	35	173	0.21
	Sep-05	7.73	2170	78	706	723	1280	5.20	0.40	4.80	0.70	<0.3	1.0	<2	29	110	<0.05
	Sep-06	7.60	2640	90	857	802	1400	1.30	0.68	0.62	<0.1	<0.01	6.0	<2	30	140	1.10
	Sep-07	7.90	3100	130	1020	797	1700	2.00	<0.05	1.98	<0.1	<0.01	<1	<2	34	170	<0.05
	Oct-08	7.90	1750	42	387	585	870	<5.00	0.07	<4.93	<0.1	<0.01	<1	<2	18	59	<0.02
	Sep-09	7.20	1810	38	440	578	930	5.00	0.33	4.67	<0.1	<0.01	3.0	<2	18	60	<0.02
	Sep-10	7.50	2200	61	560	639	1100	3.00	0.22	2.78	<0.1	<0.01	<1	<2	20	79	0.10
	Sep-11	7.43	2430	68	750	629	1300	4.00	0.06	3.94	<0.1	<0.01	<1	<2	22	93	<0.02
	Sep-12	7.15	2600	98	730	620	1300	1.10	0.13	0.97	<0.1	<0.01	<1	<2.0	22	107	0.02
	Sep-13	7.67	2400	69	750	630	1400	1.30	<0.05	1.25	<0.1	<0.01	<1	<2	21	89	0.03
	Sep-14	7.27	2200	58	630	590	1200	13.00	0.07	12.93	0.12	<0.01	<1	<2	18	74	<0.02
	Sep-15	7.31	1800	59	360	560	980	0.47	<0.05	<0.42	<0.1	<0.01	<1	<2	16	63	<0.02
	Sep-16	7.39	1800	67	430	540	1000	0.50	<0.05	0.5	<0.1	<0.01	<1	<2	16	67	<0.02
	Sep-17	7.41	2800	140	720	720	1600	0.32	<0.050	0.30	<0.1	<0.01	1.7	<2	20	100	<0.02
	Sep-18	7.47	2600	140	710	760	1400	0.64	0.26	0.38	<0.1	<0.01	<1	<2	20	99	<0.02
	Sep-19	7.60	2100	120	480	630	1200	0.54	0.13	0.41	<0.10	<0.010	<1	<2	15	71	<0.1
	Sep-20	7.74	2900	140	860	770	1600	0.34	<0.050	0.34	<0.10	<0.010	<1	<2	22	110	<0.02
	Sep-21	7.47	1700	38	420	600	970	0.57	<0.050	0.57	<0.10	<0.010	<1	<2	10	43	<0.02
	Sep-22	7.66	3300	220	860	810	2100	0.72	0.16	0.56	<0.10	<0.010	<1	<2	26	140	<0.2

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BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
29-I	Nov-85	7.52	747	4		354	386	0.40	<0.05	0.40			0.8	3.8			
	Jul-86	8.62	834	4		441	460	0.20	<0.05	0.20			1.2	8.7			
	Sep-87	7.80	710	505		990	10659	<0.05					<1.0	4.7			
	Nov-87	7.77	700	50		740	552	0.25	<0.01	0.25			0.5	<1.0			
	Jul-88	7.81	650			512	512	<0.20	<0.01	<0.20							
	Nov-88		608			482	540							3.0			
	Oct-89	7.86	939	110		477	456	0.11	0.05	0.06			<2.0	0.3		11	
	Oct-90		975	8		500		0.08	<0.05	0.08	0.90	<0.02	<2.0			13	<0.08
	Sep-91	7.98	965	497		465	520	0.17	<0.05	0.17	0.10	<0.01	<2.0	0.7		15	<0.08
	Aug-92	7.66	897	27		602	620	0.18	<0.02	0.18	<0.1	<0.01	<2.0	<0.5		17	<0.08
	Sep-05	8.29	833	12	67	447		1.70	<0.05	1.70	0.70	<0.3	<1	<2	10	21	<0.05
	Sep-06	8.10	899	15	91	446	480	0.50	0.09	0.41	0.40	<0.01	<1	5.0	9	27	<0.05
	Sep-07	8.20	860	10	70	418	470	1.00	0.12	0.88	0.30	0.02	<1	<2	9	19	<0.05
	Oct-08	8.20	1940 *	6	64	140	400	2.00	0.54	1.46	0.30	<0.01	2.0	<2	7	16	<0.02
	Sep-09	8.00	807	5	62	401	420	0.80	0.05	0.75	0.20	0.02	<1	<2	7	13	<0.02
	Sep-10	8.00	794	5	66	374	400	1.00	0.07	0.93	0.10	<0.01	<1	<2	7	11	<0.02
	Sep-11	7.96	807	5	53	387	420	2.00	<0.05	1.98	<0.1	<0.01	<1	<2	7	14	<0.02
	Sep-12	7.71	860	10	56	390	440	0.82	<0.05	0.80	0.17	<0.01	<1	<2.0	8	10	<0.02
	Sep-13	8.12	820	11	55	390	450	0.86	0.09	0.77	<0.1	0.01	<1	<2	8	16	<0.02
	Sep-14	7.88	770	9	58	350	410	0.62	<0.05	0.62	<0.1	<0.01	<1	<2	7	11	<0.02
	Sep-15	7.96	840	17	60	390	500	0.35	0.07	0.28	<0.1	<0.01	<1	3.0	8	15	<0.02
	Sep-16	8.11	880	13	56	430	500	0.54	<0.05	0.53	<0.1	<0.01	<1	<2	8	16	<0.02
	Sep-17	7.98	850	11	57	420	480	0.14	<0.050	0.12	0.12	<0.01	<1	<2	8	15	<0.02
	Sep-18	7.94	820	10	56	410	430	0.23	<0.050	0.23	0.19	<0.01	<1	<2	7	14	<0.02
	Sep-19	8.06	660	9	40	390	410	0.31	0.08	0.23	<0.10	<0.010	<1	<2	6	12	<0.1
	Sep-20	7.98	770	7	48	380	440	0.26	<0.050	0.26	<0.10	<0.010	<1	5.0	7	13	<0.02
	Sep-21	7.91	700	6	49	340	380	0.40	<0.050	0.40	0.12	<0.010	<1	<2	5	9	<0.02
	Sep-22	8.00	770	7	39	400	460	0.19	0.19	-	<0.10	<0.010	<1	3.0	6	11	<0.02

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MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
30-I	Nov-85	6.94	2060	10		630	1040	5.00	<0.05	5.00			0.6	8.9			
	Jul-86	8.32	1740	16		382	867	1.60	0.05	1.55			<1.0	21.6			
	Sep-87	7.24	1420	380		926	1231	0.41					2.0	11.0			
	Nov-87	7.24	1380	19		448	682	1.05	0.12	0.93			1.3	10.9			
	Jul-88	7.21	1280			596	1004						0.8				
	Nov-88		1240	29		561	1918	1.00					<0.5	2.0			
	Oct-89	7.65	1920	30		564	740	0.57	0.42	0.15			<2.0	0.5		51	
	Oct-90		989	6.8		405		0.18	0.07	0.11	0.70	<0.02	2.0			40	<0.08
	Sep-91	7.48	1160	5.4		380	520	0.13	<0.05	0.13	<0.2	<0.01	2.1	4.7		41	<0.08
	Aug-92	7.39	1010	<1.6		426	530	0.43	0.21	0.22	<0.1	<0.01	<2.0	<0.5		37	<0.08
	Aug-93	7.55	930	<2.6		401	460	0.68	0.31	0.37	0.11	<0.01	<2.0	8.0		33	0.11
	Aug-94	7.97	1020	<2.6		434	510	0.57	0.36	0.21	<0.02	<0.02	<1.0	0.5		29	0.17
	Sep-95	7.45	1130	<2.6	236	483	610	0.51	0.23	0.28	<0.04	<0.01	<2.0	3.5		37	0.51
	Sep-97	7.31	888	7	153	437	470	0.80	0.28	0.52	0.20	<0.20	<1.0	2.6		33	0.15
	Sep-98	7.63	947	6	125	454	501	1.15	0.34	0.81	<0.2	<0.2	<1.0	2.8	15	33	0.03
	Sep-99	7.51	1299	9	208	582	682	0.45	0.34	0.11	0.70	<0.2	<1.0	2.7	17	50	0.51
	Sep-00	7.82	1207	9	270	602	719	0.40	0.36	0.04	<0.2	<0.2	<1	0.9	21	50	<0.01
	Sep-01		1169	10	301	648	814	2.55	1.82	0.73	<0.2	<0.2	<1.0	1.8	25	57	<0.01
	Sep-02	7.25	1088	12	75	589	513	1.22	0.91	0.31	<0.2	<0.2	<1.0	1.3	13	44	<0.01
	Sep-03	7.60	1227	12	109	600	619	2.74	1.73	1.01	<0.2	<0.2	* 20	4.1	19	51	0.13
	Sep-04	8.12	763	7		423	376	6.10	0.22	5.88	<0.1	<0.1	<1.0	12.0	10	35	0.51
	Sep-05	8.04	1020	9	70	596	527	1.50	0.43	1.07	<0.2	<0.3	<1	<2	17	49	1.30
	Sep-06	8.00	973	10	44	558	490	0.30	0.14	0.16	<0.1	<0.01	<1	<2	12	39	2.40
	Sep-07	7.80	960	9	44	508	480	2.00	0.06	1.94	<0.1	0.01	<1	<2	12	30	<0.05
	Oct-08	8.10	929	6	46	487	440	<2.00	0.20	<1.80	<0.1	<0.01	<1	5.0	11	29	<0.02
	Sep-09	7.40	1200	9	76	617	560	2.00	0.19	1.81	<0.1	<0.01	<1	3.0	15	39	<0.02
	Sep-10	7.60	1440	13	160	665	700	2.00	0.20	1.80	<0.1	<0.01	<1	5.0	14	44	0.07
	Sep-11	7.34	1240	11	44	657	630	3.00	0.59	2.41	<0.1	<0.01	<1	5.0	14	35	<0.02
	Sep-12	7.25	1100	16	58	520	570	0.87	0.24	0.63	<0.1	<0.01	<1	8.0	12	27	0.55
	Sep-13	7.65	1200	16	53	590	640	1.60	0.19	1.41	<0.1	<0.01	<1	13.0	10	27	0.58
	Sep-14	7.41	1100	14	43	590	620	2.20	0.15	2.05	<0.1	<0.01	<1	<2	10	27	0.36
	Sep-15	7.37	1500	16	160	730	820	0.48	0.23	0.25	<0.1	0.02	<1	3.0	15	42	0.18
	Sep-17	7.31	1300	14	4	730	670	0.67	0.51	0.16	<0.1	<0.01	<10	9.0	11	31	3.50
	Sep-18	7.45	1100	14	22	630	570	0.26	0.12	0.14	<0.1	<0.01	<1	6.0	11	26	<0.02
	Sep-19	7.67	880	15	19	560	560	0.41	0.28	0.13	<0.10	<0.010	<1	4.0	9	22	<0.1
	Sep-20	7.38	1100	20	27	590	590	0.38	0.23	0.15	<0.10	<0.010	<1	<2	12	23	<0.02
	Sep-21	7.67	1300	18	36	770	680	0.42	0.20	0.22	<0.10	<0.010	<1	<2	12	32	<0.02
	Sep-22	7.53	1200	18	2	700	690	0.27	0.21	0.06	<0.10	<0.010	<1	<2	11	26	<0.02

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MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
31-I	Sep-91	7.31	864	<1.6		403	420	0.32	<0.05	0.32	<0.2	0.12	<2.0	<0.7		28	0.18
	Aug-92	7.41	698	17.4		431	520	1.95	<0.02	>1.93	<0.1	0.04	<2.0			35	<0.08
	Aug-94	7.53	964	4.7		438	490	1.00	0.19	0.81	0.22	0.02	<2.0			32	0.38
	Sep-06	7.70	1420	15.0	77	832	790	10.00	0.26	9.74	<0.1	<0.01	<1	2.0	8	59	2.40
	Sep-07	7.80	1290	13.0	75	669	690	5.00	0.23	4.77	<0.1	<0.01	<1	<2	7	43	<0.05
	Oct-08	7.90	1260	13.0	157	569	660	<5.00	0.73	<4.27	<0.1	<0.01	<1	<2	6	35	<0.02
	Sep-09	7.60	1150	12.0	120	538	580	10.00	0.37	9.63	0.60	0.03	0.0	<2	6	32	<0.02
	Sep-10	7.80	1210	12.0	140	542	600	4.00	0.21	3.79	0.30	0.02	<1	3.0	6	31	<0.02
	Sep-11	7.46	1130	12.0	130	506	590	25.00	0.09	24.91	0.20	<0.01	<1	<2	6	33	<0.02
	Sep-12	7.52	1200	14.0	140	480	660	4.30	0.11	4.19	0.10	<0.01	<1	<2.0	8	36	<0.02
	Sep-13	7.57	1300	14.0	140	570	710	2.70	<0.05	2.65	<0.1	<0.01	<1	<2	7	37	<0.02
	Sep-14	7.52	1300	16.0	89	620	680	9.80	0.11	9.690	<0.1	<0.01	<1	<2	7	37	<0.02
	Sep-15	7.30	1400	19.0	180	630	840	0.37	0.10	0.27	<0.1	<0.01	<1	<2	7	41	0.05
	Sep-16							0.39	<0.05	0.38				<2			
	Sep-18	7.56	1500	37.0	150	710	780				<0.1	<0.01	<1		8	45	0.03
	Sep-19	7.45	1300	29.0	21	690	690	0.30	0.06	0.24	<0.10	<0.010	<1	4.0	6	36	<0.1
	Sep-21	7.83	1300	33.0	43	740	700	0.19	<0.050	0.19	<0.10	<0.010	<1	<2	7	33	<0.02

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BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
32-I	Sep-87	7.30	2590	800		460	833	0.40					3.0	13.0			
	Nov-87	7.36	2900	840		540	1065	2.08	<0.01	2.08			6.5	3.0			
	Nov-88		1700			428	905	0.25						2.0			
	Oct-89	7.35	4300	732		396	1045	1.64	1.06	0.58			<2.0	0.3		340	
	Oct-90		7150	339		<1	993	0.30	0.10	0.20	<0.2	<0.02	2.0			215	<0.08
	Sep-91	7.26	3330	492		409	1100	1.19	<0.05	1.19	<0.2	<0.01	12.3	<0.7		350	<0.12
	Aug-92	7.12	3160	520		433	1200	0.78	0.34	0.44	<0.1	<0.01	<2.0	<0.5		310	<0.08
	Aug-93	7.26	3280	520		438	1200	0.76	0.20	0.56	0.03	<0.01	<2.0	<0.3		313	<0.10
	Aug-94	7.45	3280	411		445	1200	0.49	0.29	0.20	<0.02	<0.02	<5.0	0.3		329	<0.10
	Sep-95	7.39	3440	497	951	432	1200	0.87	0.46	0.41	<0.04	<0.01	<2.0	<0.5		332	<0.25
	Sep-96	7.42	2865	306	632	510	1030	0.26	0.07	0.19	<0.1	<0.2	<0.5	2.7		280	0.20
	Sep-97	7.08	2490	295	648	476	1040	0.09	0.12	<0.05	<0.2	<0.2	<1.0	0.3		235	<0.10
	Sep-98	7.43	2408	342	641	495	1130	0.15	0.02	0.13	<0.2	<0.2	<1.0	0.8	23	280	0.03
	Sep-99		2482	239	600	494	992	0.16	0.02	0.14	<0.2	<0.2	<1.0	1.5	19	223	0.02
	Sep-00	7.77	2254	369	710	517	1100	0.16	0.03	0.13	<0.2	<0.2	<1	0.4	20	247	<0.01
	Sep-01		2071	340	644	524	1080	0.61	0.07	0.54	<0.2	<0.2	<1.0	<0.5	19	248	<0.01
	Sep-02	7.25	2604	314	678	500	976	0.17	<0.03	0.17	<0.2	<0.2	<1.0	<0.5	19	223	<0.01
	Sep-03	7.70	2530	241	570	532	888	0.10	<0.03	0.10	<0.2	<0.2	<1.0	<0.5	18	200	<0.01
	Sep-04	8.04	2360	125		548	979	0.30	<0.05	<0.30	<0.1	<0.1	<1.0	<3	25	272	0.41
	Sep-05	8.07	2120	196	562	498	925	0.40	<0.05	0.40	<0.2	<0.3	<1	<2	21	220	<0.05
	Sep-06	7.90	2300	193	484	589	950	0.40	<0.05	0.40	<0.1	<0.01	<1	<2	22	230	<0.05
	Sep-07	8.00	2340	190	523	529	900	0.80	0.20	0.60	<0.1	<0.01	<1	<2	20	200	<0.05
	Oct-08	8.10	2560	220	579	521	920	1.80	0.21	1.59	<0.1	<0.01	<1	7	20	219	<0.02
	Sep-09	7.80	2380	180	540	521	800	0.50	<0.05	0.50	0.10	<0.01	<1	<2	19	195	<0.02
	Sep-10	7.70	2330	200	500	501	780	0.50	<0.05	0.48	<0.1	<0.01	<1	<2	18	196	<0.02
	Sep-11	8.07	2190	180	480	494	770	1.80	0.10	1.70	0.40	<0.01	<1	3	20	193	<0.02
	Sep-12	7.60	2100	140	430	490	710	0.56	0.14	0.42	<0.1	<0.01	<1	<2.0	18	181	<0.02
	Sep-13	7.73	2000	130	410	500	730	0.42	<0.05	0.37	<0.1	<0.01	<1	<2	18	170	<0.02
	Sep-14	7.70	2100	140	430	500	750	0.56	<0.05	0.56	<0.1	<0.01	<1	<2	17	170	<0.02
	Sep-15	7.69	2100	130	420	500	830	0.38	<0.05	0.33	<0.1	<0.01	<1	<2	20	190	<0.02
	Sep-16	8.01	2000	130	400	500	830	0.27	<0.05	0.26	<0.1	<0.01	<1	<2	21	180	<0.02
	Sep-17	7.79	2100	140	440	510	840	0.12	<0.050	0.10	<0.1	<0.01	<1	<2	21	180	<0.02
	Sep-18	7.70	2200	160	490	520	820	<0.10	<0.050	<0.10	<0.1	<0.01	<1	<2	19	190	<0.02
	Sep-19	8.12	2400	190	450	520	820	0.20	0.08	0.12	0.19	<0.010	<1	<2	18	230	<0.02
	Sep-20	7.74	2300	220	470	500	830	0.14	<0.050	0.14	<0.10	<0.010	<1	<2	21	210	<0.02
	Sep-21	7.89	2100	160	420	500	770	0.16	<0.050	0.16	<0.10	<0.010	<1	<2	19	190	<0.02
	Sep-22	7.77	2100	210	330	420	640	0.99	0.89	0.10	0.28	0.05	<1	7.0	25	220	<0.02

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
32-II	Sep-87	7.00	2180	530		384	1744	<0.10					12.0	10.0			
	Nov-87	7.23	2100	350		720	1045	0.19	<0.01	0.19			2.7	5.0			
	Jul-88	7.12	1870	353		464	1210	<0.20	<0.01				1.9				
	Nov-88		1830	274		432	982	0.12	<0.01	0.12			2.0	2.0			
	Oct-89	7.24	2990	349		440	907	0.21	0.05	0.16			<2.0	3.0		190	
	Oct-90		8750	432		<1	1088	0.22	0.10	0.12	<0.2	<0.02	2.0			264	<0.08
	Sep-91	7.28	2890	311		444	1100	0.27	<0.05	0.27	<0.2	<0.01	7.1	1.5		260	<0.08
	Aug-92	7.12	3180	495		453	1300	0.28	<0.02	>0.26	<0.1	<0.01	<2.0	<0.5		300	<0.08
	Aug-93	7.17	3360	610		452	1300	0.45	<0.01	0.45	0.03	<0.01	<2.0	0.7		311	<0.10
	Aug-94	7.31	3260	429		447	1200	0.24	<0.02	0.24	<0.02	<0.02	<5.0	<0.3		312	<0.10
	Sep-95	7.27	3060	379	843	460	1200	0.38	<0.03	0.38	<0.04	<0.01	<2.0	<0.5		273	<0.25
	Sep-96	7.10	3277	431	784	449	1250	0.14	<0.02	0.14	<0.1	<0.2	<0.5	6.0		298	0.20
	Sep-97	7.07	2830	384	744	470	1130	0.16	0.06	0.10	<0.2	<0.2	<1.0	0.4		270	<0.10
	Sep-98	7.40	2768	394	742	489	1110	0.12	0.05	0.07	<0.2	<0.2	<1.0	1.0	24	277	0.02
	Sep-99		2796	317	698	533	1080	0.17	0.06	0.11	<0.2	<0.2	<1.0	0.8	21	279	<0.01
	Sep-00	7.78	2440	441	725	485	1160	0.16	0.07	0.09	<0.2	<0.2	1.0	0.4	23	278	<0.01
	Sep-01		2266	427	710	452	1160	0.30	0.03	0.27	<0.2	<0.2	<1.0	<0.5	22	284	<0.01
	Sep-02	7.37	2963	408	770	479	1110	0.21	<0.03	0.21	<0.2	<0.2	<1.0	<0.5	22	258	<0.10
	Sep-03	7.80	3620	480	971	468	1198	0.28	0.05	0.23	<0.2	<0.2	<1.0	1.5	25	323	<0.01
	Sep-04	8.02	3250	434		494	1290	0.50	0.06	0.44	<0.1	<0.1	<1.0	<3	31	405	0.39
	Sep-05	7.86	2560	298	744	516	999	4.00	0.16	3.84	<0.2	<0.3	<1	<2	24	320	<0.05
	Sep-06	7.90	3250	363	741	532	1300	1.10	0.19	0.91	<0.1	<0.01	<1	<2	27	360	0.14
	Sep-07	7.90	3250	370	794	479	1200	1.80	0.40	1.40	<0.1	0.02	3.0	<2	25	300	<0.05
	Oct-08	8.00	2970	330	638	492	1000	1.90	<0.05	1.90	<0.1	<0.01	<1	<2	23	257	<0.02
	Sep-09	7.70	2890	300	650	490	930	2.40	0.07	2.33	<0.1	<0.01	2.0	<2	22	241	<0.02
	Sep-10	7.80	2670	250	550	480	860	2.00	0.06	1.94	<0.1	<0.01	<1	<2	21	231	<0.02
	Sep-11	7.74	2520	220	550	485	870	3.00	<0.05	2.98	<0.1	<0.01	<1	<2	22	235	<0.02
	Sep-12	7.82	2400	180	490	480	750	0.54	0.14	0.40	<0.1	<0.01	<1	<2.0	20	214	<0.02
	Sep-13	7.68	2400	210	520	480	810	1.70	0.09	1.62	<0.1	<0.01	<1	<2	20	210	<0.02
	Sep-14	7.70	2500	210	510	490	850	2.30	0.09	2.21	<0.1	<0.01	<1	<2	20	220	<0.02
	Sep-15	7.66	2500	220	490	480	950	0.35	0.10	0.25	<0.1	<0.01	<1	<2	23	240	<0.02
	Sep-16	7.78	2400	190	500	490	940	0.66	<0.05	0.65	<0.1	<0.01	<1	<2	25	240	<0.02
	Sep-17	7.64	2500	200	530	490	920	0.24	0.08	0.16	<0.1	<0.01	<1	<2	24	230	<0.02
	Sep-18	7.59	2600	260	530	500	890	0.17	0.09	0.08	<0.1	<0.01	<1	<2	23	230	<0.02
	Sep-19	7.90	2700	310	510	470	940	0.26	0.13	0.13	<0.10	<0.010	<1	<2	22	260	<0.02
	Sep-20	7.66	2600	270	510	470	940	0.24	<0.050	0.24	0.20	<0.010	<1	<2	23	250	<0.02
	Sep-21	7.91	2300	260	490	470	860	0.23	0.05	0.18	<0.10	<0.010	<1	<2	21	230	<0.02
	Sep-22	7.95	2100	180	400	480	780	0.21	<0.050	0.21	<0.10	<0.010	<1	<2	18	190	<0.02

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
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GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
32-III	Sep-87	7.10	2090	820		412	988	0.20					<1.0	16.0			
	Nov-87	7.26	1900	300		700	986	0.61	<0.01	0.61			<0.1	6.0			
	Jul-88	7.22	1779	272		484	1060	<0.20					0.2				
	Nov-88		1680	230		460	912	0.48					<0.5	2.0			
	Oct-89	7.49	2790	295		466	765	0.41	0.11	0.30			1.0	0.3		175	
	Oct-90		8680	329		1	1166	0.53	0.24	0.29	<0.2	<0.02	2.0			255	<0.08
	Sep-91	7.11	2960	322		465	1100	0.27	<0.05	0.27	<0.2	<0.01	4.0	1.0		270	0.13
	Aug-92	7.20	2890	394		457	1100	0.61	0.10	0.51	<0.1	<0.01	<2.0	1.2		300	<0.08
	Aug-93	7.20	3080	515		480	1100	0.63	0.18	0.45	0.05	<0.01	<2.0	1.0		290	0.27
	Aug-94	7.40	2970	361		450	1100	0.63	0.26	0.37	<0.02	<0.02	<5.0	0.4		294	0.16
	Sep-95	7.28	3000	361	810	464	1100	0.69	0.34	0.35	<0.04	<0.01	<2.0	2.2		277	<0.25
	Sep-96	7.14	3020	395	668	471	1060	0.60	0.54	0.06	<0.1	<0.2	1.4	3.5		281	3.00
	Sep-97	7.29	2680	374	646	464	938	3.60	3.00	0.60	<0.2	<0.2	<1.0	0.6		304	1.61
	Sep-98	7.65	2688	398	660	458	895	1.23	0.75	0.48	0.20	<0.2	<1.0	5.2	29	311	0.08
	Sep-99		2750	350	658	408	853	1.33	1.04	0.29	0.20	<0.2	<1.0	6.6	29	327	2.26
	Sep-00	7.56	2227	343	517	568	765	8.40	7.80	0.60	<0.2	<0.2	<1	8.7	36	318	<0.01
	Sep-01		2130	414	248 *	844 *	811	9.60	8.57	1.03	<0.2	<0.2	1.0	34.6	35	320	0.07
	Sep-02	7.57	2756	376	453	646	880	7.00	6.05	0.95	<0.2	<0.2	<1.0	1.1	35	294	<0.10
	Sep-03	7.80	2910	318	523	628	754	4.76	3.36	1.40	<0.2	<0.2	<1.0	40	45	301	0.06
	Sep-04	8.12	2590	283		729	831	11.70	7.30	4.40	<0.1	<0.1	<1.0	62	49	350	0.48
	Sep-05	7.99	2300	276	491	540	770	13.30	1.49	11.81	<0.2	<0.3	43.0	44	27	270	3.60
	Sep-06	7.90	2580	273	490	549	840	4.00	1.41	2.59	<0.1	0.02	<1	87	30	280	0.79
	Sep-07	8.00	2610	270	540	463	830	2.00	0.49	1.51	<0.1	<0.01	2.0	<2	28	270	<0.05
	Oct-08	7.80	2560	270	477	549	790	21.00	3.10	17.90	<0.1	<0.01	52.0	<2	29	259	<0.02
	Sep-09	7.80	2630	260	420	614	740	15.00	6.30	8.70	<0.1	<0.01	152.0	290	25	238	<0.02
	Sep-10	7.70	2570	250	480	472	760	16.00	1.50	14.50	0.20	0.01	310.0	<2	26	251	<0.02
	Sep-11	7.68	2420	220	490	476	740	7.00	1.20	5.80	<0.1	<0.01	52.0	<2	26	246	0.18
	Sep-12	7.80	2200	150	410	500	700	2.00	0.52	1.48	<0.1	<0.10	1.4	<2	21	200	0.60
	Sep-13	7.75	2300	210	420	460	620	1.30	0.57	0.73	<0.1	<0.01	<1	<2	25	240	0.03
	Sep-14	7.68	2400	230	420	470	690	5.40	0.64	4.76	<0.1	<0.01	<1	<2	25	240	0.03
	Sep-15	7.75	2200	180	410	460	670	0.46	0.16	0.30	<0.1	0.03	<1	<2	26	240	<0.02
	Sep-16	7.95	2100	140	390	520	780	0.79	0.38	0.41	0.13	0.02	<1	<2	25	210	<0.02
	Sep-17	7.68	2100	170	340	500	650	2.20	2.00	0.20	0.11	1.54	<10	<2	25	230	0.46
	Sep-18	7.74	2200	190	400	510	740	0.53	0.45	0.08	<0.1	<0.01	<1	<2	23	210	<0.02
	Sep-19	8.32	2000	150	380	460	620	0.22	0.09	0.13	<0.10	<0.010	<1	4.0	23	210	<0.02
	Sep-20	7.67	2200	200	380	470	720	0.77	0.62	0.15	<0.10	<0.010	<1	6.0	26	220	<0.02
	Sep-21	7.82	2200	220	350	490	690	2.00	1.50	0.50	<0.10	0.03	<1	12.0	25	220	<0.02
	Dec-22	7.65	3100	360	720	490	1000	0.49	0.10	0.39	<0.10	<0.010	<1	3.0	22	270	0.10

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
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TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
33-I	Jul-88	7.51	2160	268		982	952	<0.20	<0.01				<0.5				
	Nov-88		1680	321		918	860	0.47	0.17	0.30				3.0			
	Oct-89	6.83	2530	286		954	786	0.32	0.05	0.27				0.3		220	
	Oct-90		2370	251		840		0.76	<0.05	0.76	<0.2	<0.02	<2.0			251	0.79
	Sep-91	7.15	2890	267		989	1100	0.70	<0.05	0.70	<0.2	<0.01	2.8	1.0		270	<0.08
	Aug-92	6.74	2170	238		986	1000	0.80	<0.02	0.80	<0.1	<0.01	<2.0	1.2		220	0.60
	Aug-93	6.88	2610	221		1080	1000	1.11	0.02	1.09	0.03	<0.01	6.6	0.3		211	1.38
	Aug-94	6.79	2670	212		1090	1100	1.35	0.07	1.28	<0.02	<0.02	3.0	0.7		243	2.82
	Sep-05	7.59	2470	218	578	801	1280	1.00	0.68	0.32	1.60		<1	<2	24	230	0.97
	Oct-08	7.90	2620	190	515	717	1100	2.60	2.50	0.10	0.10	<0.01	<1	<2	20	197	<0.02
	Sep-09	7.30	2630	250	40	1120	900	1.70	0.26	1.44	<0.1	<0.01	<1	8.0	29	214	<0.02
	Sep-10	7.40	2720	260	39	1110	900	2.80	0.72	2.08	0.50	0.04	15.0	6.0	26	186	0.02
	Sep-11	7.17	2850	270	39	1150	990	2.00	0.28	1.72	<0.1	<0.01	5.0	6.0	28	211	<0.02
	Sep-12	7.21	2900	290	51	1100	1000	3.20	0.43	2.77	0.25	<0.01	<1	5.0	32	232	0.06
	Sep-13	7.43	2900	290	54	1200	1100	2.20	0.46	1.74	<0.1	<0.01	<1	<2	34	250	0.44
	Sep-14	7.16	3000	300	59	1200	1100	1.90	0.36	1.54	<0.1	<0.01	<1	<2	32	250	0.16
	Sep-15	7.36	3200	350	53	1200	1300	1.50	0.35	1.15	<0.1	<0.01	<2	3.0	36	290	0.02
	Sep-16	7.59	3300	380	74	1300	1300	2.20	0.38	1.82	0.54	<0.01	<1	2.0	38	290	0.03
	Sep-17	7.68	3300	360	75	1300	1300	1.50	0.41	1.09	0.25	<0.01	13.0	4.0	36	280	0.02
	Sep-18	7.16	3400	410	94	1400	1200	1.50	0.50	1.00	0.22	<0.01	1.9	4.0	35	290	0.04
	Sep-19	7.54	3300	370	86	1200	1300	1.80	0.82	0.98	<0.10	<0.010	<1	4.0	35	290	0.98
	Sep-20	7.64	3300	370	140	1300	1300	1.70	0.42	1.28	0.17	<0.010	1.6	8.0	37	300	0.06
	Sep-21	7.35	3400	390	130	1300	1200	1.60	0.66	0.94	0.23	0.03	1.9	9.0	33	290	0.03
	Sep-22	7.71	3300	410	130	1100	1200	2.20	1.00	1.20	0.64	0.02	4.4	11.0	35	290	<0.02

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
34-I	Sep-87	7.00	2600	450		413	1454	0.40					<1.0	10.0			
	Nov-87	7.21	2600	350		740	1459	1.02	<0.01	1.02			<0.1	2.0			
	Jul-88	7.59	2570	289		575	1584	<0.20	0.25	-			<0.5				
	Nov-88		2180	409		500	1400	0.98					1.4	3.0			
	Oct-89	6.93	3110	1700		561	1062	1.54	1.48	0.06			<2.0	0.3		230	
	Oct-90		2270	234		640		0.69	0.31	0.38	<0.2	<0.02	<2.0			208	0.49
	Sep-91	7.90	26600 *	210		638	1100	0.45	0.35	0.10	<0.2	<0.01	6.9	1.9		220	0.22
	Aug-92	7.02	2510	368		673	1100	0.71	0.19	0.52	<0.1	<0.01	<2.0	<0.5		200	0.10
	Aug-93	7.06	2710	216		657	1200	0.55	0.19	0.36	0.04	<0.01	2.8	0.3		216	0.78
	Aug-94	6.96	2760	4		668	1300	0.61	0.22	0.39	<0.02	<0.02	2.0	0.8		228	2.50
	Sep-95	7.06	2760	215	727	639	1800	0.97	0.53	0.44	0.17	0.02	9.7	3.6		202	0.81
	Oct-96	7.04	2547	195	635	685	321	0.59	0.23	0.36	0.10	<0.2	<0.5	1.0		212	0.60
	Sep-99	7.29	1811	131	377	467	791	1.28	1.24	0.04	<0.2	<0.2	2.0	2.8	9	110	0.76
	Sep-00	7.96	1261	110	275	419	543	4.03	2.97	1.06	<0.2	<0.2	<1.0	9.8	12	125	<0.01
	Sep-01		3710	285	1350 *	590	2070	0.65	<0.03	0.65	<0.2	<0.2	<1.0	<0.5	5	225	<0.01
	Sep-02	7.36	727	49	104	207	248	0.83	0.88	<0.05	3.2	<0.2	<1.0	<0.5	7	53	<0.01
	Sep-03	7.70	2140	164	440	530	800	1.30	1.04	0.26	0.3	<0.2	<1.0	6.0	16	148	<0.01
	Sep-04	7.91	2260	158		769	993	2.40	1.02	1.38	0.2	<0.1	<1.0	7.0	17	188	0.16
	Sep-06	7.60	2660	202	468	849	1200	1.00	0.81	0.19	0.2	<0.01	<1	<2	22	220	* 8.3
	Sep-07	7.70	2590	190	464	794	1200	0.90	0.35	0.55	<0.1	<0.01	<1	<2	22	210	<0.05
	Sep-09	7.70	2370	180	390	722	870	1.40	0.36	1.04	0.1	<0.01	<1	<2	18	165	<0.02
	Sep-10	7.60	2520	190	450	728	980	0.90	0.27	0.63	<0.1	<0.01	<1	<2	19	168	<0.02
	Sep-11	7.38	2450	160	450	724	990	0.80	0.19	0.61	<0.1	<0.01	<1	<2	18	159	<0.02
	Sep-12	7.27	2300	130	440	590	970	0.83	0.32	0.51	<0.10	<0.01	<1	<2.0	19	167	0.15
	Sep-13	7.77	1900	120	320	600	800	0.56	0.09	0.47	<0.5	<0.05	<1	<2	18	130	<0.02
	Sep-14	7.85	1900	100	310	600	750	0.60	0.22	0.38	<0.1	<0.01	<1	<2	16	130	<0.02
	Sep-15	7.59	2100	130	450	540	960	0.59	<0.05	0.58	0.11	<0.01	<1	<2	20	160	<0.02
	Sep-16	7.86	2100	110	410	610	920	0.72	0.14	0.58	<0.1	<0.01	<1	<2	21	140	<0.02
	Sep-17	7.63	1900	120	370	590	880	0.35	0.13	0.22	<0.1	<0.01	<10	<2	20	140	<0.02
	Sep-18	7.69	1800	110	310	590	760	0.22	0.18	0.04	0.11	<0.01	<1	<2	19	120	<0.02
	Sep-19	8.07	1600	99	330	450	670	0.29	<0.050	0.27	0.22	<0.010	<1	<2	17	120	<0.02
	Sep-20	7.92	1700	90	330	530	780	0.37	<0.050	0.37	<0.10	<0.010	<1	<2	21	130	<0.02
	Sep-21	7.91	1700	96	320	510	720	0.30	<0.050	0.30	0.18	<0.010	<1	<2	18	110	<0.02
	Sep-22	8.04	1700	100	340	460	750	0.25	<0.050	0.25	0.24	<0.010	<1	3.0	18	110	<0.02

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
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TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
35-I	Nov-98	7.97	1667	323	176	100	357	1.71	1.56	0.2	<0.2	<0.2			21	185	<0.03
	Dec-98	7.98	1994	569	164	87	344	1.32	1.13	0.19	<0.2	<0.2			18	259	<0.03
	Dec-98	8.08	5652	1830	362	135	929	3.10	2.60	0.50	0.2	<2			43	945	<0.03
	Sep-01		2373	345	932	299	635	3.25	2.73	0.52	<0.2	<0.2	<1.0	1.9	27	482	<0.01
	Sep-02	7.47	122000 *	40000 *	1730	44	22100 *	32.20 *	2.89	29.31	<2.0	<20.0	2.0	<0.5	289	14500 *	<1.00
	Sep-03	7.60	6290	1990	386	164	1252	1.30	1.04	0.26	2.4	<2.0	1.0	1.4	15	902	<0.10
	Sep-04	7.58	6070	1290		30	2420	2.80	1.32	1.48	<10	0.3	<1.0	<5	24	694	0.42
	Sep-05	7.58	22900	10700	690	195		10.40	8.90	1.50	<0.2	<0.3	1.0	<2	120	7900 *	<5
35-I R	Oct-10	6.80	130000	69000	660	42	45000	45.00	45.00	0.00	<0.1	<0.01	4.0	<2	312	20800	<2
	May-11	6.38	144000	78000	750	26	53000	47.00	47.00	0.00	<0.1	<0.01	<1	<2	360	23000	<10
	Sep-11	6.47	>100000	69000	810	18	47000	46.00	40.00	6.00	<0.1	<0.01	50.0	<2	287	20700	10.00
	Sep-12	6.91	98000	45000	1100	36	28000	32.00	28.00	4.00	<0.10	<0.10	18.0	<2.0	156	14200	<2
	Sep-13	6.75	96000	44000	1200	35	29000	33.00	27.00	6.00	<0.1	<0.01	<1	<2	230	15000	<2
	Sep-14	6.79	>100000	62000	1000	40	47000	47.00	39.00	8.00	<0.5	<0.01	<1	<2	350	23000	4.30
	Sep-15	6.81	>100000	48000	1200	42	31000	30.00	25.00	5.00	<0.1	<0.1	6.4	<2	280	15000	<0.2
	Sep-16	6.97	92000	40000	1200	40	26000	25.00	28.00	<0.05	<1.0	<0.10	1.2	<2.0	250	13000	<0.2
	Sep-17	6.93	92000	40000	1200	43	30000	28.00	26.00	2.00	<0.5	<0.050	<1	<2	260	15000	<0.2
	Sep-18	6.56	96000	42000	1100	28	27000	30.00	28.00	2.00	<1.0	<0.10	4.3	<2	260	13000	<0.2
	Sep-19	6.95	99000	45000	1100	35	32000	35.00	31.00	4.00	<0.10	<0.050	5.6	<2	300	15000	<0.2
	Sep-20	6.38	100000	54000	1200	34	37000	35.00	34.00	1.00	<0.50	<0.050	<2	<20	310	17000	5.20
	Sep-21	6.79	>100000	72000	810	44	51000	42.00	39.00	3.00	<0.10	<0.010	8.4	<2	350	22000	<2
	Sep-22	6.50	>100000	67000	800	14	50000	52.00	41.00	11.00	<1.0	<0.10	220.0	2.0	380	20000	<0.2

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
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3) Blank indicates parameter not analysed.

Borehole Location BH35 was replaced by BH35R in 2011, and Borehole Location BH35 was decommissioned in 2013.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
35-II	Nov-98	7.69	7612	2440	535	133	1929	6.40	6.30	0.10	<0.2	<2.0			58	1020	2.08
	Dec-98	7.67	7815	2740	586	141	1727	7.60	6.60	1.00	<0.2	<2.0			57	954	1.49
	Dec-98	7.57	8321	2790	600	126	2123	6.90	6.80	0.10	<0.2	<2			60	1150	2.49
	Sep-01		1459 *	24 *	568	634	907 *	1.30	1.01	0.29	0.3	<0.2	<1.0	0.7	22	155 *	<0.1
	Sep-02	7.51	8115	2530	559	159	1880	6.60	<0.03	6.60	<0.2	<2.0	<1.0	<0.5	61	983	<0.10
	Sep-03	7.70	11220	3870	641	122	2542	7.65	7.60	0.05	0.9	<2.0	<1.0	0.6	74	1300	<0.10
	Sep-04	7.91	5080	890		105	2380	32.40 *	0.53	31.87 *	<10	0.3	<1.0	6.0	* 7.6	522 *	0.75
	Sep-05	7.88	9380	3520	595	129		8.80	8.15	0.65	<0.2	<0.3	<1	<2	78	1600	4.50
	Sep-06	7.60	11700	3640	622	131	2900	9.00	8.73	0.27	0.6	0.0	<1	<2	77	1500	3.50
	Sep-07	7.70	12100	3700	618	126	3000	9.00	10.30	<0.05	0.1	<0.01	<1	<2	77	1500	<0.05
	Oct-08	7.80	12300	3800	611	120	2800	9.00	10.00	<0.05	0.5	<0.01	<1	<2	79	1390	0.30
	Sep-09	7.40	12100	3700	660	122	2800	8.30	9.30	<0.05	0.5	<0.01	<1	<2	67	1360	<0.2
	Sep-10	7.50	12000	3700	600	122	2800	8.80	9.60	<0.05	0.1	<0.01	<1	<2	69	1380	<0.2
35-II R	Oct-10	7.70	6250	1700	370	242	1100	12.00	6.20	5.80	<0.1	<0.01	<1	<2	53	814	<0.02
	May-11	7.78	6320	1800	370	243	1300	9.00	6.60	2.40	<0.1	<0.01	<1	<2	57	740	<0.1
	Sep-11	7.76	5970	1600	380	241	1200	6.40	6.20	0.20	<0.1	<0.01	2.0	<2	53	738	<0.02
	Sep-12	7.71	6300	1600	340	250	1200	6.00	6.30	<0.05	<0.1	<0.01	<1	<2.0	38	728	2.00
	Sep-13	7.56	6200	1800	380	240	1200	6.00	5.80	0.20	<0.1	<0.01	<1	<2	51	740	0.30
	Sep-14	7.86	6500	1700	380	240	1300	5.10	6.20	<0.05	<0.1	<0.01	<1	<2	54	830	0.90
	Sep-15	7.68	6300	1800	380	260	1300	6.00	5.90	0.10	<0.1	0.02	<1	<2	62	770	0.54
	Sep-16	7.65	6100	1600	370	250	1200	5.90	5.80	0.10	0.16	0.03	<1	<2	58	760	0.05
	Sep-17	7.64	6400	1700	380	260	1300	5.90	5.20	0.70	0.33	0.06	<1	5.0	62	750	0.20
	Sep-18	7.70	6600	1900	440	210	1300	5.40	5.20	0.20	0.56	0.13	<1	<2	57	810	0.02
	Sep-19	7.83	6100	1600	360	240	1200	4.10	4.10	0.00	1.53	0.21	<1	4.0	60	790	0.80
	Sep-20	7.58	5900	1500	400	260	1300	5.40	5.80	<0.05	<0.10	<0.010	<1	11.0	61	710	0.33
	Sep-21	7.68	5900	1600	370	260	1200	6.20	5.80	0.40	<0.10	<0.010	<1	<2	55	740	<0.02
	Sep-22	7.72	6000	1600	380	250	1300	6.20	5.50	0.70	0.25	<0.010	3.2	3.0	58	680	<0.2

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Borehole Location BH35 was replaced by BH35R in 2011, and Borehole Location BH35 was decommissioned in 2013.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
35-III	Nov-98	7.88	2914	524	469	162	723	3.70	3.40	0.30	<0.2	<0.2			61	358	<0.03
	Dec-98	7.90	3031	728	624	157	760	4.00	3.50	0.50	<0.2	<0.2			58	376	<0.03
	Dec-98	7.87	3301	694	660	146	808	3.80	3.60	0.20	<0.2	<2			54	394	<0.03
	Sep-01		2184	243	983	631	1210	1.55	1.19	0.36	<0.2	<0.2	<1.0	1.2	19	355	<0.01
	Sep-02	7.61	3259	708	578	173	843	2.98	3.78	<0.05	0.8	2.3	<1.0	0.8	38	385	<0.10
	Sep-03	7.80	3320	685	580	186	782	3.04	2.99	0.05	2.9	<0.2	<1.0	3.8	36	373	<0.01
	Oct-04	7.89	3720	994	743	180	846	5.60	2.18	3.42	<1	<0.1	<1.0	<4		560	
	Sep-05	7.83	3680	837	842	176	1170	6.00	3.02	2.98	<0.2		<1	<2	39	520	<0.5
	Sep-06	7.90	4220	846	699	218	910	2.00	1.84	0.16	0.2	0.1	<1	5.0	38	530	<0.30
	Sep-07	7.70	3800	810	579	182	1000	4.00	2.79	1.21	0.8	0.4	<1	4.0	40	510	<0.05
	Oct-08	7.80	3410	700	406	191	670	9.00	1.60	7.40	0.7	0.4	<1	7.0	34	443	<0.02
	Sep-09	7.70	3200	660	390	196	710	3.00	2.20	0.80	0.7	0.2	<1	<2	28	411	<0.2
	Sep-10	7.80	3460	780	400	192	640	8.00	2.60	5.40	1.2	0.4	<1	6.0	32	383	<0.02
35-III R	Oct-10	7.90	3070	670	360	193	640	9.00	3.70	5.30	<0.1	<0.01	<1	<2	37	322	<0.02
	May-11	7.85	3350	700	460	184	830	5.00	3.80	1.20	0.1	0.10	<1	<2	40	370	<0.1
	Sep-11	7.85	3690	730	650	160	970	3.00	3.70	<0.05	0.6	0.04	3.0	<2	43	398	<0.02
	Sep-12	7.80	3700	710	530	160	900	4.30	4.20	0.10	0.9	0.05	<1	<2.0	22	377	0.20
	Sep-13	7.74	3900	800	660	150	950	3.70	3.70	0.00	<0.1	0.02	<1	<2	42	380	<0.02
	Sep-14	7.90	4100	790	660	160	1000	3.60	3.90	<0.05	<0.1	0.0	<1	<2	41	430	0.30
	Sep-15	7.72	3900	790	610	160	1100	4.00	3.90	0.10	<0.1	0.04	<1	<2	47	410	<0.02
	Sep-16	7.84	3900	760	610	160	970	4.40	4.30	0.10	<0.1	0.01	<1	<2	44	400	<0.02
	Sep-17	7.77	4000	790	630	170	1100	4.30	4.00	0.30	0.11	<0.01	<1	4.0	47	410	<0.02
	Sep-18	7.72	4100	860	720	160	1100	4.10	3.90	0.20	0.19	0.07	<1	<2	44	420	<0.02
	Sep-19	7.81	4100	830	680	140	1100	3.40	3.00	0.40	0.64	0.01	<1	5.0	47	450	0.05
	Sep-20	7.68	4000	810	710	160	1100	4.50	4.10	0.40	<0.10	0.02	<1	29.0	45	410	<0.02
	Sep-21	7.73	3400	690	470	180	890	4.00	3.70	0.30	0.11	0.07	<1	15.0	39	380	<0.02
	Sep-22	7.91	3500	760	510	160	940	2.80	1.10	1.70	2.17	0.06	1.0	4.0	40	360	<0.02

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.

Borehole Location BH35 was replaced by BH35R in 2011, and Borehole Location BH35 was decommissioned in 2013.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
35-IV	Nov-98	7.88	7293	813	4250	385	3872	0.87	0.31	0.56	0.8	<0.2			41	652	0.18
	Dec-98	7.78	7550	828	4470	398	4221	1.14	0.09	1.05	<0.2	<0.2			41	697	0.16
	Dec-98	7.59	7883	761	4720	363	4415	0.26	0.06	0.20	<0.2	<2			50	731	0.09
	Sep-01		1973 *	192 *	842 *	545	966 *	2.15	1.70	0.45	0.5	<0.2	<1.0	0.8	22	312	<0.01
	Sep-02	7.33	8814	1220	3860	418	5090	0.22	1.86	<0.05	<0.2	<2.0	<1.0	<0.5	24	713	<0.10
	Sep-03	7.60	8480	1040	4960	449	5070	0.22	0.03	0.19	3.8	<2.0	<1.0	2.7	36	738	<0.10
	Oct-04	7.76	7490	1120	4860	506	4540	5.80	0.38	5.42	<1	<0.1	1.0	<4		610	
	Sep-05	7.91	7360	1080	3600	470		2.60	0.12	2.48	<0.2	<0.3	<1	<2	29	900	2.30
	Sep-06	7.70	9680	1390	3610	469	5500	0.30	0.14	0.16	<0.1	<0.01	<1	<2	28	920	0.42
	Sep-07	7.80	9280	1200	3950	434	5500	2.00	0.10	1.90	<0.1	<0.01	<1	<2	29	910	<0.25
	Oct-08	7.90	9560	1500	4010	420	4300	3.00	0.05	2.95	<0.1	<0.01	<1	<2	23	817	<0.2
	Sep-09	7.70	9670	1600	4000	429	4300	4.00	0.25	3.75	<0.1	<0.01	<1	<2	17	880	<0.2
	Sep-10	7.60	9180	1900	2300	345	3200	4.00	0.11	3.89	<0.1	<0.01	<1	<2	24	973	<0.2
35-IVR	Oct-10	7.80	4070	190	1500	638	1500	3.00	0.10	2.90	<0.1	<0.01	<1	<2	37	398	<0.02
	May-11	7.77	4350	190	1800	562	1800	2.00	0.08	1.92	0.1	<0.01	<1	<2	21	470	<0.1
	Sep-11	7.82	3990	180	1700	591	1800	<2.00	<0.05	<1.95	0.2	<0.01	<1	<2	22	396	<0.02
	Sep-12	7.50	4000	170	1500	580	1500	<0.50	0.14	<0.05	<0.1	<0.01	<1	<2.0	17	388	<0.2
	Sep-13	7.64	4000	170	1500	620	1600	0.58	0.11	0.47	<0.1	<0.01	<1	<2	19	390	<0.2
	Sep-14	7.95	4200	170	1800	560	1700	3.30	0.05	3.25	<0.1	<0.01	<1	<2	19	430	<0.2
	Sep-15	7.74	4100	180	1500	560	1900	0.44	<0.05	0.43	<0.1	<0.01	<1	<2	21	410	<0.02
	Sep-16	7.91	3900	170	1600	590	1700	<0.10	<0.05	<0.05	<0.1	<0.01	<1.0	<2.0	23	400	<0.02
	Sep-17	7.80	3800	160	1400	590	1600	<0.10	<0.050	<0.10	0.14	<0.01	<1	<2	23	370	<0.02
	Sep-18	7.85	3700	170	1500	560	1500	0.15	0.06	0.10	0.16	<0.01	<1	<2	19	360	<0.02
	Sep-19	7.89	3700	160	1500	500	1600	0.24	<0.050	0.22	0.17	<0.010	<1	<2	14	390	<0.02
	Sep-20	7.96	3800	160	1600	590	1600	0.15	0.06	0.09	0.11	<0.010	<1	2.0	23	380	<0.02
	Sep-21	7.81	3800	170	1500	580	1600	0.21	0.06	0.15	<0.10	<0.010	<1	<2	20	400	<0.02
	Sep-22	7.80	3800	170	1500	520	1700	0.26	0.14	0.12	0.14	<0.010	<1	3.0	18	380	<0.2

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.

Borehole Location BH35 was replaced by BH35R in 2011, and Borehole Location BH35 was decommissioned in 2013.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
36-I Leachate	Sep-21	7.27	3600	320	<1.0	1700	1100	91	86	5	<0.10	<0.010	4.5	32		260	0.14
37-I Leachate	Sep-19	7.60	16000	2500	41	5600	1300	870	600	270	<0.10	0.03	20.0	76	810	1500	4.00
	Sep-20	7.63	16000	2800	<20	4900	1300	930	880	50	<0.10	0.03	17.0	67	870	1600	3.80
	Sep-21	7.59	15000	2500	<20	5100	1200	950	740	210	<0.50	<0.050	19.0	>230	710	1400	3.30
	Sep-22	7.61	18000	2300	<20	6200	1100	1300	980	320	<1.0	<0.10	47.0	120	990	1700	9.80
38-I	Oct-08	7.50	8250	1800	1570	654	2300	64.0	3.7	60.30	0.7	0.0	<1	<2	79	982	<0.02
	Sep-09	7.40	10400	2700	1600	565	2500	22.0	2.2	19.80	0.4	<0.01	<1	<2	82	1360	<0.2
	Sep-10	7.40	9420	2200	1300	563	2200	36.0	3.5	32.50	1.0	<0.01	<1	<2	69	1130	0.20
	Sep-11	7.35	7180	1600	980	479	1700	19.0	3.0	16.00	0.4	<0.01	<1	<2	61	924	<0.02
	Sep-12	7.29	9300	2300	960	340	2000	6.2	2.3	3.90	<0.10	<0.01	<1	<2.0	64	1280	<0.02
	Sep-13	7.56	7100	1600	930	510	1900	6.7	2.1	4.60	<0.1	<0.01	<1	<2	55	910	0.30
	Sep-14	7.37	7100	1700	840	430	1800	5.9	2.0	3.90	<0.1	<0.01	<1	<2	48	890	0.02
	Sep-15	7.31	8100	1800	1100	530	2100	3.4	2.7	0.70	<0.1	<0.01	<1	<2	63	940	0.07
	Sep-17	7.48	8100	1700	1200	590	2200	3.1	2.4	0.70	0.2	<0.01	<10	<2	66	880	0.04
	Sep-18	7.30	15000	4400	1100	350	3000	6.2	6.6	<0.05	<0.1	0.016	0.0052	<2	92	2100	0.57
	Sep-19	7.41	12000	3400	1300	520	3100	5.9	5.2	0.70	<0.10	<0.010	7.50	7.0	88	1700	<0.5
39-I	Sep-21	7.72	13000	1400	<20	5500	1500	800	660	140	<0.50	<0.050	0.0	170.0	600	1200	4.40
	Sep-22	7.60	13000	1300	<20	6000	1500	740	670	70	<1.0	<0.10	1.9	85	660	1400	2.70

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
5-I	Sep-03	7.80	13540	3450	2460	74	2062	7.99	7.50	0.49			<1.0	0.6	54	2080	
BP	Jan-04	7.41	14260	3570	2730	60	2225	7.82	7.50	0.32			<1.0	<0.5	60	2430	
	Oct-04	7.22	22600	11000	2410	48	5590	14.50	13.40	1.10			<1.0	<4	90	4570	
	Oct-05	7.48	18900	6480	2490	52	4680	14.00	10.60	3.40			<1.0	<3	94	4520	
	Apr-06	7.60	15100	3270	1940	56	2800	8.00	9.28	-			<1.0	<2	73	3100	
	Sep-06	7.60	16700	4710	2820	54	3000	9.00	8.97	0.03			1.0	<2	78	3500	
	May-07	7.60	14400	3200	2910	52	2300	8.60	9.52	-			* 55	<2	68	2800	
	Sep-07	7.50	14400	3400	2970	48	2100	8.40	9.46	-			<1	<2	62	2650	
	May-08	7.50	14300	3100	3090	47	2200	7.70	8.10	-			<1	<2	68	2740	
	Oct-08	7.50	14200	3100	3110	45	2100	7.40	8.50	-			<1	<2	61	2540	
	Apr-09	6.80	13800	3200	3200	53	1800	8.60	8.50	0.10			<1	<2	66	2250	
	Sep-09	7.20	13900	3100	3200	48	1900	8.10	8.10	0.00			<1	<2	59	2310	
	Sep-10	7.60	13900	3300	3000	47	2000	9.00	8.50	0.50			<1	<2	57	2440	
	Apr-10	7.50	14300	3300	3200	48	2100	9.90	10.00	-			<1	<2	57	2700	
	Apr-11	7.51	13900	3200	2900	51	2000	12.00	8.40	3.60			<1	<2	72	2460	
	Sep-11	7.67	10400	2100	2200	62	1200	6.60	7.40	-			4.0	<2	47	1850	
	Apr-12	7.51	12000	2600	2600	58	1600	9.90	6.90	3.00			4.9	<2.0	54	2120	
	Sep-12	7.32	8500	1500	1900	74	800	4.40	4.90	-			<1	<2.0	40	1550	
	Apr-13	7.66	8300	1500	1700	73	740	5.10	5.40	-			<1	<2	42	1500	
	Sep-13	7.78	8300	1600	2100	72	780	5.20	4.80	0.40			<1	<2	42	1600	
	Sep-14	7.78	8400	1500	2100	71	780	5.10	5.20	-			<1	<2	41	1600	
	Sep-15	7.44	9600	1900	2600	68	1100	6.10	5.70	0.40			<1	<2	51	1800	
	Sep-16	7.50	11000	2300	2800	56	1500	6.60	6.70	<0.05	<0.1	<0.01	<1	<2			
	Apr-17	7.58	13000	2900	2700	56	1600	6.70	7.30	<0.05	<0.1	0.01	<1	<2.0	67	2200	0.83
	Sep-17	7.48	12000	2600	2900	68	1600	6.90	7.10	<0.05	<0.1	<0.01	<1	<2.0	62	2200	
	May-18	7.56	12000	2700	3000	57	1500	6.70	7.40	<0.05	<0.1	<0.01	<1	<2	62	2200	
	Sep-18	7.50	12000	2600	2800	56	1600	7.70	7.10	0.60			<1	<2	63	2300	
	Apr-19	7.57	13000	2900	2900	52	2100	6.80	7.20	<0.05	<0.10	<0.010	<1	<2	66	2500	1.10
	Sep-19	7.56	12000	2800	2900	51	1700	6.90	7.70	<0.05	<0.10	<0.010	<1	<2	58	2200	<0.5
	Apr-20	7.50	13000	2700	3000	50	1800	7.80	7.60	0.20			<1	<2	70	2300	
	Sep-20	7.20	13000	2700	2800	52	1700	7.70	7.50	0.20			<1	<2	66	2300	
	Apr-21	7.34	12000	2800	3100	49	1800	6.70	6.30	0.50	0.50	0.05	<1	6.0	56	2200	<0.5
	Sep-21	7.47	13000	2800	3000	50	1800	8.20	7.50	0.70			<1	<2	63	2300	
	Apr-22	7.41	12000	2800	2900	50	1900	8.20	7.30	0.90			<1	<2	61	2400	
	Sep-22	7.52	15000	3500	2900	48	2200	8.70	8.20	0.50			1.1	<2	62	2500	

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.
4) BP - Indicates Bayview Park reference borehole location

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
5-II	Sep-03	8.18	3362	324	1550	115	240	5.12	4.33	0.79			<1.0	<0.5	33	755	
BP	Jan-04	7.93	3654	248	1550	117	244	3.58	3.84	-			<1.0	4.6	30	765	
	Oct-04	8.13	3790	365	1700	112	257	6.00	3.60	2.40			<1.0	<4	28	975	
	Oct-05	8.10	3790	162	1770	116	232	2.90	2.57	0.33		0.10	<1.0	4.0	26	860	
	Apr-06	7.90	4020	148	1570	108	310	3.10	2.72	0.38			<1.0	<2	30	950	
	Sep-06	8.10	4240	152	1820	113	270	2.70	2.67	0.03			<1.0	<2	27	850	
	May-07	8.00	4320	150	1780	108	280	3.10	3.08	0.02			<1	12.0	27	860	
	Sep-07	8.00	4190	150	1810	103	250	3.20	3.00	0.20			<1	9.0	24	807	
	May-08	7.90	4200	150	1740	100	260	2.30	1.40	0.90			<1	7.0	26	879	
	Oct-08	8.00	4170	150	1660	102	260	2.60	2.40	0.20			<1	9.0	26	804	
	Apr-09	7.40	4320	190	1800	119	240	4.60	3.10	1.50			<1	<2	27	819	
	Sep-09	7.60	4300	170	1900	111	250	4.00	3.10	0.90			<1	<2	26	755	
	Sep-10	8.00	4310	180	1700	105	260	3.50	2.70	0.80			<1	8.0	25	819	
	Apr-10	8.00	4340	200	1900	110	270	4.00	2.80	1.20			1.0	8.0	26	906	
	Apr-11	7.95	4460	190	1700	106	290	5.00	3.00	2.00			<1	<2	32	893	
	Sep-11	7.99	4570	210	1700	106	280	6.00	3.50	2.50			<1	<2	28	896	
	Apr-12	7.76	4200	150	1600	100	240	2.20	1.90	0.30			<1	10.0	24	838	
	Sep-12	7.60	4200	150	1600	110	250	3.20	2.40	0.80			<1	11.0	33	822	
	Apr-13	7.95	4500	210	1600	110	260	4.00	3.20	0.80			<1	<2	27	890	
	Sep-13	7.88	4200	140	1800	100	260	2.90	2.60	0.30			<1	<2	26	880	
	Sep-14	7.87	4600	140	1800	110	280	3.30	3.10	0.20			<1	15.0	26	920	
	Sep-15	7.56	4200	150	1800	100	260	2.60	2.40	0.20			<1	10.0	27	880	
	Sep-16	7.95	4600	230	1800	110	310	3.10	3.10	<0.05	0.74	0.38	<1.0	6.0			
	Apr-17	8.01	4600	210	1800	120	280	3.00	2.80	0.20	0.91	0.29	<1	<2.0	30	890	<0.50
	Sep-17	7.79	4300	180	1800	110	300	1.70	1.30	0.40	2.47	0.11	<10	5.0	30	900	
	May-18	7.91	4400	210	1600	110	300	2.40	2.40	<0.05	1.09	0.36	<1	8.0	27	880	
	Sep-18	7.91	4900	330	1800	110	300	3.30	3.20	0.10			<1	14.0	29	980	
	Apr-19	7.89	4400	210	1700	100	260	0.44	0.64	<0.05	2.39	0.09	<1	5.0	24	850	<0.5
	Sep-19	7.91	4400	220	1700	110	270	1.50	1.50	<0.05	1.91	0.14	<1	10.0	26	860	<0.1
	Apr-20	7.70	4700	290	1700	120	300	1.50	1.50	<0.05			<1	11.0	29	970	
	Sep-20	7.75	4500	290	1700	110	290	2.00	2.00	<0.05			<1	9.0	30	870	
	Apr-21	7.71	4400	260	1700	110	280	0.71	0.60	0.11	3.33	0.14	<1	5.0	26	890	<0.5
	Sep-21	7.79	4500	310	1800	120	290	1.30	1.50	<0.05			<1	11.0	27	930	
	Apr-22	7.68	4300	270	1700	110	290	1.10	0.93	0.17			<1	11.0	27	920	
	Sep-22	7.82	4500	290	1600	110	290	1.40	1.40	0.00			1.2	14.0	26	910	

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
5-III	Sep-03	7.87	4675	42	2950	79	1706	3.48	2.84	0.64			<1.0	<0.5	31	600	
BP	Jan-04	7.73	4913	49	3100	80	1693	3.36	3.21	0.15			<1.0	<0.5	35	682	
	Oct-04	7.88	4520	51	3380	63	1920	22.70	3.07	19.63			<1.0	<4	36	738	
	Oct-05	7.82	4540	51	3100	72	1480	7.00	2.85	4.15			<1.0	<3	33	745	
	Apr-06	7.80	5280	54	3060	67	1900	2.60	2.22	0.38			<1.0	<2	39	770	
	Sep-06	7.70	5270	57	3220	64	1900	7.00	2.63	4.37			<1.0	<2	38	760	
	May-07	7.60	5380	55	2830	58	100 *	2.00	0.71	1.29			<1	3.0	* 1.5	10 *	
	Sep-07	7.70	5370	57	3410	62	1900	8.00	2.25	5.75			<1	<2	35	716	
	May-08	7.70	5370	51	3290	59	1900	3.00	0.50	2.50			<1	<2	26	776	
	Oct-08	7.80	5350	51	3080	60	1900	5.00	1.90	3.10			<1	5.0	37	711	
	Apr-09	6.70	5390	52	3100	66	1700	3.40	1.50	1.90			<1	<2	35	671	
	Sep-09	7.30	5360	50	3400	67	1700	31.00	2.00	29.00			<1	<2	32	625	
	Sep-10	7.70	5400	45	3200	60	1800	4.00	1.60	2.40			<1	3.0	32	683	
	Apr-10	7.70	5420	45	3400	61	1900	4.00	1.10	2.90			1.0	<2	30	738	
	Apr-11	7.54	5430	45	3100	60	2000	5.00	1.10	3.90			<1	<2	35	696	
	Sep-11	7.62	5480	44	3100	62	1800	4.00	1.50	2.50			1.0	<2	37	676	
	Apr-12	7.54	5400	44	3100	58	1800	<0.5	0.16	<0.34			<1	<2.0	35	683	
	Sep-12	7.05	5300	42	3100	59	1900	2.50	1.50	1.00			<1	2.0	37	683	
	Apr-13	7.58	5400	44	3100	59	1900	2.70	1.50	1.20			<1	<2	31	660	
	Sep-13	7.67	5300	45	3200	62	1900	2.00	1.30	0.70			<1	<2	34	710	
	Sep-14	7.60	5400	45	3300	64	1900	3.80	1.30	2.50			<1	2.0	34	700	
	Sep-15	7.14	5300	46	3300	65	2000	1.50	1.20	0.30			<1	4.0	40	690	
	Sep-16	7.53	5300	46	3200	66	2000	1.60	1.30	0.30	1.15	0.69	<1	4.0			
	Apr-17	7.66	5500	47	3200	64	1900	1.00	0.89	0.11	1.69	0.40	<1	4.0	39	680	<0.10
	Sep-17	7.69	5300	47	3300	66	2000	1.50	1.20	0.30	1.36	0.23	<10	<2.0	38	720	
	May-18	7.57	5400	45	3100	61	2100	1.50	1.10	0.40	0.95	0.25	<1	<2	35	690	
	Sep-18	7.50	5500	47	3300	64	2000	1.10	0.62	0.48			<1	<2	34	690	
	Apr-19	7.73	5400	44	3200	65	2000	1.20	0.59	0.61	2.03	0.06	<1	5.0	36	670	<0.1
	Sep-19	7.73	5400	46	3200	63	2000	1.50	0.91	0.59	1.22	0.03	<1	6.0	35	660	<0.1
	Apr-20	7.50	5500	45	3200	63	2000	1.10	0.72	0.38			<1	10.0	40	710	
	Sep-20	7.55	5300	47	3100	66	1900	1.70	1.30	0.40			<1	8.0	39	670	
	Apr-21	7.62	5300	49	3500	65	1900	1.00	0.67	0.33	1.84	0.06	<1	6.0	34	680	<0.1
	Sep-21	7.66	5200	47	3300	67	2000	1.60	1.10	0.50			<1	11.0	34	680	
	Apr-22	7.55	5000	45	3100	65	2000	1.10	0.73	0.37			<1	4.0	35	710	
	Sep-22	7.65	5200	48	3200	61	2000	1.60	1.20	0.40			1.3	7.0	35	680	

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.
4) BP - Indicates Bayview Park reference borehole location

TABLE C-2
GROUNDWATER GENERAL CHEMISTRY RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	DATE	pH	SPEC. COND.	CHLORIDE	SULPHATE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN (as N)	AMMONIA (as N)	ORGANIC NITROGEN	NITRATE (as N)	NITRITE (as N)	PHENOLICS	BOD	POTASSIUM	SODIUM	IRON
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ODWQS		6.5-8.5		250	500	30-500	80-100			0.15	10.0	1.0				200	0.3
5-IV	Sep-03	7.71	7341	221	5810	759	5844	0.42	0.29	0.13			<1.0	<0.5	30	420	
BP	Jan-04	7.29	8058	301	6060	753	6102	0.49	0.20	0.29			<5.0	<0.5	24	534	
	Oct-04	7.77	7510	328	6580	804	6850	2.80	0.28	2.52			<1.0	<4	23	641	
	Oct-05	7.87	7120	344	6150	809	6470	9.00	0.23	8.77		<0.1	<1.0	<2	25	700	
	Apr-06	7.80	8350	332	3630	789	7000	0.50	0.15	0.35			<1.0	<2	20	590	
	Sep-06	7.90	9040	325	5730	846	6400	3.00	0.14	2.86			<1.0	<2	21	550	
	May-07	8.00	9100	340	5430	752	6600	1.00	0.08	0.92			<1	2.0	19	560	
	Sep-07	7.70	9030	330	6010	761	5900	1.10	0.12	0.98			<1	<2	19	482	
	May-08	7.70	9070	320	6590	725	6600	6.00	0.07	5.93			<1	<2	21	518	
	Oct-08	8.00	8990	340	5910	756	6200	2.00	<0.05	1.98			<1	<2	16	500	
	Apr-09	7.50	8950	330	6200	715	5800	3.00	0.09	2.91			<1	<2	17	480	
	Sep-09	7.60	8950	320	6400	760	5700	1.00	0.06	0.94			<1	<2	18	442	
	Sep-10	7.60	9020	330	6000	728	6400	1.00	<0.05	0.98			<1	<2	17	499	
	Apr-10	7.70	9040	340	6400	711	6400	3.00	<0.05	2.98			<1	<2		533	
	Apr-11	7.59	9090	340	5900	704	6200	<5.00	0.05	<4.95			<1	<2	16	487	
	Sep-11	7.36	9190	330	5900	722	6200	5.00	<0.05	4.98			<1	<2	17	490	
	Apr-12	7.53	8800	310	5800	740	6400	1.50	<0.05	1.48			<1	<2.0	18	491	
	Sep-12	7.34	8900	320	5800	740	6000	1.00	<0.05	0.98			<1	<2.0	27	476	
	Apr-13	7.64	8800	330	5500	710	6200	1.10	0.06	1.04			<1	<2	17	500	
	Sep-13	7.58	8900	350	6200	730	6300	0.71	<0.05	0.66			<1	<2	18	510	
	Sep-14	7.55	9200	350	5500	720	6400	0.74	<0.05	0.69			<1	<2	17	500	
	Sep-15	7.38	9000	390	6200	720	6300	<0.50	<0.05	0.49			<1	<2	19	510	
	Sep-16	7.51	9000	390	6100	740	6700	<0.10	<0.05	<0.05	<0.1	<0.01	<1	<2			
	Apr-17	7.65	9300	390	6200	720	6300	0.11	<0.050	0.09	<0.1	<0.01	<1	<2.0	17	560	<0.10
	Sep-17	7.68	8900	390	6100	750	6500	0.34	<0.050	0.32	<0.1	<0.01	<10	<2.0	20	530	
	May-18	7.75	9100	400	5600	720	6000	0.12	0.13	<0.05	<0.1	<0.01	<1	<2	17	500	
	Sep-18	7.61	9100	410	6000	760	6400	0.40	0.06	0.34			<1	<2	19	520	
	Apr-19	7.75	9100	430	5900	700	6300	<0.10	<0.050	<0.10	<0.10	<0.010	<1	<2	19	570	<0.1
	Sep-19	7.58	9000	420	5800	730	6500	<0.10	0.09	<0.05	<0.10	<0.010	<1	<2	18	500	<0.1
	Apr-20	7.14	9200	430	5900	720	6200	0.10	<0.050	0.08			<1	<2	20	510	
	Sep-20	7.53	8900	440	5700	740	6300	0.25	<0.050	0.23			<1	<2	21	500	
	Apr-21	7.50	9100	460	6200	720	6500	0.10	0.11	<0.05	<0.10	<0.010	<1	<2	17	500	<0.1
	Sep-21	7.38	8600	460	5900	740	6400	0.69	<0.050	0.69			<1	<2	19	520	
	Apr-22	7.37	7700	460	5900	710	6400	0.78	0.16	0.62			<1	<2	17	530	
	Sep-22	7.76	8800	500	6100	740	6400	0.49	0.12	0.37			1.3	<2	18	510	

NOTES: 1) * - Indicates associated value is suspected to be anomalous.
2) ODWQS - Ontario Drinking Water Quality Standards (2006)
3) Blank indicates parameter not analysed.
4) BP - Indicates Bayview Park reference borehole location

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	14-I														
		Nov-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Oct-96	Sep-98	Sep-99	Sep-00	Sep-01	Sep-02
1,1,1,2-Tetrachloroethane																	<0.1
1,1,1-Trichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	2.8	<0.6	1.6	<0.6	<0.6	0.4	0.3	<0.2	0.3	<0.2	0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,1-Dichloroethylene	**14 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,2-Dibromoethane			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Acetone													<10.0	<10.0	<10.0	<10.0	<10.0
Benzene	**5 ****	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	0.2	<0.2	<0.2	<0.1
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2
Chloroform		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	0.2	<0.2	<0.2	<0.1
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<5.4	<2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0									
Dichloromethane	**50 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	4.0	<1.0	<1.0	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Hexane																	
m/p-Xylenes	**300 *****	* <0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Methyl ethyl ketone													<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																	<5.0
Methyl t-Butyl Ether																	<0.2
o-Xylene	**300 *****	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Styrene													<0.2	<0.2	<0.2	<0.2	<0.1
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Toluene	**24**	* <0.5	<0.5	<0.5	0.4	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	0.4	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2
Xylenes - total																	

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	14-I															
		Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18
1,1,1,2-Tetrachloroethane		<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.1	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.5		<0.2	<0.2		<0.2		<0.2	<0.2	<0.2				<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Acetone		<10.0	<15.0	<10.0	<10.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Chloroethane		<0.2	<1.0				<0.2	<0.2									
Chloroform		<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Chloromethane		<0.5	<2.0				<0.5	<0.5									
Cis-1,2-Dichloroethylene		<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane										<0.5		<0.5	<0.5	<0.50	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
Ethyl benzene	**2.4**	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.20	<0.10	<0.10	<0.10
Hexane										<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<15.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5.0	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<10.0	<5.0	<5.0	<5		<5	<5	<5	<5.0	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.2	<2.0	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Styrene		<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.2	<2.0				<0.2	<0.2		<0.2		<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Xylenes - total												<0.1	<0.1	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	14-I			
		Sep-19	Sep-20	Sep-21	Dec-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<1.0
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.50
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<1.0
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<1.0
1,1-Dichloroethane		<0.10	<0.10	<0.10	<0.50
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.50
1,2-Dibromoethane		<0.20	<0.20	<0.20	<1.0
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<1.0
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<1.0
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.50
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<1.0
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<1.0
Acetone		<10	<10	<10	<50
Benzene	5 **	<0.10	<0.10	<0.10	<0.50
Bromodichloromethane		<0.10	<0.10	<0.10	<0.50
Bromoform		<0.20	<0.20	<0.20	<1.0
Bromomethane		<0.50	<0.50	<0.50	<2.5
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.50
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.50
Chloroethane					
Chloroform		<0.10	<0.10	<0.10	<0.50
Chloromethane					
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.50
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.50
Dibromochloromethane		<0.20	<0.20	<0.20	<1.0
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<2.5
Dichloromethane	50 **	<0.50	<0.50	<0.50	<2.5
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.50
Hexane		<0.50	<0.50	<0.50	<2.5
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.50
Methyl ethyl ketone		<5.0	<5.0	<5.0	<25
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<25
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<1.0
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.50
Styrene		<0.20	<0.20	<0.20	<1.0
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.50
Toluene	24	<0.20	<0.20	<0.20	<1.0
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.50
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.50
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.50
Trichlorofluoromethane		<0.20	<0.20	<0.20	<1.0
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<1.0
Xylenes - total		<0.10	<0.10	<0.10	<0.50

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	14-II														
		Nov-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Oct-96	Sep-98	Sep-99	Sep-00	Sep-01	Sep-02
1,1,1,2-Tetrachloroethane																	<0.1
1,1,1-Trichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		1.6	2.4	<1.0	3.6	5.4	5.2	6.5	4.8	4.1	4.7	4.2	3.5	0.2	3.2	<0.2	3.0
1,1-Dichloroethylene	**14 ****	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,2-Dibromoethane			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	0.3	<0.2	<0.2	<0.2	<0.2	<0.1
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	0.4	<0.2	0.6
Acetone													<10.0	<10.0	<10.0	<10.0	<10.0
Benzene	**5 ****	* <0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.2	<0.2	0.6	<0.2	0.4	0.4	<0.1	0.3	<0.1	0.4
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	0.3	0.4	<0.2	0.7	<0.2	1.3
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	3.5	<2.3	<2.3	<2.3	<2.3	2.6	2.7	<0.5	1.7	<0.5	2.0
Chloroform		<1.0	<1.0	<1.0	<1.0	<1.0	0.8	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<6.7	<2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
Cis-1,2-Dichloroethylene		* <1.0	<1.0	<1.0	* <1.0	<1.0	<1.0	<1.0				1.3	1.5	0.3	1.5	<0.2	2.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		4.0	<2.0	<2.0	5.2	10.9	<2.0	<2.0									
Dichloromethane	**50 ****	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	2.5	<1.0	<1.0	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	1.8	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Hexane																	
m/p-Xylenes	**300 *****	<0.5	<0.5	<0.5	7.6	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Methyl ethyl ketone													<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																	<5.0
Methyl t-Butyl Ether																	<0.2
o-Xylene	**300 *****	<0.5	<0.5	<0.5	5.7	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Styrene													<0.2	<0.2	<0.2	<0.2	<0.1
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Toluene	**24**	* <0.5	<0.5	* <0.5	5.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	0.1
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	0.2	<0.2	<0.2	<0.2	<0.2	0.1
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	1.7	0.5	<0.5	*0.3	<0.2	0.4
Xylenes - total																	

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	14-II															
		Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18
1,1,1,2-Tetrachloroethane		<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.5	<0.2	<0.40	<0.20	<0.20	<0.50
1,1,1-Trichloroethane		<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.20	<0.10	<0.10	<0.25
1,1,2,2-Tetrachloroethane		<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.40	<0.20	<0.20	<0.50
1,1,2-Trichloroethane		<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.40	<0.20	<0.20	<0.50
1,1-Dichloroethane		2.8	2.7	2.0	2.0	1.5	1.6	1.8	1.3	1.6	0.9	1.6	1.3	1.2	1.3	1.4	1.5
1,1-Dichloroethylene	**14 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.20	<0.10	<0.10	<0.25
1,2-Dibromoethane		<0.2	<0.5		<0.2	<0.2		<0.2		<0.2	<0.2	<0.5				<0.20	<0.50
1,2-Dichlorobenzene	**3**	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.40	<0.20	<0.20	<0.50
1,2-Dichloroethane	**5 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.40	<0.20	<0.20	<0.50
1,2-Dichloropropane		<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.20	<0.10	<0.10	<0.25
1,3-Dichlorobenzene		<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.40	<0.20	<0.20	<0.50
1,4-Dichlorobenzene	**1**	0.6	0.8	0.4	0.9	0.9	1.1	0.9	1.2	1.3	1.1	1.4	1.6	1.5	2.2	2.6	2.2
Acetone		<10.0	<15.0	<10.0	<10.0	<10	<10	<10	<10	<10	<10	<25	<10	<20	<10	<10	<25
Benzene	**5 ****	0.3	<0.5	0.3	0.3	0.4	0.4	0.5	0.4	0.6	0.5	0.7	0.69	0.62	0.79	0.89	0.99
Bromodichloromethane		<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.20	<0.10	<0.10	<0.25
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.40	<0.20	<0.20	<0.50
Bromomethane		<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.3	<0.5	<1.0	<0.50	<0.50	<1.3
Carbon Tetrachloride	**5 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.20	<0.10	<0.10	<0.25
Chlorobenzene	**80 ****	1.1	1.8	1.3	2.2	2.5	3.0	4.4	3.7	4.8	4.1	5.3	6	5.4	6.9	7.5	6.5
Chloroethane		2.0	<1.0				1.4	1.8									
Chloroform		<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.20	<0.10	<0.10	<0.25
Chloromethane		<0.5	<2.0				<0.5	<0.5									
Cis-1,2-Dichloroethylene		2.5	2.8	2.5	3.1	3.1	3.5	4.7	4.1	4.7	4.1	5.6	5.6	5.7	5.8	6.5	6.7
Cis-1,3-Dichloropropene		<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.40	<0.20	<0.20	<0.50
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.40	<0.20	<0.20	<0.50
Dichlorodifluoromethane										<0.5		<1.3	<0.5	<1.0	<0.50	<0.50	<1.3
Dichloromethane	**50 ****	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.3	<0.5	<1.0	<0.50	<0.50	<1.3
Ethyl benzene	**2.4**	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.2	<0.10	<0.10	<0.25
Hexane										<0.5	<0.5	<1.3	<0.5	<1.0	<0.50	<0.50	<1.3
m/p-Xylenes	**300 *****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.2	<0.10	<0.10	<0.25
Methyl ethyl ketone		<5.0	<15.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5.0	<13	<5	<10	<5.0	<5.0	<13
Methyl Isobutyl Ketone		<5.0	<10.0	<5.0	<5.0	<5		<5	<5	<5	<5.0	<13	<5	<10	<5.0	<5.0	<13
Methyl t-Butyl Ether		*0.1	<2.0	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.40	<0.20	<0.20	<0.50
o-Xylene	**300 *****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.2	<0.10	<0.10	<0.25
Styrene		<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.4	<0.20	<0.20	<0.50
Tetrachloroethylene	**30 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.20	<0.10	<0.10	<0.25
Toluene	**24**	<0.2	<0.5	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.40	<0.20	<0.20	<0.50
trans-1,2-Dichloroethylene		0.1	<1.0	<0.1	<0.1	<0.1	0.1	0.1	<0.1	0.2	0.1	<0.25	0.23	<0.20	0.26	0.32	0.33
trans-1,3-Dichloropropene		<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.40	<0.20	<0.20	<0.50
Trichloroethylene	**5 ****	0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	0.15	<0.20	0.23	0.28	0.27
Trichlorofluoromethane		<0.2	<2.0				<0.2	<0.2		<0.2		<0.5	<0.2	<0.40	<0.20	<0.20	<0.50
Vinyl Chloride	**2 ****	0.3	<0.2	0.5	0.9	0.7	1.0	1.7	<2	2.5	1.5	2.6	3.5	2.6	3.4	3.9	3.8
Xylenes - total												<0.25	<0.1	<0.20	<0.10	<0.10	<0.25

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	14-II			
		Sep-19	Sep-20	Sep-21	Dec-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		1.5	1.7	0.99	1.2
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		0.16	0.18	0.15	0.19
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	4.5	3.8	4.9	3.2
Acetone		<10	<10	<10	<10
Benzene	5 **	1.2	1.1	0.72	0.65
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	9.2	7.3	8.7	6.0
Chloroethane					
Chloroform		<0.10	<0.10	<0.10	<0.10
Chloromethane					
Cis-1,2-Dichloroethylene		7.9	9.7	6.9	7.3
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.20
Hexane		<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		0.43	0.43	0.31	0.35
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	0.27	0.19	0.12	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	5.1	4.5	3.6	4.8
Xylenes - total		<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	15-I														
		Nov-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Dec-97	Sep-98	Sep-99	Sep-00	Sep-01
1,1,1,2-Tetrachloroethane																	
1,1,1-Trichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	2.5	<0.6	0.8	<0.6	<0.6	0.3	0.2	<0.2	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	0.3	<0.2	<0.2	<0.2
1,1-Dichloroethylene	**14 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dibromoethane			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone													<10.0	<10.0	<10.0	<10.0	<10.0
Benzene	**5 ****	* <0.5	<0.5	<0.5	* <0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	0.3	<0.2	<0.2	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0									
Dichloromethane	**50 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	* <0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Hexane																	
m/p-Xylenes	**300 *****	* <0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methyl ethyl ketone													<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																	
Methyl t-Butyl Ether																	
o-Xylene	**300 *****	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Styrene													<0.2	<0.2	<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	* <0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Xylenes - total																	

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	15-I															
		Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17
1,1,1,2-Tetrachloroethane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		0.1	0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2	<0.5		<0.2	<0.2		<0.2		<0.4	<0.2	<0.2				<0.20
1,2-Dichlorobenzene	**3**	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Acetone		<10.0	<10.0	<15.0	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	0.19	<0.10	<0.10	<0.10
Bromodichloromethane		<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Chloroethane		<0.2	<0.2	<1.0				<0.2	<0.2								
Chloroform		<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Chloromethane		<0.5	<0.5	<2.0				<0.5	<0.5								
Cis-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Dichlorodifluoromethane											<1		<0.5	<0.5	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50
Ethyl benzene	**2.4**	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Hexane											<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<15.0	<5	<5.0	<5	<5	<5	<5	<10	<5.0	<5	<5	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<10.0	<5	<5.0	<5		<5	<5	<10	<5.0	<5	<5	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.2	<0.2	<2.0	<0.2	<0.2	<0.2		<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Styrene		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	14.0	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.2	<0.2	<2.0				<0.2	<0.2		<0.4		<0.2	<0.2	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Xylenes - total													<0.1	<0.1	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	15-I				
		Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10
Benzene	5 **	<0.10	0.44	<0.10	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane						
Chloroform		<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane						
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane		<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.10	0.17	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	0.34	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.10	0.17	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	15-II															
		Nov-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Dec-97	Sep-98	Sep-99	Sep-00	Sep-01
1,1,1,2-Tetrachloroethane																	
1,1,1-Trichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	0.2	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	0.6	<0.5	<0.5	0.9	0.5	<0.2	0.4	1.3	<0.2
1,1-Dichloroethylene	**14 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dibromoethane			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone													<10.0	<10.0	<10.0	<10.0	<10.0
Benzene	**5 ****	* <0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.2	3.6	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	0.2	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5	*0.4	<0.5
Chloroform		* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				0.7	0.3	<0.2	0.5	1.8	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0									
Dichloromethane	**50 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Hexane																	
m/p-Xylenes	**300 *****	<0.5	<0.5	<0.5	4.3	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methyl ethyl ketone													<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																	
Methyl t-Butyl Ether																	
o-Xylene	**300 *****	<0.5	<0.5	<0.5	2.3	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Styrene													<0.2	<0.2	<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	<0.5	<0.5	* <0.5	3.2	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	0.6	<0.3	<0.3	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Xylenes - total																	

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	15-II															
		Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17
1,1,1,2-Tetrachloroethane		<0.1	<0.1	<0.5	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.1	<0.1	<0.5	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<1.0	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.5	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1-Dichloroethane		1.4	1.7	0.9	0.2	0.9	0.5	0.9	0.6	0.2	0.2	0.1	0.2	0.3	0.1	0.1	<0.10
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.5	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2	<0.5		<0.4	<0.2		<0.2		<0.2	<0.2	<0.2				<0.20
1,2-Dichlorobenzene	**3**	<0.1	<0.1	0.5	<0.1	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.1	0.1	<0.5	<0.1	<0.2	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.1	<0.1	<0.5	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.1	<0.1	<0.5	<0.1	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	0.1	0.3	0.6	<0.1	<0.4	0.2	0.5	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Acetone		<10.0	<10.0	<15.0	<10	<20.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	0.4	0.3	<0.5	0.1	0.4	0.2	0.5	0.3	<0.1	<0.1	<0.1	<0.1	0.2	<0.10	<0.10	<0.10
Bromodichloromethane		<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<3.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	0.2	0.6	<0.5	<0.1	1.0	0.5	1.5	1.0	0.2	0.2	0.1	0.3	0.5	0.1	<0.10	<0.10
Chloroethane		0.7	1.3	<1.0				0.5	0.3								
Chloroform		<0.1	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Chloromethane		<0.5	<0.5	<2.0				<0.5	<0.5								
Cis-1,2-Dichloroethylene		2.1	2.5	<1.0	0.3	1.5	0.9	1.6	0.8	0.2	0.2	0.2	0.3	0.4	0.1	0.1	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Dichlorodifluoromethane											<0.5		<0.5	<0.5	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<1.0	nd	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50
Ethyl benzene	**2.4**	<0.1	nd	<0.5	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Hexane											<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.1	nd	1.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Methyl ethyl ketone		<5.0	nd	<15.0	<5	<10.0	<5	<5	<5	<5	<5	<5.0	<5	<5	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	nd	<10.0	<5	<10.0	<5		<5	<5	<5	<5.0	<5	<5	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.2	*0.1	<2.0	<0.2	<0.4	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.1	nd	0.7	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Styrene		<0.1	nd	0.5	<0.1	<0.2	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.1	nd	1.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Toluene	**24**	0.2	nd	1.0	<0.2	10.0	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		0.2	0.2	<1.0	<0.1	<0.2	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	nd	<0.14	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	0.1	0.1	0.9	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.2	nd	<2.0				<0.2	<0.2		<0.2		<0.2	<0.2	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	0.3	0.5	<0.2	<0.2	<0.4	<0.2	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Xylenes - total													<0.1	<0.1	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	15-II				
		Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<1.0	<4.0	<0.20	<0.50	<0.20
1,1,1-Trichloroethane		<0.50	<2.0	<0.10	<0.25	<0.10
1,1,2,2-Tetrachloroethane		<1.0	<4.0	<0.20	<0.50	<0.20
1,1,2-Trichloroethane		<1.0	<4.0	<0.20	<0.50	<0.20
1,1-Dichloroethane		<0.50	<2.0	<0.10	<0.25	0.10
1,1-Dichloroethylene	14 **	<0.50	<2.0	<0.10	<0.25	<0.10
1,2-Dibromoethane		<1.0	<4.0	<0.20	<0.50	<0.20
1,2-Dichlorobenzene	3	<1.0	<4.0	<0.20	<0.50	<0.20
1,2-Dichloroethane	5 **	<1.0	<4.0	<0.20	<0.50	<0.20
1,2-Dichloropropane		<0.50	<2.0	<0.10	<0.25	<0.10
1,3-Dichlorobenzene		<1.0	<4.0	<0.20	<0.50	<0.20
1,4-Dichlorobenzene	1	<1.0	<4.0	<0.20	<0.50	<0.20
Acetone		<50	<200	<10	<25	<10
Benzene	5 **	<0.50	<2.0	<0.10	<0.25	<0.10
Bromodichloromethane		<0.50	<2.0	<0.10	<0.25	<0.10
Bromoform		<1.0	<4.0	<0.20	<0.50	<0.20
Bromomethane		<2.5	<10	<0.50	<1.3	<0.50
Carbon Tetrachloride	5 **	<0.50	<2.0	<0.10	<0.25	<0.10
Chlorobenzene	80 **	<0.50	<2.0	0.2	<0.25	0.11
Chloroethane						
Chloroform		<0.50	<2.0	<0.10	<0.25	<0.10
Chloromethane						
Cis-1,2-Dichloroethylene		<0.50	<2.0	0.1	<0.25	0.15
Cis-1,3-Dichloropropene		<1.0	<4.0	<0.20	<0.50	<0.20
Dibromochloromethane		<1.0	<4.0	<0.20	<0.50	<0.20
Dichlorodifluoromethane		<2.5	<10	<0.50	<1.3	<0.50
Dichloromethane	50 **	<2.5	<10	<0.50	<1.3	<0.50
Ethyl benzene	2.4	<0.50	<2.0	<0.10	<0.25	<0.10
Hexane		<2.5	<10	<0.50	<1.3	<0.50
m/p-Xylenes	300 ***	<0.50	<2.0	<0.10	<0.25	<0.10
Methyl ethyl ketone		<25	<100	<5.0	<13	<5.0
Methyl Isobutyl Ketone		<25	<100	<5.0	<13	<5.0
Methyl t-Butyl Ether		<1.0	<4.0	<0.20	<0.50	<0.20
o-Xylene	300 ***	<0.50	<2.0	<0.10	<0.25	<0.10
Styrene		<1.0	<4.0	<0.20	<0.50	<0.20
Tetrachloroethylene	30 **	<0.50	<2.0	<0.10	<0.25	<0.10
Toluene	24	<1.0	<4.0	<0.20	<0.50	<0.20
trans-1,2-Dichloroethylene		<0.50	<2.0	<0.10	<0.25	<0.10
trans-1,3-Dichloropropene		<1.0	<4.0	<0.20	<0.50	<0.20
Trichloroethylene	5 **	<0.50	<2.0	<0.10	<0.25	<0.10
Trichlorofluoromethane		<1.0	<4.0	<0.20	<0.50	<0.20
Vinyl Chloride	2 **	<1.0	<4.0	<0.20	<0.50	<0.20
Xylenes - total		<0.50	<2.0	<0.10	<0.25	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	16-I															
		Nov-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99	Sep-00	Sep-01
1,1,1,2-Tetrachloroethane																	
1,1,1-Trichloroethane		15.7	1.3	2.6	2.0	2.7	8.4	7.6	15.0	7.5	14.0	2.5	19.5	8.0	18.2	19.6	16.1
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	0.6	0.2	0.4	0.5	<0.2
1,1-Dichloroethylene	**14 ****	2.1	<1.0	<1.0	<1.0	<1.0	1.5	<0.4	2.2	<0.4	2.1	<0.2	<0.2	<0.2	0.2	0.2	<0.2
1,2-Dibromoethane			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2	<0.2	0.5
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone													<10.0	<10.0	<10.0	<10.0	<15.0
Benzene	**5 ****	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0									
Dichloromethane	**50 ****	* <1.0	<1.0	<1.0	2.6	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.5
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Hexane																	
m/p-Xylenes	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methyl ethyl ketone													<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																	
Methyl t-Butyl Ether																	
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Styrene													<0.2	<0.2	<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	1.5	<0.5	<0.5	* <0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	0.5	3.6	2.1	2.9	1.1	3.6
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Xylenes - total																	

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	16-I															
		Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Mar-18
1,1,1,2-Tetrachloroethane		<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<1	<0.2	<0.20	<0.20	<0.50
1,1,1-Trichloroethane		23.4	10.4	19.0	34.1	21.0	12.0	17.0	23.0	9.5	15.0	9.4	7.8	5.6	13	4	10
1,1,2,2-Tetrachloroethane		<0.2	<0.8	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
1,1,2-Trichloroethane		<0.2	<0.8	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
1,1-Dichloroethane		0.4	<0.4	0.5	0.8	0.5	0.3	0.2	0.3	0.4	0.5	<0.5	<0.5	0.16	0.23	<0.10	<0.25
1,1-Dichloroethylene	**14 ****	0.2	<0.4	<0.5	0.2	0.6	0.1	0.1	0.1	<0.1	0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
1,2-Dibromoethane		<0.2	<0.8	<0.5		<0.2	<0.2		<0.2		<0.2	<1.0	<1				<0.50
1,2-Dichlorobenzene	**3**	<0.1	<0.4	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
1,2-Dichloroethane	**5 ****	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
1,2-Dichloropropane		<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
1,3-Dichlorobenzene		<0.1	<0.4	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
1,4-Dichlorobenzene	**1**	<0.1	<0.4	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
Acetone		<10.0	<40.0	<15.0	<10	<10.0	<10	<10	<10	<10	<10	<50	<50	<10	<10	<10	<25
Benzene	**5 ****	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
Bromodichloromethane		<0.1	<0.4	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
Bromoform		<0.2	<0.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
Bromomethane		<0.5	<2.0	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<2.5	<0.5	<0.50	<0.50	<1.3
Carbon Tetrachloride	**5 ****	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
Chlorobenzene	**80 ****	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.1	<0.10	<0.25
Chloroethane		<0.2	<0.8	<1.0				<0.2	<0.2								
Chloroform		<0.1	<0.4	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.1	<0.10	<0.25
Chloromethane		<0.5	<2.0	<2.0				<0.5	<0.5								
Cis-1,2-Dichloroethylene		<0.1	<0.4	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
Cis-1,3-Dichloropropene		<0.2	<0.8	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
Dibromochloromethane		<0.2	<0.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
Dichlorodifluoromethane											<0.5		<2.5	<0.5	<0.50	<0.50	<1.3
Dichloromethane	**50 ****	<1.0	<2.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<2.5	<0.5	<0.5	<0.50	<1.3
Ethyl benzene	**2.4**	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.1	<0.10	<0.25
Hexane											<0.5	<0.5	<2.5	<0.5	<0.5	<0.50	<1.3
m/p-Xylenes	**300 *****	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.1	<0.10	<0.25
Methyl ethyl ketone		5.7	<20.0	<15.0	5.0	<5.0	<5	<5	<5	<5	<5	<25	<25	<5	<5.0	<5.0	<13
Methyl Isobutyl Ketone		<5.0	<20.0	<10.0	<5	<5.0	<5		<5	<5	<5	<25	<25	<5	<5.0	<5.0	<13
Methyl t-Butyl Ether		<0.2	<0.8	<2.0	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
o-Xylene	**300 *****	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.1	<0.10	<0.25
Styrene		0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<1.0	<1	<0.2	<0.2	<0.20	<0.50
Tetrachloroethylene	**30 ****	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
Toluene	**24**	3.9	<0.8	<0.5	3.5	1.4	<0.2	0.4	<0.2	0.3	0.5	<1.0	<1	0.59	<0.20	0.24	<0.50
trans-1,2-Dichloroethylene		<0.1	<0.4	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
trans-1,3-Dichloropropene		<0.2	<0.8	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
Trichloroethylene	**5 ****	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
Trichlorofluoromethane		<0.2	<0.8	<2.0				<0.2	<0.2		<0.2		<1	<0.2	<0.20	<0.20	<0.50
Vinyl Chloride	**2 ****	<0.2	<0.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
Xylenes - total													<0.5	<0.1	<0.10	<0.10	<0.25

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	16-I				
		Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<1.0	<0.40	<1.0	<0.50	<1.0
1,1,1-Trichloroethane		11	10	10	11	10
1,1,2,2-Tetrachloroethane		<1.0	<0.40	<1.0	<0.50	<1.0
1,1,2-Trichloroethane		<1.0	<0.40	<1.0	<0.50	<1.0
1,1-Dichloroethane		<0.50	<0.20	<0.50	<0.25	<0.50
1,1-Dichloroethylene	14 **	<0.50	<0.20	<0.50	<0.25	<0.50
1,2-Dibromoethane		<1.0	<0.40	<1.0	<0.50	<1.0
1,2-Dichlorobenzene	3	<1.0	<0.40	<1.0	<0.50	<1.0
1,2-Dichloroethane	5 **	<1.0	<0.40	<1.0	<0.50	<1.0
1,2-Dichloropropane		<0.50	<0.20	<0.50	<0.25	<0.50
1,3-Dichlorobenzene		<1.0	<0.40	<1.0	<0.50	<1.0
1,4-Dichlorobenzene	1	<1.0	<0.40	<1.0	<0.50	<1.0
Acetone		<50	<20	<50	<25	<50
Benzene	5 **	<0.50	<0.20	<0.50	<0.25	<0.50
Bromodichloromethane		<0.50	<0.20	<0.50	<0.25	<0.50
Bromoform		<1.0	<0.40	<1.0	<0.50	<1.0
Bromomethane		<2.5	<1.0	<2.5	<1.3	<2.5
Carbon Tetrachloride	5 **	<0.50	<0.20	<0.50	<0.25	<0.50
Chlorobenzene	80 **	<0.50	<0.20	<0.50	<0.25	<0.50
Chloroethane						
Chloroform		<0.50	<0.20	<0.50	<0.25	<0.50
Chloromethane						
Cis-1,2-Dichloroethylene		<0.50	<0.20	<0.50	<0.25	<0.50
Cis-1,3-Dichloropropene		<1.0	<0.40	<1.0	<0.50	<1.0
Dibromochloromethane		<1.0	<0.40	<1.0	<0.50	<1.0
Dichlorodifluoromethane		<2.5	<1.0	<2.5	<1.3	<2.5
Dichloromethane	50 **	<2.5	<1.0	<2.5	<1.3	<2.5
Ethyl benzene	2.4	<0.50	<0.20	<0.50	<0.25	<0.50
Hexane		<2.5	<1.0	<2.5	<1.3	<2.5
m/p-Xylenes	300 ***	<0.50	<0.20	<0.50	<0.25	<0.50
Methyl ethyl ketone		<25	<10	<25	<13	<25
Methyl Isobutyl Ketone		<25	<10	<25	<13	<25
Methyl t-Butyl Ether		<1.0	<0.40	<1.0	<0.50	<1.0
o-Xylene	300 ***	<0.50	<0.20	<0.50	<0.25	<0.50
Styrene		<1.0	<0.40	<1.0	<0.50	<1.0
Tetrachloroethylene	30 **	<0.50	<0.20	<0.50	<0.25	<0.50
Toluene	24	<1.0	<0.40	<1.0	<0.50	<1.0
trans-1,2-Dichloroethylene		<0.50	<0.20	<0.50	<0.25	<0.50
trans-1,3-Dichloropropene		<1.0	<0.40	<1.0	<0.50	<1.0
Trichloroethylene	5 **	<0.50	<0.20	<0.50	<0.25	<0.50
Trichlorofluoromethane		<1.0	<0.40	<1.0	<0.50	<1.0
Vinyl Chloride	2 **	<1.0	<0.40	<1.0	<0.50	<1.0
Xylenes - total		<0.50	<0.20	<0.50	<0.25	<0.50

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	16-II															
		Nov-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99	Sep-00	Sep-01
1,1,1,2-Tetrachloroethane																	
1,1,1-Trichloroethane		4.2	2.7	3.1	<1.0	3.7	3.2	3.8	2.7	17.0	2.9	10.2	9.9	5.5	8.9	6.5	5.8
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	0.2	<0.2	* 0.1	0.2	<0.2
1,1-Dichloroethylene	**14 ****	1.0	<1.0	<1.0	<1.0	<1.0	0.6	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dibromoethane			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2	<0.2	0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone													<10.0	<10.0	<10.0	<10.0	<15.0
Benzene	**5 ****	* <0.5	<0.5	<0.5	* <0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0									
Dichloromethane	**50 ****	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.5
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Hexane																	
m/p-Xylenes	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methyl ethyl ketone													<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																	
Methyl t-Butyl Ether																	
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Styrene													<0.2	<0.2	<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	0.7	<0.5	0.9	* <0.5	1.3	<0.5	<0.4	<0.4	<0.4	<0.4	0.2	<0.2	<0.2	0.2	<0.2	0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	5.3	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Xylenes - total																	

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	16-II															
		Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Mar-18
1,1,1,2-Tetrachloroethane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<1.0	<1	<0.2	<0.20	<0.20	<0.50
1,1,1-Trichloroethane		7.7	8.6	5.9	8.0	9.5	8.7	6.2	5.9	3.1	4.7	3.4	5.7	3.8	6.2	0.96	1.2
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.4	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
1,1,2-Trichloroethane		<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
1,1-Dichloroethane		0.2	0.1	<0.4	0.3	0.2	0.1	<0.1	0.1	0.5	0.5	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.5	<0.1	0.3	<0.1	<0.1	<0.1	<0.2	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
1,2-Dibromoethane		<0.2	<0.2	<0.5		<0.2	<0.2		<0.2		<0.2	<1.0	<1				<0.50
1,2-Dichlorobenzene	**3**	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
1,2-Dichloroethane	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.4	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
1,2-Dichloropropane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
1,3-Dichlorobenzene		<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
1,4-Dichlorobenzene	**1**	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
Acetone		<10.0	<10.0	<15.0	<10	<10.0	<10	<10	<10	<20	<10	<50	<50	<10	<10	<10	<25
Benzene	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
Bromodichloromethane		<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
Bromomethane		<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2.5	<2.5	<0.5	<0.50	<0.50	<1.3
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
Chlorobenzene	**80 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.5	<0.5	<0.1	<0.1	<0.10	<0.25
Chloroethane		<0.2	<0.2	<1.0				<0.2	<0.2								
Chloroform		<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.5	<0.5	<0.1	<0.1	<0.10	<0.25
Chloromethane		<0.5	<0.5	<2.0				<0.5	<0.5								
Cis-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
Dichlorodifluoromethane											<0.5		<2.5	<0.5	<0.50	<0.50	<1.3
Dichloromethane	**50 ****	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<2.5	<2.5	<0.5	<0.5	<0.50	<1.3
Ethyl benzene	**2.4**	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.5	<0.5	<0.1	<0.1	<0.10	<0.25
Hexane											<0.5	<0.5	<2.5	<0.5	<0.5	<0.50	<1.3
m/p-Xylenes	**300 *****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.5	<0.5	<0.1	<0.1	<0.10	<0.25
Methyl ethyl ketone		<5.0	<5.0	<15.0	<5	<5.0	<5	<5	<5	<10	<5	<25	<25	<5	<5.0	<5.0	<13
Methyl Isobutyl Ketone		<5.0	<5.0	<10.0	<5	<5.0	<5		<5	<10	<5	<25	<25	<5	<5.0	<5.0	<13
Methyl t-Butyl Ether		<0.2	<0.2	<2.0	<0.2	<0.2	<0.2		<0.2	<0.4	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
o-Xylene	**300 *****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.5	<0.5	<0.1	<0.1	<0.10	<0.25
Styrene		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.4	<0.2	<1.0	<1	<0.2	<0.2	<0.20	<0.50
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
Toluene	**24**	<0.2	<0.2	<0.5	<0.2	<0.2	0.3	<0.2	<0.2	<0.4	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
trans-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
trans-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
Trichloroethylene	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<0.25
Trichlorofluoromethane		<0.2	<0.2	<2.0				<0.2	<0.2		<0.2		<1	<0.2	<0.20	<0.20	<0.50
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<1.0	<1	<0.2	<0.20	<0.20	<0.50
Xylenes - total													<0.5	<0.1	<0.10	<0.10	<0.25

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	16-II				
		Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<1.0	<0.40	<0.20	<0.50	<0.20
1,1,1-Trichloroethane		3.1	3.6	4.4	5.6	4.2
1,1,2,2-Tetrachloroethane		<1.0	<0.40	<0.20	<0.50	<0.20
1,1,2-Trichloroethane		<1.0	<0.40	<0.20	<0.50	<0.20
1,1-Dichloroethane		<0.50	<0.20	0.12	<0.25	<0.10
1,1-Dichloroethylene	14 **	<0.50	<0.20	<0.10	<0.25	<0.10
1,2-Dibromoethane		<1.0	<0.40	<0.20	<0.50	<0.20
1,2-Dichlorobenzene	3	<1.0	<0.40	<0.20	<0.50	<0.20
1,2-Dichloroethane	5 **	<1.0	<0.40	<0.20	<0.50	<0.20
1,2-Dichloropropane		<0.50	<0.20	<0.10	<0.25	<0.10
1,3-Dichlorobenzene		<1.0	<0.40	<0.20	<0.50	<0.20
1,4-Dichlorobenzene	1	<1.0	<0.40	<0.20	<0.50	<0.20
Acetone		<50	<20	<10	<25	<10
Benzene	5 **	<0.50	<0.20	<0.10	<0.25	<0.10
Bromodichloromethane		<0.50	<0.20	<0.10	<0.25	<0.10
Bromoform		<1.0	<0.40	<0.20	<0.50	<0.20
Bromomethane		<2.5	<1.0	<0.50	<1.3	<0.50
Carbon Tetrachloride	5 **	<0.50	<0.20	<0.10	<0.25	<0.10
Chlorobenzene	80 **	<0.50	<0.20	<0.10	<0.25	<0.10
Chloroethane						
Chloroform		<0.50	<0.20	<0.10	<0.25	<0.10
Chloromethane						
Cis-1,2-Dichloroethylene		<0.50	<0.20	<0.10	<0.25	<0.10
Cis-1,3-Dichloropropene		<1.0	<0.40	<0.20	<0.50	<0.20
Dibromochloromethane		<1.0	<0.40	<0.20	<0.50	<0.20
Dichlorodifluoromethane		<2.5	<1.0	<0.50	<1.3	<0.50
Dichloromethane	50 **	<2.5	<1.0	<0.50	<1.3	<0.50
Ethyl benzene	2.4	<0.50	<0.20	<0.10	<0.25	<0.10
Hexane		<2.5	<1.0	<0.50	<1.3	<0.50
m/p-Xylenes	300 ***	<0.50	<0.20	<0.10	<0.25	<0.10
Methyl ethyl ketone		<25	<10	<5.0	<13	<5.0
Methyl Isobutyl Ketone		<25	<10	<5.0	<13	<5.0
Methyl t-Butyl Ether		<1.0	<0.40	<0.20	<0.50	<0.20
o-Xylene	300 ***	<0.50	<0.20	<0.10	<0.25	<0.10
Styrene		<1.0	<0.40	<0.20	<0.50	<0.20
Tetrachloroethylene	30 **	<0.50	<0.20	<0.10	<0.25	<0.10
Toluene	24	<1.0	<0.40	<0.20	<0.50	<0.20
trans-1,2-Dichloroethylene		<0.50	<0.20	<0.10	<0.25	<0.10
trans-1,3-Dichloropropene		<1.0	<0.40	<0.20	<0.50	<0.20
Trichloroethylene	5 **	<0.50	<0.20	<0.10	<0.25	<0.10
Trichlorofluoromethane		<1.0	<0.40	<0.20	<0.50	<0.20
Vinyl Chloride	2 **	<1.0	<0.40	<0.20	<0.50	<0.20
Xylenes - total		<0.50	<0.20	<0.10	<0.25	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	16-III															
		Nov-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99	Sep-00	Sep-01
1,1,1,2-Tetrachloroethane																	
1,1,1-Trichloroethane		9.2	11.2	8.0	5.1	2.3	3.3	2.6	2.9	<0.6	0.9	3.1	0.9	0.9	0.9	1.6	1.9
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		4.2	3.7	<1.0	3.0	2.8	3.0	3.3	2.8	<0.5	3.6	9.1	1.8	1.5	2.4	4	<0.2
1,1-Dichloroethylene	**14 ****	2.8	2.7	3.9	1.9	1.2	0.9	<0.4	0.7	<0.4	<0.4	0.6	<0.2	<0.2	0.2	0.4	0.3
1,2-Dibromoethane			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2	<0.2	3.5
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone													<10.0	<10.0	<10.0	<10.0	<15.0
Benzene	**5 ****	0.6	<0.5	<0.5	0.6	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	0.5	<0.1	<0.1	<0.1	0.2	0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0									
Dichloromethane	**50 ****	1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.5
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Hexane																	
m/p-Xylenes	**300 *****	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methyl ethyl ketone													<5.0	<5.0	8.6	32.3	<5.0
Methyl Isobutyl Ketone																	
Methyl t-Butyl Ether																	
o-Xylene	**300 *****	<0.5	<0.5	<0.5	0.4	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Styrene													<0.2	<0.2	<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	8.8	<0.5	3.3	6.6	0.7	3.0	3.3	4.3	1.6	<0.4	10.8	0.6	0.4	1.3	2.9	1.9
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Xylenes - total																	

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	16-III															
		Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Mar-18
1,1,1,2-Tetrachloroethane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<1	<0.2	<0.20	<0.20	<0.50
1,1,1-Trichloroethane		1.0	1.2	0.9	0.6	0.7	0.8	1.0	0.5	1.1	1.6	1.4	2.1	1.4	0.4	1.7	1
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.20	<0.20	<0.50
1,1,2-Trichloroethane		<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.20	<0.20	<0.50
1,1-Dichloroethane		1.9	2.2	1.6	1.4	1.4	1.2	1.9	1.1	3.1	2.4	1.6	2.3	1.7	0.63	2	1.6
1,1-Dichloroethylene	**14 ****	<0.1	0.1	<0.5	<0.1	<0.1	<0.1	0.1	<0.1	0.2	0.2	0.1	<0.5	0.1	<0.10	0.16	<0.25
1,2-Dibromoethane		<0.2	<0.2	<0.5		<0.2	<0.2		<0.2		<0.2	<0.2	<1				<0.50
1,2-Dichlorobenzene	**3**	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.20	<0.20	<0.50
1,2-Dichloroethane	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.20	<0.20	<0.50
1,2-Dichloropropane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.10	<0.10	<0.25
1,3-Dichlorobenzene		<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.20	<0.20	<0.50
1,4-Dichlorobenzene	**1**	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.20	<0.20	<0.50
Acetone		<10.0	<10.0	<15.0	<10	<10.0	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<25
Benzene	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.1	0.1	<0.5	<0.1	<0.10	<0.10	<0.25
Bromodichloromethane		<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.10	<0.10	<0.25
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.20	<0.20	<0.50
Bromomethane		<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.50	<0.50	<1.3
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.10	<0.10	<0.25
Chlorobenzene	**80 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.10	<0.25
Chloroethane		<0.2	<0.2	<1.0				<0.2	<0.2								
Chloroform		<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.10	<0.25
Chloromethane		<0.5	<0.5	<2.0				<0.5	<0.5								
Cis-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.10	<0.10	<0.25
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.20	<0.20	<0.50
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.20	<0.20	<0.50
Dichlorodifluoromethane											<0.5		<2.5	<0.5	<0.50	<0.50	<1.3
Dichloromethane	**50 ****	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.50	<1.3
Ethyl benzene	**2.4**	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.10	<0.25
Hexane											<0.5	<0.5	<2.5	<0.5	<0.5	<0.50	<1.3
m/p-Xylenes	**300 *****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.10	<0.25
Methyl ethyl ketone		<5.0	<5.0	<15.0	<5	<5.0	<5	11.0	<5	22.0	22.0	19.0	<25	15	<5.0	8.7	<13
Methyl Isobutyl Ketone		<5.0	<5.0	<10.0	<5	<5.0	<5		<5	<5	<5	<5.0	<25	<5	<5.0	<5.0	<13
Methyl t-Butyl Ether		<0.2	<0.2	<2.0	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.20	<0.20	<0.50
o-Xylene	**300 *****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.10	<0.25
Styrene		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.2	<0.20	<0.50
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.10	<0.10	<0.25
Toluene	**24**	<0.2	0.2	<0.5	<0.2	<0.2	0.3	1.8	<0.2	5.4	2.8	2.6	2.3	1.6	<0.20	1.3	<0.50
trans-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.10	<0.10	<0.25
trans-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.20	<0.20	<0.50
Trichloroethylene	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.10	<0.10	<0.25
Trichlorofluoromethane		<0.2	<0.2	<2.0				<0.2	<0.2		<0.2		<1	<0.2	<0.20	<0.20	<0.50
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.20	<0.20	<0.50
Xylenes - total													<0.5	<0.1	<0.10	<0.10	<0.25

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	16-III				
		Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<1.0	<1.0	<0.20	<0.50	<0.20
1,1,1-Trichloroethane		0.92	1.1	1	0.92	0.86
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<0.20	<0.50	<0.20
1,1,2-Trichloroethane		<1.0	<1.0	<0.20	<0.50	<0.20
1,1-Dichloroethane		1.2	1.3	1.3	1.1	0.78
1,1-Dichloroethylene	14 **	<0.50	<0.50	<0.10	<0.25	<0.10
1,2-Dibromoethane		<1.0	<1.0	<0.20	<0.50	<0.20
1,2-Dichlorobenzene	3	<1.0	<1.0	<0.20	<0.50	<0.20
1,2-Dichloroethane	5 **	<1.0	<1.0	<0.20	<0.50	<0.20
1,2-Dichloropropane		<0.50	<0.50	<0.10	<0.25	<0.10
1,3-Dichlorobenzene		<1.0	<1.0	<0.20	<0.50	<0.20
1,4-Dichlorobenzene	1	<1.0	<1.0	<0.20	<0.50	<0.20
Acetone		<50	<50	<10	<25	<10
Benzene	5 **	<0.50	<0.50	<0.10	<0.25	0.13
Bromodichloromethane		<0.50	<0.50	<0.10	<0.25	<0.10
Bromoform		<1.0	<1.0	<0.20	<0.50	<0.20
Bromomethane		<2.5	<2.5	<0.50	<1.3	<0.50
Carbon Tetrachloride	5 **	<0.50	<0.50	<0.10	<0.25	<0.10
Chlorobenzene	80 **	<0.50	<0.50	<0.10	<0.25	<0.10
Chloroethane						
Chloroform		<0.50	<0.50	<0.10	<0.25	<0.10
Chloromethane						
Cis-1,2-Dichloroethylene		<0.50	<0.50	<0.10	<0.25	<0.10
Cis-1,3-Dichloropropene		<1.0	<1.0	<0.20	<0.50	<0.20
Dibromochloromethane		<1.0	<1.0	<0.20	<0.50	<0.20
Dichlorodifluoromethane		<2.5	<2.5	<0.50	<1.3	<0.50
Dichloromethane	50 **	<2.5	<2.5	<0.50	<1.3	<0.50
Ethyl benzene	2.4	<0.50	<0.50	<0.10	<0.25	<0.10
Hexane		<2.5	<2.5	<0.50	<1.3	<0.50
m/p-Xylenes	300 ***	<0.50	<0.50	<0.10	<0.25	<0.10
Methyl ethyl ketone		<25	<25	<5.0	<13	<5.0
Methyl Isobutyl Ketone		<25	<25	<5.0	<13	<5.0
Methyl t-Butyl Ether		<1.0	<1.0	<0.20	<0.50	<0.20
o-Xylene	300 ***	<0.50	<0.50	<0.10	<0.25	<0.10
Styrene		<1.0	<1.0	<0.20	<0.50	<0.20
Tetrachloroethylene	30 **	<0.50	<0.50	<0.10	<0.25	<0.10
Toluene	24	<1.0	1.5	0.41	1.3	0.64
trans-1,2-Dichloroethylene		<0.50	<0.50	<0.10	<0.25	<0.10
trans-1,3-Dichloropropene		<1.0	<1.0	<0.20	<0.50	<0.20
Trichloroethylene	5 **	<0.50	<0.50	<0.10	<0.25	<0.10
Trichlorofluoromethane		<1.0	<1.0	<0.20	<0.50	<0.20
Vinyl Chloride	2 **	<1.0	<1.0	<0.20	<0.50	<0.20
Xylenes - total		<0.50	<0.50	<0.10	<0.25	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	16-IV															
		Nov-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99	Sep-00	Sep-01
1,1,1,2-Tetrachloroethane																	
1,1,1-Trichloroethane		* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		1.0	<1.0	<1.0	1.2	<1.0	<1.0	<0.5	<0.5	<0.5	0.7	0.3	0.2	0.2	0.4	<0.2	<0.2
1,1-Dichloroethylene	**14 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dibromoethane			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone													<10.0	<10.0	<10.0	<10.0	<15.0
Benzene	**5 ****	* <0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	0.3
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		7.7	<1.0	5.4	7.9	6.5	<1.0	<1.0				0.3	0.3	0.4	0.6	<0.2	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		7.7	<2.0	<2.0	8.7	<2.0	<2.0	<2.0									
Dichloromethane	**50 ****	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.5
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Hexane																	
m/p-Xylenes	**300 *****	<0.5	* <0.5	<0.5	0.9	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	0.3
Methyl ethyl ketone													<5.0	<5.0	<5.0	<5.0	11.2
Methyl Isobutyl Ketone																	
Methyl t-Butyl Ether																	
o-Xylene	**300 *****	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Styrene													<0.2	<0.2	<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	* <0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	0.4
trans-1,2-Dichloroethylene		* <1.0	<1.0	<1.0	<1.0	<1.0	0.4	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	4.8	<1.0	3.3	4.8	2.5	0.8	<0.3	0.4	<0.3	0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Xylenes - total																	

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	16-IV															
		Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Mar-18
1,1,1,2-Tetrachloroethane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20	<0.50
1,1,1-Trichloroethane		<0.1	0.2	<0.5	<0.1	<0.1	0.1	0.2	<0.1	0.1	0.1	0.1	0.1	0.12	<0.10	0.13	<0.25
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.50
1,1,2-Trichloroethane		<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.50
1,1-Dichloroethane		<0.1	<0.1	<0.4	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	0.11	0.1	0.16	<0.25
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.25
1,2-Dibromoethane		<0.2	<0.2	<0.5		<0.2	<0.2		<0.2		<0.2	<0.2	<0.2				<0.50
1,2-Dichlorobenzene	**3**	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.50
1,2-Dichloroethane	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.50
1,2-Dichloropropane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.25
1,3-Dichlorobenzene		<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.50
1,4-Dichlorobenzene	**1**	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.50
Acetone		<10.0	<10.0	<15.0	<10	<10.0	11.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<25
Benzene	**5 ****	0.1	0.1	<0.5	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.10	<0.10	<0.25
Bromodichloromethane		<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.25
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.50
Bromomethane		<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<1.3
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.25
Chlorobenzene	**80 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.25
Chloroethane		<0.2	<0.2	<1.0				<0.2	<0.2								
Chloroform		<0.1	0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.25
Chloromethane		<0.5	<0.5	<2.0				<0.5	<0.5								
Cis-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.25
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.50
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.50
Dichlorodifluoromethane											<0.5		<0.5	<0.5	<0.50	<0.50	<1.3
Dichloromethane	**50 ****	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<1.3
Ethyl benzene	**2.4**	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.25
Hexane											<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<1.3
m/p-Xylenes	**300 *****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.25
Methyl ethyl ketone		<5.0	<5.0	<15.0	<5	<5.0	<5	<5	<5	<5	<5	<5.0	<5	<5	<5.0	<5.0	<13
Methyl Isobutyl Ketone		<5.0	<5.0	<10.0	<5	<5.0	<5		<5	<5	<5	<5.0	<5	<5	<5.0	<5.0	<13
Methyl t-Butyl Ether		<0.2	<0.2	<2.0	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.50
o-Xylene	**300 *****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.25
Styrene		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.50
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.25
Toluene	**24**	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	0.21	<0.50
trans-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.25
trans-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.50
Trichloroethylene	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.25
Trichlorofluoromethane		<0.2	<0.2	<2.0				<0.2	<0.2		<0.2		<0.2	<0.2	<0.20	<0.20	<0.50
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.50
Xylenes - total													<0.1	<0.1	<0.10	<0.10	<0.25

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	16-IV				
		Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		0.12	<0.10	0.15	0.12	0.15
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		0.12	<0.10	0.12	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10
Benzene	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane						
Chloroform		<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane						
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane		<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	18-I R				18-II						
		Sep-19	Sep-20	Sep-21	Sep-22	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.1	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10	<0.1	0.2	<0.1	0.18	0.11	0.1	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
1,1-Dichloroethane		<0.10	<0.10	<0.10	<0.10	<0.1	0.1	0.12	0.22	0.14	0.14	0.13
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20		<0.2	<0.2	<0.2			
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	5 **	<0.10	0.11	0.41	0.13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10
Chloroethane												
Chloroform		<0.10	<0.10	<0.10	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10
Chloromethane												
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50		<0.5	<0.5	<0.5	<0.5	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10
Hexane		<0.50	<0.50	<0.50	<0.50		<0.5	<0.5	<0.5	<0.5	<0.5	<0.50
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Toluene	24	<0.20	<0.20	0.20	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10	<0.10				<0.1	<0.1	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	18-II R						18-III R					
		Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22	Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	5 **	0.34	<0.10	0.36	<0.10	0.16	0.19	0.3	<0.10	0.31	<0.10	0.39	0.40
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane													
Chloroform		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane													
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10	0.13	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	0.13	<0.10	0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.11	0.13
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	24	0.24	<0.20	0.24	<0.20	<0.20	<0.20	0.25	<0.20	0.2	<0.20	0.27	0.28
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total		0.13	<0.10	0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.11	0.13

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	21-I							21-I R						
		Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.2	<3	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.2	<3	0.59	0.35	0.11	0.52	0.54	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.4	<5	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.4	<5	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		0.4	<3	<0.1	<0.25	0.15	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.2	<3	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane			<5	<0.2	<0.5				<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.4	<5	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.4	<5	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.2	<3	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.4	<5	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.4	<5	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<20	<300	<10	<25	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.2	<3	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.2	<3	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.4	<5	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<1	<10	<0.5	<1.3	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.2	<3	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.2	<3	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane														
Chloroform		<0.2	<3	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane														
Cis-1,2-Dichloroethylene		<0.2	<3	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.4	<5	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.4	<5	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane			<10	<0.5	<1.3	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<1	<10	<0.5	<1.3	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	**2.4**	<0.2	<3	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane			<0.5	<0.5	<1.3	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.2	<3	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<10	<100	<5	<13	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<10	<100	<5	<13	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.4	<5	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.2	<3	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.4	<5	<0.2	<0.5	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.2	<3	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	15	180	0.29	<0.5	<0.2	<0.20	0.44	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.2	<3	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.4	<5	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.2	<3	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane			<5	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.4	<5	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total					<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	21-II				21-II R					
		Sep-10	Sep-11	Sep-12	Sep-16	Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.1	<0.1	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		0.1	0.6	0.3	0.13	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		0.4	0.2	0.22	0.52	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane			<0.2	<0.2		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	11	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	0.12	<0.10	<0.10	0.22
Bromodichloromethane		<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane											
Chloroform		<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane											
Cis-1,2-Dichloroethylene		<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane			<0.5		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	**2.4**	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane			<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.16
Methyl ethyl ketone		<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.25
trans-1,2-Dichloroethylene		<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane			<0.2		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total					<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.16

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	21-III							21-III R						
		Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.5	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.5	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<1	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<1	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.5	0.3	0.34	0.28	0.34	0.24	0.3	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.5	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane			<0.2	<0.2	<0.2				<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<1	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<1	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.5	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<1	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<1	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	5 **	<0.5	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.5	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<1	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<3	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.5	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane														
Chloroform		<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane														
Cis-1,2-Dichloroethylene		<0.5	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<1	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<1	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane			<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane			<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.5	0.1	0.16	0.15	0.19	0.13	0.17	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<30	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<30	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<1	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.5	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	24	49	<0.2	<0.2	<0.2	<0.2	<0.20	0.21	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.5	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<1	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.5	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane			<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<1	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total					0.15	0.19	0.13	0.17	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	22-I						22-I R					
		Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.2	<0.2	<0.2	<2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		0.9	0.36	1.5	<1	0.77	0.41	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.4	<0.2	<0.2	<2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.4	<0.2	<0.2	<2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.2	0.29	0.13	<1	<0.10	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.2	<0.1	<0.1	<1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.4	<0.2	<0.2				<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.4	<0.2	<0.2	<2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.4	<0.2	<0.2	<2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.2	<0.1	<0.1	<1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.4	<0.2	<0.2	<2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.4	<0.2	<0.2	<2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<20	20	<10	<100	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.2	<0.1	<0.1	<1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.2	<0.1	<0.1	<1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.4	<0.2	<0.2	<2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<1	<0.5	<0.5	<5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.2	<0.1	<0.1	<1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.2	<0.1	<0.1	<1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane													
Chloroform		<0.2	<0.1	<0.1	<1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane													
Cis-1,2-Dichloroethylene		<0.2	<0.1	<0.1	<1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.4	<0.2	<0.2	<2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.4	<0.2	<0.2	<2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<1		<0.5	<5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	**2.4**	<0.2	<0.1	<0.1	<1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane		<0.5	<0.5	<0.5	<5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.2	3	<0.1	<1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<10	<5.0	<5	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<10	13	<5	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.4	<0.2	<0.2	<2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.2	<0.1	<0.1	<1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.4	<0.2	<0.2	<2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.2	<0.1	<0.1	<1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	<0.4	0.78	<0.2	<2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.2	<0.1	<0.1	<1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.4	<0.2	<0.2	<2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.2	<0.1	<0.1	<1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.4		<0.2	<2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.4	<0.2	<0.2	<2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total				<0.1	<1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	22-II							22-II R						
		Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.1	<0.1	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.1	0.1	0.29	<0.25	<0.1	0.3	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane			<0.2	<0.2	<0.5				<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<25	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<1.3	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane														
Chloroform		<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane														
Cis-1,2-Dichloroethylene		<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane			<0.5	<0.5	<1.3	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<0.5	<0.5	<0.5	<1.3	16	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	**2.4**	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane			<0.5	<0.5	<1.3	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.1	<0.1	<0.5	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5	<5	<5	<13	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5	<5	<5	<13	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane			<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total					<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	22-III R					
		Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10	<10
Benzene	5 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane							
Chloroform		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane							
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	23-I																
		Sep-87	Nov-87	Dec-87	Dec-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99
1,1,1,2-Tetrachloroethane																		
1,1,1-Trichloroethane		* <1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethylene	**14 ****	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dibromoethane						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone																<10.0	<10.0	<10.0
Benzene	**5 ****	<0.5	* <0.5	* <0.5	* <0.5	<0.5	<0.5	* <0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5
Chloroform		<1.0	<1.0	<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0							
Dichloromethane	**50 ****	* <1.0	<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
Hexane																		
m/p-Xylenes	**300 *****	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Methyl ethyl ketone																<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																		
Methyl t-Butyl Ether																		
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Styrene																<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	* <0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	* <0.5	<0.5	<0.5	<0.4	<0.4	0.9	<0.4	0.4	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5
Xylenes - total																		

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	23-I																	
		Sep-00	Sep-01	Sep-02	Sep-03	Sep-04	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18
1,1,1,2-Tetrachloroethane				<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<1.0	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.2	<0.2	<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2	<0.2	<0.2	<0.5	<0.2			<0.2		<0.2	<0.2	<0.2				<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Acetone		<10.0	<10.0	<10.0	<10.0	<15.0	<10	<10	13.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.10	0.14	<0.10	<0.10
Bromodichloromethane		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chloroethane		<0.5	<0.5	<0.2	<0.2	<1.0		<0.2	<0.2	<0.2									
Chloroform		<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chloromethane		<1.0	<1.0	<0.5	<0.5	<2.0		<0.5	<0.5	<0.5									
Cis-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane												<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<1.0	<1.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
Ethyl benzene	**2.4**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Hexane												<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone				<5.0	<5.0	<10.0	<5.0			<5	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether				<0.2	<0.2	<2.0	<0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Styrene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.5	<0.5	<0.2	<0.2	<2.0		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Xylenes - total														<0.1	<0.1	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	23-I		
		Sep-19	Sep-20	Dec-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.10	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20
Acetone		<10	<10	31
Benzene	5 **	<0.10	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10
Chloroethane				
Chloroform		<0.10	<0.10	<0.10
Chloromethane				
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10
Hexane		<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	23-II																
		Sep-87	Nov-87	Dec-87	Dec-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99
1,1,1,2-Tetrachloroethane																		
1,1,1-Trichloroethane		<1.0	1.1	* <1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethylene	**14 ****	<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dibromoethane						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone																<10.0	<10.0	<10.0
Benzene	**5 ****	<0.5	* <0.5	* <0.5	* <0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5
Chloroform		<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0							
Dichloromethane	**50 ****	* <1.0	* <1.0	<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
Hexane																		
m/p-Xylenes	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Methyl ethyl ketone																<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																		
Methyl t-Butyl Ether																		
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Styrene																<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	* <0.5	* <0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5
Xylenes - total																		

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	23-II																	
		Sep-00	Sep-01	Sep-02	Sep-03	Sep-04	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18
1,1,1,2-Tetrachloroethane				<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<1.0	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.2	<0.2	<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2	<0.2	<0.2	<0.5	<0.2			<0.2		<0.2	<0.2	<0.2				<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Acetone		<10.0	<10.0	<10.0	<10.0	<15.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chloroethane		<0.5	<0.5	<0.2	<0.2	<1.0		<0.2	<0.2	<0.2									
Chloroform		<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chloromethane		<1.0	<1.0	<0.5	<0.5	<2.0		<0.5	<0.5	<0.5									
Cis-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane												<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<1.0	<1.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
Ethyl benzene	**2.4**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Hexane												<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone				<5.0	<5.0	<10.0	<5.0			<5	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether				<0.2	<0.2	<2.0	<0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Styrene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.5	<0.5	<0.2	<0.2	<2.0		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Xylenes - total														<0.1	<0.1	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	23-II			
		Sep-19	Sep-20	Sep-21	Dec-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<2.0
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<1.0
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<2.0
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<2.0
1,1-Dichloroethane		<0.10	<0.10	<0.10	<1.0
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<1.0
1,2-Dibromoethane		<0.20	<0.20	<0.20	<2.0
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<2.0
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<2.0
1,2-Dichloropropane		<0.10	<0.10	<0.10	<1.0
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<2.0
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<2.0
Acetone		<10	<10	<10	<100
Benzene	5 **	<0.10	<0.10	<0.10	<1.0
Bromodichloromethane		<0.10	<0.10	<0.10	<1.0
Bromoform		<0.20	<0.20	<0.20	<2.0
Bromomethane		<0.50	<0.50	<0.50	<5.0
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<1.0
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<1.0
Chloroethane					
Chloroform		<0.10	<0.10	<0.10	<1.0
Chloromethane					
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<1.0
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<2.0
Dibromochloromethane		<0.20	<0.20	<0.20	<2.0
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<5.0
Dichloromethane	50 **	<0.50	<0.50	23	<5.0
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<1.0
Hexane		<0.50	<0.50	<0.50	<5.0
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<1.0
Methyl ethyl ketone		<5.0	<5.0	<5.0	<50
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<50
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<2.0
o-Xylene	300 ***	<0.10	<0.10	<0.10	<1.0
Styrene		<0.20	<0.20	<0.20	<2.0
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<1.0
Toluene	24	<0.20	<0.20	<0.20	<2.0
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<1.0
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<2.0
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<1.0
Trichlorofluoromethane		<0.20	<0.20	<0.20	<2.0
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<2.0
Xylenes - total		<0.10	<0.10	<0.10	<1.0

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	23-III																
		Sep-87	Nov-87	Dec-87	Dec-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99
1,1,1,2-Tetrachloroethane																		
1,1,1-Trichloroethane		3.7	1.3	* <1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	0.6
1,1-Dichloroethylene	**14 ****	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dibromoethane						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone																<10.0	<10.0	<10.0
Benzene	**5 ****	0.6	* <0.5	* <0.5	* <0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	0.2
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5
Chloroform		1.2	<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	0.8
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0							
Dichloromethane	**50 ****	2.1	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
Hexane																		
m/p-Xylenes	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Methyl ethyl ketone																<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																		
Methyl t-Butyl Ether																		
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Styrene																<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	* <0.5	<0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5
Xylenes - total																		

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	23-III																	
		Sep-00	Sep-01	Sep-02	Sep-03	Sep-04	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18
1,1,1,2-Tetrachloroethane				<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<1.0	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.2	<0.2	<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2	<0.2	<0.2	<0.5	<0.2			<0.2		<0.2	<0.2	<0.2				<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Acetone		<10.0	<10.0	<10.0	<10.0	<15.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chloroethane		<0.5	<0.5	<0.2	<0.2	<1.0		<0.2	<0.2	<0.2									
Chloroform		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chloromethane		<1.0	<1.0	<0.5	<0.5	<2.0		<0.5	<0.5	<0.5									
Cis-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane												<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<1.0	<1.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
Ethyl benzene	**2.4**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Hexane												<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone				<5.0	<5.0	<10.0	<5.0			<5	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether				<0.2	<0.2	<2.0	<0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Styrene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.5	<0.5	<0.2	<0.2	<2.0		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Xylenes - total														<0.1	<0.1	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	23-III			
		Sep-19	Sep-20	Sep-21	Dec-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.50
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.25
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.50
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.50
1,1-Dichloroethane		<0.10	<0.10	<0.10	<0.25
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.25
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.50
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.50
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.50
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.25
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.50
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.50
Acetone		<10	<10	<10	<25
Benzene	5 **	<0.10	<0.10	<0.10	<0.25
Bromodichloromethane		<0.10	<0.10	<0.10	<0.25
Bromoform		<0.20	<0.20	<0.20	<0.50
Bromomethane		<0.50	<0.50	<0.50	<1.3
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.25
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.25
Chloroethane					
Chloroform		<0.10	<0.10	<0.10	<0.25
Chloromethane					
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.25
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.50
Dibromochloromethane		<0.20	<0.20	<0.20	<0.50
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<1.3
Dichloromethane	50 **	<0.50	<0.50	<0.50	<1.3
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.25
Hexane		<0.50	<0.50	<0.50	<1.3
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.25
Methyl ethyl ketone		<5.0	<5.0	<5.0	<13
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<13
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.50
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.25
Styrene		<0.20	<0.20	<0.20	<0.50
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.25
Toluene	24	<0.20	<0.20	<0.20	<0.50
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.25
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.50
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.25
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.50
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.50
Xylenes - total		<0.10	<0.10	<0.10	<0.25

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	24-I																
		Sep-87	Nov-87	Dec-87	Dec-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99
1,1,1,2-Tetrachloroethane																		
1,1,1-Trichloroethane		2.7	<1.0	* <1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethylene	**14 ****	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dibromoethane						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone																<10.0	18.4	29.4
Benzene	**5 ****	* <0.5	* <0.5	* <0.5	* <0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5
Chloroform		1.1	<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<5.0	<2.3	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0							
Dichloromethane	**50 ****	1.5	<1.0	* <1.0	* <1.0	<1.0	<1.0	2.2	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	0.2	<0.2
Hexane																		
m/p-Xylenes	**300 *****	<0.5	* <0.5	* <0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	0.8	0.3
Methyl ethyl ketone																<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																		
Methyl t-Butyl Ether																		
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	0.3	* 0.1
Styrene																<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	* <0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	* <0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	5.9	0.7
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5
Xylenes - total																		

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	24-I																	
		Sep-00	Sep-01	Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17
1,1,1,2-Tetrachloroethane				<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.5	<0.2	<1.0	<2.0	<1.0
1,1,1-Trichloroethane		<0.2	<0.2	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.25	<0.1	<0.50	<1.0	<0.50
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.8	<1.0	<0.1	<0.1	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.5	<0.2	<1.0	<2.0	<1.0
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.8	<0.5	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.5	<0.2	<1.0	<2.0	<1.0
1,1-Dichloroethane		<0.2	<0.2	<0.1	<0.4	<0.4	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.25	<0.1	<0.50	<1.0	<0.50
1,1-Dichloroethylene	**14 ****	<0.2	<0.2	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.25	<0.1	<0.50	<1.0	<0.50
1,2-Dibromoethane		<0.2	<0.2	<0.2	<0.8	<0.5		<0.2	<0.2		<0.4		<0.2	<0.2	<0.5				<1.0
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.1	<0.4	<0.5	<0.1	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.5	<0.2	<1.0	<2.0	<1.0
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.5	<0.2	<1.0	<2.0	<1.0
1,2-Dichloropropane		<0.2	<0.2	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.25	<0.1	<0.50	<1.0	<0.50
1,3-Dichlorobenzene		<0.2	<0.2	<0.1	<0.4	<0.5	<0.1	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.5	<0.2	<1.0	<2.0	<1.0
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.1	<0.4	<0.5	<0.1	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.5	<0.2	<1.0	<2.0	<1.0
Acetone		<10.0	<15.0	<10.0	<40.0	<15.0	<10	14	<10	11	<20	<10	<10	<10	<25	<10	<50	<100	<50
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.25	<0.1	<0.50	<1.0	<0.50
Bromodichloromethane		<0.2	<0.2	<0.1	<0.4	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.25	<0.1	<0.50	<1.0	<0.50
Bromoform		<0.2	<0.2	<0.2	<0.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.5	<0.2	<1.0	<2.0	<1.0
Bromomethane		<0.5	<0.5	<0.5	<2.0	<3.0	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<1.3	<0.5	<2.5	<5.0	<2.5
Carbon Tetrachloride	**5 ****	<0.2	<0.2	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.25	<0.1	<0.50	<1.0	<0.50
Chlorobenzene	**80 ****	<0.2	<0.2	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.25	<0.1	<0.5	<1.0	<0.50
Chloroethane		<0.5	<0.5	<0.2	<0.8	<1.0				<0.2									
Chloroform		<0.2	<0.2	<0.1	<0.4	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.25	<0.1	<0.5	<1.0	<0.50
Chloromethane		<1.0	<1.0	<0.5	<2.0	<2.0				<0.5									
Cis-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.4	<1.0	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.25	<0.1	<0.50	<1.0	<0.50
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.8	<0.14	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.5	<0.2	<1.0	<2.0	<1.0
Dibromochloromethane		<0.2	<0.2	<0.2	<0.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.5	<0.2	<1.0	<2.0	<1.0
Dichlorodifluoromethane													<0.5	<0.5	<1.3	<0.5	<2.5	<5.0	<2.5
Dichloromethane	**50 ****	<1.0	<1.5	<1.0	<2.0	<1.0	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<1.3	<0.5	<2.5	<5.0	<2.5
Ethyl benzene	**2.4**	<0.2	<0.2	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.25	<0.1	<0.5	<1.0	<0.50
Hexane													<0.5	<0.5	<1.3	<0.5	<2.5	<5.0	<2.5
m/p-Xylenes	**300 *****	<0.2	<0.2	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.25	<0.1	<0.5	<1.0	<0.50
Methyl ethyl ketone		<5.0	<5.0	<5.0	<20.0	<15.0	<5	<5.0	<5	<5	<10	<5	<5	<5	<13	<5	<25	<50	<25
Methyl Isobutyl Ketone				<5.0	<20.0	<10.0	<5	<5.0	<5		<10	<5	<5	<5	<13	<5	<25	<50	<25
Methyl t-Butyl Ether				<0.2	<0.8	<2.0	<0.2	<0.2	<0.2		<0.4	<0.2	<0.2	<0.2	<0.5	<0.2	<1.0	<2.0	<1.0
o-Xylene	**300 *****	<0.2	<0.2	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.25	<0.1	<0.5	<1.0	<0.50
Styrene		<0.2	<0.2	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.5	<0.2	<1.0	<2.0	<1.0
Tetrachloroethylene	**30 ****	<0.2	<0.2	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.25	<0.1	<0.50	<1.0	<0.50
Toluene	**24**	<0.2	<0.2	<0.2	<0.8	<0.5	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.5	<0.2	<1.0	<2.0	<1.0
trans-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.4	<1.0	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.25	<0.1	<0.50	<1.0	<0.50
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.8	<0.14	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.5	<0.2	<1.0	<2.0	<1.0
Trichloroethylene	**5 ****	<0.2	<0.2	<0.1	<0.4	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.25	<0.1	<0.50	<1.0	<0.50
Trichlorofluoromethane		<0.5	<0.5	<0.2	<0.8	<2.0				<0.2			<0.2	<0.2	<0.5	<0.2	<1.0	<2.0	<1.0
Vinyl Chloride	**2 ****	<0.5	<0.2	<0.2	<0.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.5	<0.2	<1.0	<2.0	<1.0
Xylenes - total															<0.25	<0.1	<0.50	<1.0	<0.50

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	24-I				
		Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<2.0	<0.20	<1.0	<0.50	<0.50
1,1,1-Trichloroethane		<1.0	<0.10	<0.50	<0.25	<0.25
1,1,2,2-Tetrachloroethane		<2.0	<0.20	<1.0	<0.50	<0.50
1,1,2-Trichloroethane		<2.0	<0.20	<1.0	<0.50	<0.50
1,1-Dichloroethane		<1.0	<0.10	<0.50	<0.25	<0.25
1,1-Dichloroethylene	14 **	<1.0	<0.10	<0.50	<0.25	<0.25
1,2-Dibromoethane		<2.0	<0.20	<1.0	<0.50	<0.50
1,2-Dichlorobenzene	3	<2.0	<0.20	<1.0	<0.50	<0.50
1,2-Dichloroethane	5 **	<2.0	<0.20	<1.0	<0.50	<0.50
1,2-Dichloropropane		<1.0	<0.10	<0.50	<0.25	<0.25
1,3-Dichlorobenzene		<2.0	<0.20	<1.0	<0.50	<0.50
1,4-Dichlorobenzene	1	<2.0	<0.20	<1.0	<0.50	<0.50
Acetone		<100	<10	<50	<25	<25
Benzene	5 **	<1.0	<0.10	<0.50	<0.25	<0.25
Bromodichloromethane		<1.0	<0.10	<0.50	<0.25	<0.25
Bromoform		<2.0	<0.20	<1.0	<0.50	<0.50
Bromomethane		<5.0	<0.50	<2.5	<1.3	<1.3
Carbon Tetrachloride	5 **	<1.0	<0.10	<0.50	<0.25	<0.25
Chlorobenzene	80 **	<1.0	<0.10	<0.50	<0.25	<0.25
Chloroethane						
Chloroform		<1.0	<0.10	<0.50	<0.25	<0.25
Chloromethane						
Cis-1,2-Dichloroethylene		<1.0	<0.10	<0.50	<0.25	<0.25
Cis-1,3-Dichloropropene		<2.0	<0.20	<1.0	<0.50	<0.50
Dibromochloromethane		<2.0	<0.20	<1.0	<0.50	<0.50
Dichlorodifluoromethane		<5.0	<0.50	<2.5	<1.3	<1.3
Dichloromethane	50 **	<5.0	<0.50	<2.5	<1.3	<1.3
Ethyl benzene	2.4	<1.0	<0.10	<0.50	<0.25	<0.25
Hexane		<5.0	<0.50	<2.5	<1.3	<1.3
m/p-Xylenes	300 ***	<1.0	<0.10	<0.50	<0.25	<0.25
Methyl ethyl ketone		<50	<5.0	<25	<13	<13
Methyl Isobutyl Ketone		<50	<5.0	<25	<13	<13
Methyl t-Butyl Ether		<2.0	<0.20	<1.0	<0.50	<0.50
o-Xylene	300 ***	<1.0	<0.10	<0.50	<0.25	<0.25
Styrene		<2.0	<0.20	<1.0	<0.50	<0.50
Tetrachloroethylene	30 **	<1.0	<0.10	<0.50	<0.25	<0.25
Toluene	24	<2.0	<0.20	<1.0	<0.50	<0.50
trans-1,2-Dichloroethylene		<1.0	<0.10	<0.50	<0.25	<0.25
trans-1,3-Dichloropropene		<2.0	<0.20	<1.0	<0.50	<0.50
Trichloroethylene	5 **	<1.0	<0.10	<0.50	<0.25	<0.25
Trichlorofluoromethane		<2.0	<0.20	<1.0	<0.50	<0.50
Vinyl Chloride	2 **	<2.0	<0.20	<1.0	<0.50	<0.50
Xylenes - total		<1.0	<0.10	<0.50	<0.25	<0.25

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	24-II																
		Sep-87	Nov-87	Dec-87	Dec-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-00
1,1,1,2-Tetrachloroethane																		
1,1,1-Trichloroethane		3.4	* <1.0	<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethylene	**14 ****	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dibromoethane															<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	* <0.4	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone																<10.0	<10.0	<10.0
Benzene	**5 ****	* <0.5	* <0.5	* <0.5	* <0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5
Chloroform		1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0							
Dichloromethane	**50 ****	2.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
Hexane																		
m/p-Xylenes	**300 *****	<0.5	<0.5	<0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Methyl ethyl ketone																<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																		
Methyl t-Butyl Ether																		
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Styrene																<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	* <0.5	* <0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5
Xylenes - total																		

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	24-II																	
		Sep-01	Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18
1,1,1,2-Tetrachloroethane			<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.4	<1	<1	<0.50	<1.0	<0.20	<1.0
1,1,1-Trichloroethane		<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.5	<0.5	<0.25	<0.50	<0.10	<0.50
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<1	<1	<0.50	<1.0	<0.20	<1.0
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<1	<1	<0.50	<1.0	<0.20	<1.0
1,1-Dichloroethane		<0.2	<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.5	<0.5	<0.25	<0.50	<0.10	<0.50
1,1-Dichloroethylene	**14 ****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.5	<0.5	<0.25	<0.50	<0.10	<0.50
1,2-Dibromoethane		<0.2	<0.2	<0.2	<0.5		<0.2	<0.2		<0.4		<0.2	<0.4	<1				<0.20	<1.0
1,2-Dichlorobenzene	**3**	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<1	<1	<0.50	<1.0	<0.20	<1.0
1,2-Dichloroethane	**5 ****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.4	<0.2	<0.2	<0.4	<1	<1	<0.50	<1.0	<0.20	<1.0
1,2-Dichloropropane		<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.5	<0.5	<0.25	<0.50	<0.10	<0.50
1,3-Dichlorobenzene		<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<1	<1	<0.50	<1.0	<0.20	<1.0
1,4-Dichlorobenzene	**1**	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<1	<1	<0.50	<1.0	<0.20	<1.0
Acetone		<15.0	24.7	19.9	<15.0	<10	<10	<10	<10	<20	<10	<10	92	<50	<50	<25	<50	<10	<50
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.5	<0.5	<0.25	<0.50	<0.10	<0.50
Bromodichloromethane		<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.5	<0.5	<0.25	<0.50	<0.10	<0.50
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<1	<1	<0.50	<1.0	<0.20	<1.0
Bromomethane		<0.5	<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<1.0	<2.5	<2.5	<1.3	<2.5	<0.50	<2.5
Carbon Tetrachloride	**5 ****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.5	<0.5	<0.25	<0.50	<0.10	<0.50
Chlorobenzene	**80 ****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.5	<0.5	<0.25	<0.50	<0.10	<0.50
Chloroethane		<0.5	<0.2	<0.2	<1.0				<0.2										
Chloroform		<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.5	<0.5	<0.25	<0.50	<0.10	<0.50
Chloromethane		<1.0	<0.5	<0.5	<2.0				<0.5										
Cis-1,2-Dichloroethylene		<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.5	<0.5	<0.25	<0.50	<0.10	<0.50
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<1	<1	<0.50	<1.0	<0.20	<1.0
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<1	<1	<0.50	<1.0	<0.20	<1.0
Dichlorodifluoromethane												<0.5	<1.0	<2.5	<2.5	<1.3	<2.5	<0.50	<2.5
Dichloromethane	**50 ****	<1.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<1.0	<2.5	<2.5	<1.3	<2.5	<0.50	<2.5
Ethyl benzene	**2.4**	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.5	<0.5	0.25	<0.50	<0.10	<0.50
Hexane												<0.5	<0.5	<2.5	<2.5	<1.3	<2.5	<0.50	<2.5
m/p-Xylenes	**300 *****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.5	<0.5	<0.25	<0.50	<0.10	<0.50
Methyl ethyl ketone		<5.0	10.4	<5.0	<15.0	<5	<5.0	<5	<5	<10	<5	<5	<10	<25	<25	<13	<25	<5.0	<25
Methyl Isobutyl Ketone			<5.0	<5.0	<10.0	<5	<5.0	<5		<10	<5	<5	<10	<25	<25	<13	<25	<5.0	<25
Methyl t-Butyl Ether			<0.2	<0.2	<2.0	<0.2	<0.2	<0.2		<0.4	<0.2	<0.2	<0.4	<1	<1	<0.50	<1.0	<0.20	<1.0
o-Xylene	**300 *****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.5	<0.5	<0.25	<0.50	<0.10	<0.50
Styrene		<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.4	<0.2	<0.2	<0.4	<1	<1	<0.5	<1.0	<0.20	<1.0
Tetrachloroethylene	**30 ****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.5	<0.5	<0.25	<0.50	<0.10	<0.50
Toluene	**24**	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<1	<1	<0.50	<1.0	<0.20	<1.0
trans-1,2-Dichloroethylene		<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.5	<0.5	<0.25	<0.50	<0.10	<0.50
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<1	<1	<0.50	<1.0	<0.20	<1.0
Trichloroethylene	**5 ****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.5	<0.5	<0.25	<0.50	<0.10	<0.50
Trichlorofluoromethane		<0.5	<0.2	<0.2	<2.0				<0.2			<0.2	<0.4	<1	<1	<0.50	<1.0	<0.20	<1.0
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<1	<1	<0.50	<1.0	<0.20	<1.0
Xylenes - total														<0.5	<0.5	<0.25	<0.50	<0.10	<0.50

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	24-II			
		Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<1.0	<0.50	<0.50
1,1,1-Trichloroethane		<0.10	<0.50	<0.25	<0.25
1,1,2,2-Tetrachloroethane		<0.20	<1.0	<0.50	<0.50
1,1,2-Trichloroethane		<0.20	<1.0	<0.50	<0.50
1,1-Dichloroethane		<0.10	<0.50	<0.25	<0.25
1,1-Dichloroethylene	14 **	<0.10	<0.50	<0.25	<0.25
1,2-Dibromoethane		<0.20	<1.0	<0.50	<0.50
1,2-Dichlorobenzene	3	<0.20	<1.0	<0.50	<0.50
1,2-Dichloroethane	5 **	<0.20	<1.0	<0.50	<0.50
1,2-Dichloropropane		<0.10	<0.50	<0.25	<0.25
1,3-Dichlorobenzene		<0.20	<1.0	<0.50	<0.50
1,4-Dichlorobenzene	1	<0.20	<1.0	<0.50	<0.50
Acetone		<10	<50	<25	<25
Benzene	5 **	<0.10	<0.50	<0.25	<0.25
Bromodichloromethane		<0.10	<0.50	<0.25	<0.25
Bromoform		<0.20	<1.0	<0.50	<0.50
Bromomethane		<0.50	<2.5	<1.3	<1.3
Carbon Tetrachloride	5 **	<0.10	<0.50	<0.25	<0.25
Chlorobenzene	80 **	<0.10	<0.50	<0.25	<0.25
Chloroethane					
Chloroform		<0.10	<0.50	<0.25	<0.25
Chloromethane					
Cis-1,2-Dichloroethylene		<0.10	<0.50	<0.25	<0.25
Cis-1,3-Dichloropropene		<0.20	<1.0	<0.50	<0.50
Dibromochloromethane		<0.20	<1.0	<0.50	<0.50
Dichlorodifluoromethane		<0.50	<2.5	<1.3	<1.3
Dichloromethane	50 **	<0.50	<2.5	<1.3	<1.3
Ethyl benzene	2.4	<0.10	<0.50	<0.25	<0.25
Hexane		<0.50	<2.5	<1.3	<1.3
m/p-Xylenes	300 ***	<0.10	<0.50	<0.25	<0.25
Methyl ethyl ketone		<5.0	<25	<13	<13
Methyl Isobutyl Ketone		<5.0	<25	<13	<13
Methyl t-Butyl Ether		<0.20	<1.0	<0.50	<0.50
o-Xylene	300 ***	<0.10	<0.50	<0.25	<0.25
Styrene		<0.20	<1.0	<0.50	<0.50
Tetrachloroethylene	30 **	<0.10	<0.50	<0.25	<0.25
Toluene	24	<0.20	<1.0	<0.50	<0.50
trans-1,2-Dichloroethylene		<0.10	<0.50	<0.25	<0.25
trans-1,3-Dichloropropene		<0.20	<1.0	<0.50	<0.50
Trichloroethylene	5 **	<0.10	<0.50	<0.25	<0.25
Trichlorofluoromethane		<0.20	<1.0	<0.50	<0.50
Vinyl Chloride	2 **	<0.20	<1.0	<0.50	<0.50
Xylenes - total		<0.10	<0.50	<0.25	<0.25

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	24-III																
		Sep-87	Nov-87	Dec-87	Dec-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99
1,1,1,2-Tetrachloroethane																		
1,1,1-Trichloroethane		3.7	<1.0	* <1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	1.1	3.7	3.6	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethylene	**14 ****	* <1.0	<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dibromoethane						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	* <1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	* <0.3	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone																<10.0	<10.0	<10.0
Benzene	**5 ****	* <0.5	* <0.5	* <0.5	0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5
Chloroform		1.3	<1.0	* <1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	8.7	32.8	29.5	<1.0	3.4	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	8.0	6.9	6.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0							
Dichloromethane	**50 ****	2.2	<1.0	* <1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
Hexane																		
m/p-Xylenes	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Methyl ethyl ketone																<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																		
Methyl t-Butyl Ether																		
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Styrene																<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	* <1.0	1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	* <0.5	* <0.5	* <0.5	* <0.5	<0.5	<0.5	* <0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	2.9	2.5	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	6.1	12.1	11.8	<1.0	5.7	* <1.0	* <0.6	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	* 0.1
Trichlorofluoromethane		<2.0	<2.0	* <2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	3.5	11.0	12.3	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5
Xylenes - total																		

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	24-III																	
		Sep-00	Sep-01	Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17
1,1,1,2-Tetrachloroethane				<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.2	<0.2	<0.1	<0.1	<0.4	<0.1	0.1	0.1	0.2	0.2	0.1	0.1	<0.1	<0.25	<0.1	0.13	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2	<0.2	<0.2	<0.5		<0.2	<0.2		<0.2		<0.2	<0.2	<0.5				<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
Acetone		<10.0	<15.0	<10.0	<10.0	<15.0	<10	<10	<10	<10	<10	<10	<10	<10	<25	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	0.1	<0.1	<0.5	<0.1	0.1	0.2	<0.1	<0.1	0.2	0.1	<0.1	<0.25	<0.1	0.34	0.14	<0.10
Bromodichloromethane		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.3	<0.5	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10
Chloroethane		<0.5	<0.5	<0.2	<0.2	<1.0				<0.2									
Chloroform		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10
Chloromethane		<1.0	<1.0	<0.5	<0.5	<2.0				<0.5									
Cis-1,2-Dichloroethylene		0.3	0.2	0.2	0.3	<1.0	0.4	0.5	0.4	0.4	0.3	0.3	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
Dichlorodifluoromethane													<0.5	<0.5	<1.3	<0.5	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<1.0	<1.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.3	<0.5	<0.5	<0.50	<0.50
Ethyl benzene	**2.4**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10
Hexane													<0.5	<0.5	<1.3	<0.5	<0.5	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	0.11	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<15.0	<5	<5.0	<5	<5	<5	<5	<5	<5	<13	<5	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone				<5.0	<5.0	<10.0	<5	<5.0	<5		<5	<5	<5	<5	<13	<5	<5.0	<5.0	<5.0
Methyl t-Butyl Ether				<0.2	<0.2	<2.0	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10
Styrene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	0.25	<0.20	0.21
trans-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.2	<0.2	0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.5	<0.5	<0.2	<0.2	<2.0				<0.2			<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
Xylenes - total															<0.25	<0.1	0.11	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	24-III				
		Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10
Benzene	5 **	0.11	0.14	<0.10	0.12	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane						
Chloroform		<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane						
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane		<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	25-I (Refuse Monitor)														
		Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99	Sep-00	Sep-01	Sep-02	Sep-03
1,1,1,2-Tetrachloroethane															<0.1	<4.0
1,1,1-Trichloroethane		<1.0	3.8	<6.0	<0.6	<0.6	<0.6	<3.0	<50	<10.0	<2.0	<5.0	<10.0	<0.2	<0.1	<4.0
1,1,2,2-Tetrachloroethane		<1.0	<2.0	<4	<0.4	<0.4	<0.4	<2.0	<50	<10.0	<2.0	<5.0	<10.0	<0.2	<0.2	<8.0
1,1,2-Trichloroethane		<2.0	<2.0	<6.0	<1.1	<1.1	<0.6		<50	<10.0	<2.0	<5.0	<10.0	<0.2	<0.2	<8.0
1,1-Dichloroethane		<1.0	66.5	120.0	230.0	<0.5	<0.5	47.0	48.0	* 9.6	18.0	15.0	24.7	<0.2	0.1	10.9
1,1-Dichloroethylene	14 **	<1.0	<1.0	<4	<0.4	<0.4	<0.4	<8.0	<50	<10.0	<2.0	<5.0	<10.0	<0.2	<0.1	<4.0
1,2-Dibromoethane		<1.0	<1.0	<1.0	<1.0				<50	<10.0	<2.0	<5.0	<10.0	<0.2	<0.2	<8.0
1,2-Dichlorobenzene	3	<1.0	<1.0	6.7	<0.4	<0.4	<0.4	<2.0	<50	<10.0	<2.0	<5.0	<10.0	<0.2	<0.1	<4.0
1,2-Dichloroethane	5 **	<1.0	1.2	5.4	2.0	<0.4	<0.4	<2.0	<50	<10.0	*1.9	<5.0	<10.0	<0.2	0.1	*3.3
1,2-Dichloropropane		<1.0	<1.0	<5.0	<0.5	<0.5	<0.5	<2.5	<50	<10.0	<2.0	<5.0	<10.0	<0.2	15.8	<4.0
1,3-Dichlorobenzene		<1.0	* <0.3	<3	<0.3	<0.3	<0.3	<1.5	<50	<10.0	<2.0	<5.0	<10.0	<0.2	<0.1	<4.0
1,4-Dichlorobenzene	1	<1.0	<1.0	12.0	7.0	<0.2	<0.2	<1.0	<50	* 8.6	7.7	7.8	<10.0	1.1	0.1	10.7
Acetone										<500.0	<100.0	<250.0	<500	<10.0	<10.0	<400
Benzene	5 **	<0.5	5.9	<2.0	20.0	<0.2	<0.2	1.5	24.0	15.2	24.2	17.4	22.5	5.3	0.4	22.8
Bromodichloromethane		<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<50	<10.0	<2.0	<5.0	<10.0	<0.2	<0.1	<4.0
Bromoform		<2.0	<2.0	<3	<0.3	<0.3	<0.3		<125	<10.0	<2.0	<5.0	<10.0	<0.2	<0.2	<8.0
Bromomethane		<2.0	<2.0	<24	<2.4	<2.4	<2.4	<12	<250	<25.0	<5.0	<12.5	<25.0	<0.5	<0.5	<20.0
Carbon Tetrachloride	5 **	<1.0	<1.0	<3.0	<0.3	<0.3	<0.3	<1.5	<50	<10.0	<2.0	<5.0	<10.0	<0.2	<0.1	<4.0
Chlorobenzene	80 **	<0.5	<0.5	<6	<0.6	<0.6	<0.6	<3.0	<50	<10.0	<2.0	<5.0	<10.0	6.3	0.4	<4.0
Chloroethane		<2.0	<2.0	<23	5.1	<2.3	<2.3	<12	<250	<25.0	<5.0	* 9.0	<25.0	<0.5	<0.2	<8.0
Chloroform		<1.0	<1.0	7.8	<0.4	<0.4	<0.4		<50	<10.0	<2.0	<5.0	<10.0	<0.2	<0.1	<4.0
Chloromethane		<2.0	<2.0	<23	<2.3	<2.3	<2.3	<12.0	<250	<50.0	<10.0	<25.0	<50.0	<1.0	<0.5	<20.0
Cis-1,2-Dichloroethylene		<1.0	32.7	<1.0	<1.0				196.0	28.8	7.8	48.2	147	<0.2	0.1	89.8
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<50	<10.0	<2.0	<5.0	<10.0	<0.2	<0.2	<8.0
Dibromochloromethane		<1.0	<1.0	<4.0	<1.0	<1.0	<0.4		<50	<10.0	<2.0	<5.0	<10.0	<0.2	<0.2	<8.0
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0											
Dichloromethane	50 **	<1.0	<1.0	<1.0	510.0	<1.0	<1.0	160.0	<250	<50.0	<10.0	38.7	106	<1.0	<1.0	<20.0
Ethyl benzene	2.4	<0.5	7.3	15.0	47.0	<0.4	<0.4	<2.0	50.0	47.6	63.5	32.9	49.8	<0.2	<0.1	58.6
Hexane																
m/p-Xylenes	300 ***	<0.5	<0.5	<0.5	<0.5				153.0	175.0	168.0	96.8	127	3.1	0.1	164.0
Methyl ethyl ketone										<250.0	*48.1	<125	527.0	<5.0	<5.0	487.0
Methyl Isobutyl Ketone															<5.0	<200
Methyl t-Butyl Ether															<0.2	<8.0
o-Xylene	300 ***	<0.5	<0.5	<0.5	<0.5				64.0	58.8	58.1	32.1	44.8	0.2	<0.1	63.5
Styrene										<10.0	2.0	<5.0	<10.0	<0.2	<0.1	<4.0
Tetrachloroethylene	30 **	<1.0	14.6	250.0	320.0	<0.2	<0.2	150.0	313.0	358.0	7.5	20.9	88.9	<0.2	<0.1	228.0
Toluene	24	<0.5	10.2	76.0	580.0	<0.4	<0.4	210.0	610.0	281.0	88.4	80.4	251	0.2	0.4	280.0
trans-1,2-Dichloroethylene		<1.0	<1.0	7.6	20.0	<0.4	<0.4	<10	<50	<10.0	6.8	8.8	*8.0	<0.2	<0.1	7.6
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<5.5	<50	<10.0	<2.0	<5.0	<10.0	<0.2	<0.2	<8.0
Trichloroethylene	5 **	<1.0	21.6	120.0	130.0	<0.3	<0.3	86.0	108.0	36.0	<2.0	10.6	57.1	<0.2	<0.1	50.0
Trichlorofluoromethane		<2.0	2.8	<3	<0.3	<0.3	<0.3		<125	<25.0	<5.0	<12.5	<25.0	<0.5	0.7	<8.0
Vinyl Chloride	2 **	<2.0	99.7	45.0	46.0	<2.9	<2.9	60.0	<125	<25.0	* 3.5	* 10.6	*16.4	<0.2	<0.2	12.2
Xylenes - total																

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	25-I (Refuse Monitor)															
		Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18	Sep-19	Sep-20
1,1,1,2-Tetrachloroethane		<0.5	<10	<10	<10	<3	<5	<5	<1	<5	<4	<10	<2.0	<2.0	<10	<4.0	<4.0
1,1,1-Trichloroethane		<0.5	<10	<10	<10	<3	<5	<5	<1	<2.5	<2	<5.0	<1.0	<1.0	<5.0	<2.0	<2.0
1,1,2,2-Tetrachloroethane		<1.0	<10	<10	<20	<5	<10	<10	<2	<5	<4	<10	<2.0	<2.0	<10	<4.0	<4.0
1,1,2-Trichloroethane		<0.5	<20	<20	<20	<5	<10	<10	<2	<5	<4	<10	<2.0	<2.0	<10	<4.0	<4.0
1,1-Dichloroethane		<0.4	<10	<10	<10	<3	<5	<5	<1	<2.5	<2	<5.0	<1.0	<1.0	<5.0	<2.0	<2.0
1,1-Dichloroethylene	**14 ****	<0.5	<10	<10	<10	<3	<5	<5	<1	<2.5	<2	<5.0	<1.0	<1.0	<5.0	<2.0	<2.0
1,2-Dibromoethane		<0.5		<20	<20		<10		<2	<5				<2.0	<10	<4.0	<4.0
1,2-Dichlorobenzene	**3**	<0.5	<10	<20	<20	<5	<10	<10	6	<5	<4	<10	<2.0	<2.0	<10	<4.0	<4.0
1,2-Dichloroethane	**5 ****	<0.5	<10	<10	<10	<5	<10	<10	<2	<5	<4	<10	<2.0	<2.0	<10	<4.0	<4.0
1,2-Dichloropropane		<0.5	<10	<10	<10	<3	<5	<5	<1	<2.5	<2	<5.0	<1.0	<1.0	<5.0	<2.0	<2.0
1,3-Dichlorobenzene		<0.5	<10	<20	<20	<5	<10	<10	<2	<5	<4	<10	<2.0	<2.0	<10	<4.0	<4.0
1,4-Dichlorobenzene	**1**	1.2	13.0	24.0	24.0	16.0	27	37	15	13	14	13	2.2	6	<10	7.3	<4.0
Acetone		<15.0	<1000	<1000	<1000	<300	<300	<500	<100	<250	<200	<500	<100	<100	<500	<200	<200
Benzene	**5 ****	6.8	16.0	23.0	16.0	5.0	8	11	1	<2.5	3.3	5.1	2.9	3.7	<5.0	3.4	<2.0
Bromodichloromethane		<0.2	<10	<10	<10	<3	<5	<5	<1	<2.5	<2	<5.0	<1.0	<1.0	<5.0	<2.0	<2.0
Bromoform		<0.2	<20	<20	<20	<5	<10	<10	<2	<5	<4	<10	<2.0	<2.0	<10	<4.0	<4.0
Bromomethane		<3.0	<50	<50	<50	<10	<30	<30	<5	<13	<10	<25	<5.0	<5.0	<25	<10	<10
Carbon Tetrachloride	**5 ****	<0.5	<10	<10	<10	<3	<5	<5	<1	<2.5	<2	<5.0	<1.0	<1.0	<5.0	<2.0	<2.0
Chlorobenzene	**80 ****	7.4	<10	<10	<10	<3	<5	<5	<1	<2.5	<2	<5	<1.0	<1.0	<5.0	<2.0	<2.0
Chloroethane		<1.0				<5	<10										
Chloroform		<0.2	<10	<10	<10	<3	<5	<5	<1	<2.5	<2	<5	<1.0	<1.0	<5.0	<2.0	<2.0
Chloromethane		5.2				<10	<30										
Cis-1,2-Dichloroethylene		<1.0	365.0	180.0	110.0	<3	26	15	<1	<2.5	<2	<5.0	<1.0	<1.0	8	<2.0	<2.0
Cis-1,3-Dichloropropene		<0.14	<20	<20	<20	<5	<10	<10	<2	<5	<4	<10	<2.0	<2.0	<10	<4.0	<4.0
Dibromochloromethane		<0.2	<20	<20	<20	<5	<10	<10	<2	<5	<4	<10	<2.0	<2.0	<10	<4.0	<4.0
Dichlorodifluoromethane									<5	<13	<10	<25	<5.0	<5.0	<25	<10	<10
Dichloromethane	**50 ****	<1.0	<50	<50	<50	<10	<30	<30	<5	<13	<10	<25	<5.0	<5.0	<25	<10	<10
Ethyl benzene	**2.4**	<0.5	67.0	110.0	100.0	14.0	85	190	<1	13	17	12	4	19	<5.0	28	2.6
Hexane								<0.5	<0.5	<13	<10	<25	<5.0	<5.0	<25	<10	<10
m/p-Xylenes	**300 *****	11.0	216.0	320.0	290.0	180.0	290	490	3	120	140	170	23	72	11	96	7
Methyl ethyl ketone		<15.0	<500	<500	<500	<100	<300	<300	<50	<130	<100	<250	<50	<50	<250	<100	<100
Methyl Isobutyl Ketone		<10.0	<500	<500	<500		<300	<300	<50	<130	<100	<250	<50	<50	<250	<100	<100
Methyl t-Butyl Ether		<2.0	<20	<20	<20		<10	<10	<2	<5	<4	<10	<2.0	<2.0	<10	<4.0	<4.0
o-Xylene	**300 *****	0.6	79.0	120.0	50.0	69.0	71	100	57	16	11	20	6.5	17	<5.0	36	3.6
Styrene		<0.5	<10	<10	<10	<5	<10	15	<2	<5	<4	<10	<2.0	<2.0	<10	<4.0	<4.0
Tetrachloroethylene	**30 ****	<0.5	420.0	400.0	280.0	<3	72	48	<1	<2.5	<2	<5.0	1.5	1.5	<5.0	<2.0	5.1
Toluene	**24**	<0.5	839.0	800.0	560.0	5.0	500	420	<2	<5	<4	<10	<2.0	<2.0	25	<4.0	<4.0
trans-1,2-Dichloroethylene		<1.0	<10	<10	<10	<3	<5	<5	<1	<2.5	<2	<5.0	2.1	4.4	<5.0	5	<2.0
trans-1,3-Dichloropropene		<0.14	<20	<20	<20	<5	<10	<10	<2	<5	<4	<10	<2.0	<2.0	<10	<4.0	<4.0
Trichloroethylene	**5 ****	<0.5	167.0	59.0	42.0	<3	11	14	<1	<2.5	<2	<5.0	<1.0	<1.0	<5.0	<2.0	<2.0
Trichlorofluoromethane		<2.0				<5	<10		<2	<5	<4	<10	<2.0	<2.0	<10	<4.0	<4.0
Vinyl Chloride	**2 ****	<0.2	25.0	<20	<20	<5	<10	<10	<2	<5	<4	<10	<2.0	<2.0	<10	<4.0	<4.0
Xylenes - total										140	160	190	29	89	11	130	11

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	25-I	
		Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<10	<4.0
1,1,1-Trichloroethane		<5.0	<2.0
1,1,2,2-Tetrachloroethane		<10	<4.0
1,1,2-Trichloroethane		<10	<4.0
1,1-Dichloroethane		<5.0	<2.0
1,1-Dichloroethylene	14 **	<5.0	<2.0
1,2-Dibromoethane		<10	
1,2-Dichlorobenzene	3	<10	<4.0
1,2-Dichloroethane	5 **	<10	<4.0
1,2-Dichloropropane		<5.0	<2.0
1,3-Dichlorobenzene		<10	<4.0
1,4-Dichlorobenzene	1	<10	11
Acetone		<500	<200
Benzene	5 **	<5.0	3.2
Bromodichloromethane		<5.0	<2.0
Bromoform		<10	<4.0
Bromomethane		<25	<10
Carbon Tetrachloride	5 **	<5.0	<2.0
Chlorobenzene	80 **	<5.0	<2.0
Chloroethane			<4.0
Chloroform		<5.0	<2.0
Chloromethane			<10
Cis-1,2-Dichloroethylene		<5.0	<2.0
Cis-1,3-Dichloropropene		<10	<4.0
Dibromochloromethane		<10	<4.0
Dichlorodifluoromethane		<25	
Dichloromethane	50 **	<25	<10
Ethyl benzene	2.4	33	35
Hexane		<25	
m/p-Xylenes	300 ***	100	110
Methyl ethyl ketone		<250	<100
Methyl Isobutyl Ketone		<250	
Methyl t-Butyl Ether		<10	
o-Xylene	300 ***	46	54
Styrene		<10	<4.0
Tetrachloroethylene	30 **	<5.0	<2.0
Toluene	24	<10	<4.0
trans-1,2-Dichloroethylene		7.1	7
trans-1,3-Dichloropropene		<10	<4.0
Trichloroethylene	5 **	<5.0	<2.0
Trichlorofluoromethane		<10	<4.0
Vinyl Chloride	2 **	<10	<4.0
Xylenes - total		150	170

NOTES:

1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	26-I													
		Sep-87	Nov-87	Dec-87	Dec-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97
1,1,1,2-Tetrachloroethane																
1,1,1-Trichloroethane		5.4	* <1.0	<1.0	* <1.0	<1.0	* <1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2
1,1-Dichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2
1,1-Dichloroethylene	**14 ****	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2
1,2-Dibromoethane						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone																<10.0
Benzene	**5 ****	* <0.5	* <0.5	* <0.5	* <0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2
Bromomethane		<2.0	<2.0	* <2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5
Chloroform		1.6	<1.0	* <1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0					
Dichloromethane	**50 ****	2.9	<1.0	1.5	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2
Hexane																
m/p-Xylenes	**300 *****	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2
Methyl ethyl ketone																<5.0
Methyl Isobutyl Ketone																
Methyl t-Butyl Ether																
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2
Styrene																<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	* <0.5	* <0.5	* <0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5
Xylenes - total																

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	26-I													
		Sep-98	Sep-98	Sep-99	Sep-00	Sep-01	Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10
1,1,1,2-Tetrachloroethane							<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethylene	**14 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dibromoethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5		<0.2	<0.2		<0.2	
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0..1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2
1,2-Dichloropropane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-Dichlorobenzene		<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone		<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<15.0	<10	<10.0	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	**80 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroethane		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<1.0				<0.2		
Chloroform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<2.0				<0.5		
Cis-1,2-Dichloroethylene		<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane															
Dichloromethane	**50 ****	<1.0	<1.0	<1.0	<1.0	<1.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethyl benzene	**2.4**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexane															
m/p-Xylenes	**300 *****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5	<5.0	<5	<5	<5	<5
Methyl Isobutyl Ketone							<5.0	<5.0	<10.0	<5	<5.0	<5		<5	<5
Methyl t-Butyl Ether							<0.2	<0.2	<2.0	<0.2	<0.2	<0.2		<0.2	<0.2
o-Xylene	**300 *****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Styrene		<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	**24**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichlorofluoromethane		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<2.0				<0.2		
Vinyl Chloride	**2 ****	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Xylenes - total															

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	26-I											
		Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.1	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2	<0.2				<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane													
Chloroform		<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane													
Cis-1,2-Dichloroethylene		<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	**2.4**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane		<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.2	<0.2	<0.2	<0.2	<0.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total				<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	26-II																
		Sep-87	Nov-87	Dec-87	Dec-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99
1,1,1,2-Tetrachloroethane																		
1,1,1-Trichloroethane		4.8	<1.0	<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethylene	**14 ****	1.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dibromoethane						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	* <1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone																<10.0	<10.0	<10.0
Benzene	**5 ****	* <0.5	* <0.5	* <0.5	* <0.5	<0.5	<0.5	* <0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5
Chloroform		<1.0	<1.0	* <1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0							
Dichloromethane	**50 ****	3.1	<1.0	* <1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
Hexane																		
m/p-Xylenes	**300 *****	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Methyl ethyl ketone																<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																		
Methyl t-Butyl Ether																		
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Styrene																<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	* <0.5	* <0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5
Xylenes - total																		

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	26-II																
		Sep-00	Sep-01	Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17
1,1,1,2-Tetrachloroethane				<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20
1,1,1-Trichloroethane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20
1,1-Dichloroethane		<0.2	<0.2	<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2	<0.2	<0.2	<0.5		<0.2	<0.2		<0.2		<0.2	<0.2	<0.2				<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20
1,2-Dichloropropane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20
Acetone		<10.0	<10.0	<10.0	<10.0	<15.0	<10	<10.0	<10	<10	<10	<10	<10	<10	<10	<10	<250	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.10	<0.10
Bromodichloromethane		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<13	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.10	<0.10
Chlorobenzene	**80 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.10	<0.10
Chloroethane		<0.5	<0.5	<0.2	<0.2	<1.0				<0.2									
Chloroform		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.10	<0.10
Chloromethane		<1.0	<1.0	<0.5	<0.5	<2.0				<0.5									
Cis-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20
Dichlorodifluoromethane													<0.5	<0.5	<0.5	<0.5	<13	<0.50	<0.50
Dichloromethane	**50 ****	<1.0	<1.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<13	<0.50	<0.50
Ethyl benzene	**2.4**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.10	<0.10
Hexane													<0.5	<0.5	<0.5	<0.5	<13	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<15.0	<5	<5.0	<5	<5	<5	<5	<5	<5	<5	<5	<130	<5.0	<5.0
Methyl Isobutyl Ketone				<5.0	<5.0	<10.0	<5	<5.0	<5		<5	<5	<5	<5	<5	<5	<130	<5.0	<5.0
Methyl t-Butyl Ether				<0.2	<0.2	<2.0	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20
o-Xylene	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.10	<0.10
Styrene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20
Trichloroethylene	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.10	<0.10
Trichlorofluoromethane		<0.5	<0.5	<0.2	<0.2	<2.0				<0.2			<0.2	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20
Xylenes - total															<0.1	<0.1	<2.5	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	26-II				
		Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.50	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.25	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.50	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.50	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.25	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.25	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.50	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.50	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.50	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.25	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.50	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.50	<0.20	<0.20	<0.20	<0.20
Acetone		<25	<10	<10	<10	<10
Benzene	5 **	<0.25	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.25	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.50	<0.20	<0.20	<0.20	<0.20
Bromomethane		<1.3	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.25	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.25	<0.10	<0.10	<0.10	<0.10
Chloroethane						
Chloroform		<0.25	<0.10	<0.10	<0.10	<0.10
Chloromethane						
Cis-1,2-Dichloroethylene		<0.25	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.50	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.50	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<1.3	<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<1.3	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.25	<0.10	<0.10	<0.10	<0.10
Hexane		<1.3	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.25	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<13	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<13	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.50	<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.25	<0.10	<0.10	<0.10	<0.10
Styrene		<0.50	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.25	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.50	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.25	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.50	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.25	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.50	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.50	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.25	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	26-III															
		Sep-87	Nov-87	Dec-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99
1,1,1,2-Tetrachloroethane																	
1,1,1-Trichloroethane		3.0	<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethylene	**14 ****	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dibromoethane					<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone															<10.0	<10.0	<10.0
Benzene	**5 ****	* <0.5	* <0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5
Chloroform		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0							
Dichloromethane	**50 ****	3.6	<1.0	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
Hexane																	
m/p-Xylenes	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Methyl ethyl ketone															<5.0	5.3	<5.0
Methyl Isobutyl Ketone																	
Methyl t-Butyl Ether																	
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Styrene															<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	* <0.5	* <0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5
Xylenes - total																	

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	26-III																
		Sep-00	Sep-01	Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17
1,1,1,2-Tetrachloroethane				<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.2	<0.2	<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2	<0.2	<0.2	<0.5		<0.2	<0.2		<0.2		<0.2	<0.2	<0.2				<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Acetone		<10.0	<10.0	<10.0	<10.0	<15.0	<10	<10.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.14	<0.1	<0.1	<0.10	<0.10	<0.10
Bromodichloromethane		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Chloroethane		<0.5	<0.5	<0.2	<0.2	<1.0				<0.2									
Chloroform		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Chloromethane		<1.0	<1.0	<0.5	<0.5	<2.0				<0.5									
Cis-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Dichlorodifluoromethane													<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<1.0	<1.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50
Ethyl benzene	**2.4**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Hexane													<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.22	<0.1	<0.1	<0.1	<0.10	0.12
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<15.0	<5	<5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone				<5.0	<5.0	<10.0	<5	<5.0	<5		<5	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0
Methyl t-Butyl Ether				<0.2	<0.2	<2.0	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Styrene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.24	<0.2	<0.2	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.5	<0.5	<0.2	<0.2	<2.0				<0.2			<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Xylenes - total															<0.1	<0.1	<0.10	<0.10	0.12

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	26-III				
		Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10
Benzene	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane						
Chloroform		<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane						
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane		<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	0.11	<0.10	<0.10	0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total		0.11	<0.10	<0.10	0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	27-I																
		Sep-87	Nov-87	Dec-87	Dec-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99
1,1,1,2-Tetrachloroethane																		
1,1,1-Trichloroethane		4.0	<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethylene	**14 ****	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dibromoethane						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone																<10.0	<10.0	<10.0
Benzene	**5 ****	* <0.5	* <0.5	* <0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5
Chloroform		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0							
Dichloromethane	**50 ****	2.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
Hexane																		
m/p-Xylenes	**300 *****	* <0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Methyl ethyl ketone																<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																		
Methyl t-Butyl Ether																		
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Styrene																<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	* <0.5	* <0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5
Xylenes - total																		

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	27-I																	
		Sep-00	Sep-01	Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17
1,1,1,2-Tetrachloroethane				<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.2	<0.2	<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2	<0.2	<0.2	<0.5		<0.2	<0.2		<0.2		<0.2	<0.2	<0.2				<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Acetone		<10.0	<15.0	<10.0	<10.0	<15.0	<10	<10.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Bromodichloromethane		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Chloroethane		<0.5	<0.5	<0.2	<0.2	<1.0				<0.2	<0.2								
Chloroform		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Chloromethane		<1.0	<1.0	<0.5	<0.5	<2.0				<0.5	<0.5								
Cis-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Dichlorodifluoromethane													<0.5		<0.5	<0.5	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<1.0	<1.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50
Ethyl benzene	**2.4**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Hexane													<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<15.0	<5	<5.0	<5	<5	<5	<5	<5	<5.0	<5	<5	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone				<5.0	<5.0	<10.0	<5	<5.0	<5		<5	<5	<5	<5.0	<5	<5	<5.0	<5.0	<5.0
Methyl t-Butyl Ether				<0.2	<0.2	<2.0	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Styrene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.5	<0.5	<0.2	<0.2	<2.0				<0.2	<0.2		<0.2		<0.2	<0.2	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Xylenes - total															<0.1	<0.1	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	27-I				
		Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10
Benzene	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane						
Chloroform		<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane						
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane		<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	27-II																
		Sep-87	Nov-87	Dec-87	Dec-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99
1,1,1,2-Tetrachloroethane																		
1,1,1-Trichloroethane		2.8	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethylene	**14 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dibromoethane						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone																<10.0	<10.0	<10.0
Benzene	**5 ****	* <0.5	* <0.5	* <0.5	<0.5	<0.5	<0.5	* <0.4	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5
Chloroform		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0							
Dichloromethane	**50 ****	2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
Hexane																		
m/p-Xylenes	**300 *****	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Methyl ethyl ketone																<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																		
Methyl t-Butyl Ether																		
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Styrene																<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	* <0.5	* <0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5
Xylenes - total																		

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	27-II																	
		Sep-00	Sep-01	Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17
1,1,1,2-Tetrachloroethane				<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.2	<0.2	<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2	<0.2	<0.2	<0.5		<0.2	<0.2		<0.2		<0.2	<0.2	<0.2				<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Acetone		31.5	<15.0	<10.0	<10.0	<15.0	<10	<10.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Bromodichloromethane		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Chloroethane		<0.5	<0.5	<0.2	<0.2	<1.0				<0.2	<0.2								
Chloroform		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Chloromethane		<1.0	<1.0	<0.5	<0.5	<2.0				<0.5	<0.5								
Cis-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Dichlorodifluoromethane													<0.5		<0.5	<0.5	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<1.0	<1.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50
Ethyl benzene	**2.4**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Hexane													<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Methyl ethyl ketone		5.4	<5.0	<5.0	<5.0	<15.0	<5	<5.0	<5	<5	<5	<5	<5	<5.0	<5	<5	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone				<5.0	<5.0	<10.0	<5	<5.0	<5		<5	<5	<5	<5.0	<5	<5	<5.0	<5.0	<5.0
Methyl t-Butyl Ether				<0.2	<0.2	<2.0	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Styrene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	0.23
trans-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.5	<0.5	<0.2	<0.2	<2.0				<0.2	<0.2		<0.2		<0.2	<0.2	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Xylenes - total															<0.1	<0.1	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	27-II				
		Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10
Benzene	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane						
Chloroform		<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane						
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane		<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	27-III																
		Sep-87	Nov-87	Dec-87	Dec-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99
1,1,1,2-Tetrachloroethane																		
1,1,1-Trichloroethane		6.8	9.6	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	* <1.0	* <1.0	<1.0	<1.0	<1.0	* <1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethylene	**14 ****	2.6	2.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dibromoethane						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone																<10.0	<10.0	<10.0
Benzene	**5 ****	* <0.5	* <0.5	* <0.5	* <0.5	<0.5	<0.5	* <0.4	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	0.1	0.4	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5
Chloroform		<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	* <2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0							
Dichloromethane	**50 ****	<1.0	6.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0
Ethyl benzene	**2.4**	<0.5	3.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
Hexane																		
m/p-Xylenes	**300 *****	<0.5	10.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Methyl ethyl ketone																<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																		
Methyl t-Butyl Ether																		
o-Xylene	**300 *****	<0.5	4.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Styrene																<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	* <0.5	5.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	0.3	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	* <1.0	* <1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5
Xylenes - total																		

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	27-III																
		Sep-00	Sep-01	Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17
1,1,1,2-Tetrachloroethane				<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.2	<0.2	0.1	0.1	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2	<0.2	<0.2	<0.5		<0.2	<0.2		<0.2		<0.2	<0.2	<0.5				<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
Acetone		<10.0	<15.0	<10.0	<10.0	<15.0	<10	<10.0	<10	<10	<10	<10	<10	<10	<25	<10	<10	<10	<10
Benzene	**5 ****	0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	0.2	0.2	<0.1	0.2	0.2	<0.1	<0.25	<0.1	<0.10	0.16	<0.10
Bromodichloromethane		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.3	<0.5	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10
Chloroethane		<0.5	<0.5	<0.2	<0.2	<1.0				<0.2	<0.2								
Chloroform		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10
Chloromethane		<1.0	<1.0	<0.5	<0.5	<2.0				<0.5	<0.5								
Cis-1,2-Dichloroethylene		<0.2	<0.2	0.1	0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
Dichlorodifluoromethane													<0.5		<1.3	<0.5	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<1.0	<1.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.3	<0.5	<0.5	<0.5	<0.50
Ethyl benzene	**2.4**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10
Hexane													<0.5	<0.5	<1.3	<0.5	<0.5	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<15.0	<5	<5.0	<5	<5	<5	<5	<5	<5.0	<13	<5	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone				<5.0	<5.0	<10.0	<5	<5.0	<5		<5	<5	<5	<5.0	<13	<5	<5.0	<5.0	<5.0
Methyl t-Butyl Ether				<0.2	<0.2	<2.0	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10
Styrene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.1	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.2	<0.2	0.1	0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.5	<0.5	<0.2	<0.2	<2.0				<0.2	<0.2		<0.2		<0.5	<0.2	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20
Xylenes - total															<0.25	<0.1	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	27-III				
		Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10
Benzene	5 **	0.15	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane						
Chloroform		<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane						
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane		<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	28-I													
		Sep-87	Nov-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99
1,1,1,2-Tetrachloroethane																
1,1,1-Trichloroethane		1.9	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	0.6	<0.5	0.6	0.4	<0.2	0.4	<0.2
1,1-Dichloroethylene	**14 ****	* <1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	0.7	<0.2	<0.2
1,2-Dibromoethane				<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone														<10.0	<10.0	<10.0
Benzene	**5 ****	* <0.5	* <0.5	<0.5	<0.5	0.5	0.5	<0.5	<0.2	<0.2	<0.2	<0.2	0.2	0.3	0.2	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5
Chloroform		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2
Chloromethane		* <2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		* <1.0	2.1	2.8	<1.0	1.7	1.6	<1.0	<1.0				0.7	0.9	0.4	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0							
Dichloromethane	**50 ****	* <1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
Hexane																
m/p-Xylenes	**300 *****	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Methyl ethyl ketone														<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																
Methyl t-Butyl Ether																
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2
Styrene														<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	* <0.5	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5
Xylenes - total																

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	28-I																	
		Sep-00	Sep-01	Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17
1,1,1,2-Tetrachloroethane				<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.5	<0.2	<0.50	<0.50	<0.20
1,1,1-Trichloroethane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.25	<0.1	<0.25	<0.25	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.5	<0.2	<0.50	<0.50	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.5	<0.2	<0.50	<0.50	<0.20
1,1-Dichloroethane		0.4	0.4	0.3	0.2	<0.4	<0.1	0.1	0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.25	<0.1	<0.25	<0.25	<0.10
1,1-Dichloroethylene	**14 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.25	<0.1	<0.25	<0.25	<0.10
1,2-Dibromoethane		<0.2	<0.2	<0.2	<0.2	<0.5		<0.2			<0.2		<0.4	<0.2	<0.5				<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.5	<0.2	<0.50	<0.50	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.4	<0.2	<0.5	<0.2	<0.50	<0.50	<0.20
1,2-Dichloropropane		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.25	<0.1	<0.25	<0.25	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.5	<0.2	<0.50	<0.50	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.5	<0.2	<0.50	<0.50	0.2
Acetone		<10.0	<10.0	<10.0	<10.0	<15.0	<10	<10	<10	<10	<10	<10	<20	<10	<25	<10	<25	<25	<10
Benzene	**5 ****	0.2	0.2	0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.2	<0.1	<0.25	<0.1	<0.25	<0.25	<0.10
Bromodichloromethane		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.25	<0.1	<0.25	<0.25	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.5	<0.2	<0.50	<0.50	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1.3	<0.5	<1.3	<1.3	<0.50
Carbon Tetrachloride	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.25	<0.1	<0.25	<0.25	<0.10
Chlorobenzene	**80 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	0.2	<0.1	<0.1	0.2	<0.2	0.21	<0.25	0.12	0.25	<0.25	0.64
Chloroethane		<0.5	<0.5	<0.2	*0.1	<1.0			0.2	<0.2	<0.2								
Chloroform		<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.25	<0.1	<0.25	<0.25	<0.10
Chloromethane		<1.0	<1.0	<0.5	<0.5	<2.0			<0.5	<0.5	<0.5								
Cis-1,2-Dichloroethylene		0.4	0.5	0.3	0.3	<1.0	<0.1	0.2	0.2	<0.1	<0.1	0.1	<0.2	0.1	<0.25	<0.1	<0.25	<0.25	0.32
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.5	<0.2	<0.5	<0.50	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.5	<0.2	<0.5	<0.50	<0.20
Dichlorodifluoromethane													<1	<0.5	<1.3	<0.5	<1.3	<1.3	<0.50
Dichloromethane	**50 ****	<1.0	<1.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1.3	<0.5	<1.3	<1.3	<0.50
Ethyl benzene	**2.4**	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.25	<0.1	<0.25	<0.25	<0.10
Hexane													<0.5	<0.5	<1.3	<0.5	<1.3	<1.3	<0.50
m/p-Xylenes	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.25	<0.1	<0.25	<0.25	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<15.0	<5	<5.0	<5	<5	<5	<5	<10	<5	<13	<5	<13	<13	<5.0
Methyl Isobutyl Ketone				<5.0	<5.0	<10.0	<5	<5.0			<5	<5	<10	<5	<13	<5	<13	<13	<5.0
Methyl t-Butyl Ether				<0.2	<0.2	<2.0	<0.2	<0.2			<0.2	<0.2	<0.4	<0.2	<0.5	<0.2	<0.5	<0.50	<0.20
o-Xylene	**300 *****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.25	<0.1	<0.25	<0.25	<0.10
Styrene		<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.4	<0.2	<0.5	<0.2	<0.5	<0.50	<0.20
Tetrachloroethylene	**30 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.25	<0.1	<0.25	<0.25	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.5	<0.2	<0.5	<0.50	<0.20
trans-1,2-Dichloroethylene		<0.2	<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.25	<0.1	<0.25	<0.25	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.5	<0.2	<0.5	<0.50	<0.20
Trichloroethylene	**5 ****	<0.2	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.25	<0.1	<0.25	<0.25	<0.10
Trichlorofluoromethane		<0.5	<0.5	<0.2	<0.2	<2.0			<0.2	<0.2	<0.2		<0.4	<0.2	<0.5	<0.2	<0.5	<0.50	<0.20
Vinyl Chloride	**2 ****	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.5	<0.2	<0.5	<0.50	<0.20
Xylenes - total															<0.25	<0.1	<0.25	<0.25	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	28-I				
		Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.50	<1.0	<0.20	<2.0	<0.20
1,1,1-Trichloroethane		<0.25	<0.50	<0.10	<1.0	<0.10
1,1,2,2-Tetrachloroethane		<0.50	<1.0	<0.20	<2.0	<0.20
1,1,2-Trichloroethane		<0.50	<1.0	<0.20	<2.0	<0.20
1,1-Dichloroethane		<0.25	<0.50	<0.10	<1.0	0.10
1,1-Dichloroethylene	14 **	<0.25	<0.50	<0.10	<1.0	<0.10
1,2-Dibromoethane		<0.50	<1.0	<0.20	<2.0	<0.20
1,2-Dichlorobenzene	3	<0.50	<1.0	<0.20	<2.0	<0.20
1,2-Dichloroethane	5 **	<0.50	<1.0	<0.20	<2.0	<0.20
1,2-Dichloropropane		<0.25	<0.50	<0.10	<1.0	<0.10
1,3-Dichlorobenzene		<0.50	<1.0	<0.20	<2.0	<0.20
1,4-Dichlorobenzene	1	<0.50	<1.0	<0.20	<2.0	0.27
Acetone		<25	<50	<10	<100	<10
Benzene	5 **	<0.25	<0.50	<0.10	<1.0	<0.10
Bromodichloromethane		<0.25	<0.50	<0.10	<1.0	<0.10
Bromoform		<0.50	<1.0	<0.20	<2.0	<0.20
Bromomethane		<1.3	<2.5	<0.50	<5.0	<0.50
Carbon Tetrachloride	5 **	<0.25	<0.50	<0.10	<1.0	<0.10
Chlorobenzene	80 **	0.32	1.7	0.27	<1.0	0.27
Chloroethane						
Chloroform		<0.25	<0.50	<0.10	<1.0	<0.10
Chloromethane						
Cis-1,2-Dichloroethylene		<0.25	<0.50	0.3	<1.0	0.48
Cis-1,3-Dichloropropene		<0.50	<1.0	<0.20	<2.0	<0.20
Dibromochloromethane		<0.50	<1.0	<0.20	<2.0	<0.20
Dichlorodifluoromethane		<1.3	<2.5	<0.50	<5.0	<0.50
Dichloromethane	50 **	<1.3	<2.5	<0.50	<5.0	<0.50
Ethyl benzene	2.4	<0.25	<0.50	<0.10	<1.0	<0.10
Hexane		<1.3	<2.5	<0.50	<5.0	<0.50
m/p-Xylenes	300 ***	<0.25	<0.50	<0.10	<1.0	<0.10
Methyl ethyl ketone		<13	<25	<5.0	<50	<5.0
Methyl Isobutyl Ketone		<13	<25	<5.0	<50	<5.0
Methyl t-Butyl Ether		<0.50	<1.0	<0.20	<2.0	<0.20
o-Xylene	300 ***	<0.25	<0.50	<0.10	<1.0	<0.10
Styrene		<0.50	<1.0	<0.20	<2.0	<0.20
Tetrachloroethylene	30 **	<0.25	<0.50	<0.10	<1.0	<0.10
Toluene	24	<0.50	<1.0	<0.20	<2.0	<0.20
trans-1,2-Dichloroethylene		<0.25	<0.50	<0.10	<1.0	<0.10
trans-1,3-Dichloropropene		<0.50	<1.0	<0.20	<2.0	<0.20
Trichloroethylene	5 **	<0.25	<0.50	<0.10	<1.0	<0.10
Trichlorofluoromethane		<0.50	<1.0	<0.20	<2.0	<0.20
Vinyl Chloride	2 **	<0.50	<1.0	<0.20	<2.0	<0.20
Xylenes - total		<0.25	<0.50	<0.10	<1.0	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	29-I											
		Sep-87	Nov-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-94	Sep-97	Sep-05	Sep-06	Sep-07
1,1,1,2-Tetrachloroethane												<0.1	<0.1	<0.1
1,1,1-Trichloroethane		2.7	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.2	<0.1	<0.1	<0.1
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.2	<0.1	<0.1	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<0.6	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.2	<0.1	<0.1	<0.1
1,1-Dichloroethylene	14 **	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.2	<0.1	<0.1	<0.1
1,2-Dibromoethane				<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<0.2		<0.2	
1,2-Dichlorobenzene	3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.2	<0.1	<0.2	<0.2
1,2-Dichloroethane	5 **	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.2	<0.1	<0.1	<0.1
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.2	<0.1	<0.1	<0.1
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.2	0.1	<0.2	<0.2
1,4-Dichlorobenzene	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	0.1	<0.2	<0.2
Acetone											<10.0	<10	<10	<10
Benzene	5 **	* <0.5	* <0.5	<0.5	<0.5	* <0.4	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.2	<0.1	<0.1	<0.1
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	5 **	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.2	<0.1	<0.1	<0.1
Chlorobenzene	80 **	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.2	<0.1	<0.1	<0.1
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<0.5			<0.2
Chloroform		<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.2	<0.1	<0.1	<0.1
Chloromethane		* <2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<1.0			<0.5
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<0.2	<0.1	<0.1	<0.1
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0					
Dichloromethane	50 **	* <1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5
Ethyl benzene	2.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.2	<0.1	<0.1	<0.1
Hexane														
m/p-Xylenes	300 ***	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.1	<0.1	<0.1
Methyl ethyl ketone											<5.0	<5	<5.0	<5
Methyl Isobutyl Ketone												<5	<5.0	
Methyl t-Butyl Ether												<0.2	<0.2	
o-Xylene	300 ***	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.1	<0.1	<0.1
Styrene											<0.2	<0.1	<0.1	<0.1
Tetrachloroethylene	30 **	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1
Toluene	24	* <0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.2	<0.1	<0.1	<0.1
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	5 **	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.2	<0.1	<0.1	<0.1
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.5			<0.2
Vinyl Chloride	2 **	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<0.5	<0.2	<0.2	<0.2
Xylenes - total														

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	29-I														
		Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.1	<0.1	<0.1	<0.1	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane			<0.2		<0.2	<0.2	<0.5				<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10	<25	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.5	<0.5	<1.3	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane		<0.2	<0.2													
Chloroform		<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane		<0.5	<0.5													
Cis-1,2-Dichloroethylene		<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane					<0.5	<0.5	<1.3	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<1.3	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	**2.4**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane					<0.5	<0.5	<1.3	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5	<5	<5	<5	<5	<13	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone			<5	<5	<5	<5	<13	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether			<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.2	<0.2		<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total							<0.25	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	30-I															
		Sep-87	Nov-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-97	Sep-98	Sep-99	Sep-00	Sep-01
1,1,1,2-Tetrachloroethane																	
1,1,1-Trichloroethane		1.4	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethylene	**14 ****	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dibromoethane				<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone													<10.0	<10.0	<10.0	<10.0	<10.0
Benzene	**5 ****	* <0.5	* <0.5	<0.5	<0.5	0.7	0.6	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2	<0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0								
Dichloromethane	**50 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0	<1.5
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2
Hexane																	
m/p-Xylenes	**300 *****	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2
Methyl ethyl ketone													<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																	
Methyl t-Butyl Ether																	
o-Xylene	**300 *****	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2
Styrene													<0.2	<0.2	<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	**24**	* <0.5	* <0.5	<0.5	<0.5	* <0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.8	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	1.1	1.7	0.6	1.3	1.2
Xylenes - total																	

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	30-I															
		Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-17	Sep-18
1,1,1,2-Tetrachloroethane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<0.1	0.3	0.7	0.2	0.13	0.17	0.17	0.88	0.4	0.19
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2	<0.5		<0.2			<0.2		<0.2	<0.2	<0.2			<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Acetone		<10.0	43.7	<15.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	0.1	0.2	<0.1	<0.1	<0.1	<0.1	0.26	0.21	<0.10
Bromodichloromethane		<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Chloroethane		<0.2	<0.2	<1.0			<0.2	<0.2	0.2								
Chloroform		<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Chloromethane		<0.5	<0.5	<2.0			<0.5	<0.5	<0.5								
Cis-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	0.1	0.9	2.8	0.9	0.66	0.91	1	5.6	3.9	1.6
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Dichlorodifluoromethane											<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50
Ethyl benzene	**2.4**	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Hexane											<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Methyl ethyl ketone		<5.0	19.7	<15.0	<5	<5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<10.0	<5	<5.0			<5	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.2	<0.2	<2.0	<0.2	<0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Styrene		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	0.2	0.3	0.2	0.12	0.18	0.18	0.75	0.58	0.15
trans-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.1	<0.1	<0.5	<0.1	0.1	0.1	<0.1	0.3	0.2	0.3	0.17	0.22	0.19	0.24	0.89	0.48
Trichlorofluoromethane		<0.2	<0.2	<2.0			<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	2.1	0.7	<0.2	2.3	2.0	1.7	1.9	6.7	8.7	3.8	1.8	2.0	1.9	7.9	3.8	1.3
Xylenes - total													<0.1	<0.1	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	30-I			
		Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		0.15	0.21	0.83	0.30
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10
Benzene	5 **	0.1	0.11	0.32	0.20
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10
Chloroethane					
Chloroform		<0.10	<0.10	<0.10	<0.10
Chloromethane					
Cis-1,2-Dichloroethylene		1.7	2.5	9.7	5.7
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10
Hexane		<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		0.22	0.31	1.1	0.63
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	0.26	0.25	0.6	1.0
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	1.3	1.9	6.7	2.9
Xylenes - total		<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	31-I														
		Aug-92	Aug-93	Aug-94	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-19	Sep-21
1,1,1,2-Tetrachloroethane					<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.6	<0.6	<0.6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.4	<0.4	<0.4	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<1.1	<1.1	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.4	<0.4	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<1.0			<0.2			<0.2		<0.2	<0.2	<0.5				<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.4	<0.4	<0.4	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
Acetone					<10.0	<10	<10	<10	<10	<10	<10	<25	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.2	<0.2	<0.2	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.4	<0.4	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
Bromomethane		<2.4	<2.4	<2.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.3	<0.5	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.3	<0.3	<0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.6	<0.6	<0.6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10
Chloroethane		<2.3	<2.3	<2.3		<0.2	<0.2	<0.2									
Chloroform		<0.4	<0.4	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10
Chloromethane		<2.3	<2.3	<2.3		<0.5	<0.5	<0.5									
Cis-1,2-Dichloroethylene		<1.0			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<1.0	<1.0	<0.7	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<1.0	<1.0	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<2.0								<0.5	<0.5	<1.3	<0.5	<0.50	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.3	<0.5	<0.5	<0.5	<0.50	<0.50
Ethyl benzene	**2.4**	<0.4	<0.4	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10
Hexane										<0.5	<0.5	<1.3	<0.5	<0.5	<0.50	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.5			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10
Methyl ethyl ketone					<5.0	<5	<5	<5	<5	<5	<5	<13	<5	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone					<5.0			<5	<5	<5	<5	<13	<5	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether					<0.2			<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.5			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10
Styrene					<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.1	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.4	<0.4	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<1.0	<1.0	<1.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.3	<0.3	<0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.3	<0.3	<0.3		<0.2	<0.2	<0.2		<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<2.9	<2.9	<2.9	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
Xylenes - total												<0.25	<0.1	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	32-I																
		Sep-87	Nov-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99	Sep-00	Sep-01	Sep-02
1,1,1,2-Tetrachloroethane																			<0.1
1,1,1-Trichloroethane		1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		1.0	<1.0	<1.0	<1.0	0.8	* <0.9	1.1	<0.5	1.4	<0.5	1.1	1.2	1.4	0.9	1.4	1.6	1.3	1.2
1,1-Dichloroethylene	**14 ****	<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	* 0.1	<0.2	<0.2	0.1
1,2-Dibromoethane				<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	0.2	<0.2	0.2	0.2	<0.2	0.1
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Acetone														<10.0	<10.0	<10.0	<10.0	<15.0	<10.0
Benzene	**5 ****	* <0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	0.3
Chloroform		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
Cis-1,2-Dichloroethylene		* <1.0	* <1.0	<1.0	<1.0	* <1.0	<1.0	<1.0	<1.0				0.7	0.8	0.6	1.0	1.1	0.9	0.9
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0										
Dichloromethane	**50 ****	* <1.0	<1.0	<1.0	<1.0	0.9	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.5	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Hexane																			
m/p-Xylenes	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Methyl ethyl ketone														<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																			<5.0
Methyl t-Butyl Ether																			<0.2
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Styrene														<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.9	<0.1
Toluene	**24**	* <0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	* <1.0	* <1.0	<1.0	<1.0	* <0.6	* <0.7	<1.0	<0.3	0.8	<0.3	<0.3	1.1	1.0	0.5	1.0	1	<0.2	0.8
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2
Xylenes - total																			

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	32-I															
		Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18
1,1,1,2-Tetrachloroethane		<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		1.1	0.8	0.9	0.8	0.7	0.8	0.5	0.4	0.2	0.3	0.4	0.27	0.32	0.26	0.23	0.31
1,1-Dichloroethylene	**14 ****	0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.5		<0.2			<0.2		<0.2	<0.2	<0.2				<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Acetone		<10.0	<15.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chloroethane		0.2	<1.0			<0.2	<0.2										
Chloroform		<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chloromethane		<0.5	<2.0			<0.5	<0.5										
Cis-1,2-Dichloroethylene		0.8	<1.0	0.6	0.5	0.4	0.5	0.2	0.2	0.2	0.2	0.2	0.17	0.2	0.16	0.14	0.16
Cis-1,3-Dichloropropene		<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane										<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.50	<0.50
Ethyl benzene	**2.4**	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Hexane										<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<15.0	<5	<5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<10.0	<5	<5.0			<5	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.2	<2.0	<0.2	<0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Styrene		<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	0.47	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	0.7	0.6	0.5	0.5	0.4	0.5	0.3	0.3	0.2	0.3	0.3	0.21	0.22	0.15	0.17	0.19
Trichlorofluoromethane		<0.2	<2.0			<0.2	<0.2			<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Xylenes - total												<0.1	<0.1	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	32-I			
		Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		0.24	0.25	0.21	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10
Benzene	5 **	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10
Chloroethane					
Chloroform		<0.10	<0.10	<0.10	<0.10
Chloromethane					
Cis-1,2-Dichloroethylene		0.14	0.12	0.13	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10
Hexane		<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	0.19	0.12	0.14	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	32-II																
		Sep-87	Nov-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99	Sep-00	Sep-01	Sep-02
1,1,1,2-Tetrachloroethane																			<0.1
1,1,1-Trichloroethane		1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		1.0	1.4	<1.0	<1.0	0.7	1.1	1.4	<0.5	1.9	<0.5	1.3	1.5	1.5	0.9	1.3	1.4	1.3	1.1
1,1-Dichloroethylene	**14 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.1
1,2-Dibromoethane				<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,2-Dichloroethane	**5 ****	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	0.2	<0.2	* 0.1	<0.2	<0.2	0.1
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Acetone														<10.0	<10.0	<10.0	<10.0	<15.0	<10.0
Benzene	**5 ****	* <0.5	* <0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	0.3
Chloroform		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
Cis-1,2-Dichloroethylene		* <1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				0.7	0.9	0.6	1.0	1	0.9	0.9
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	2.7	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0										
Dichloromethane	**50 ****	3.0	* <1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.5	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Hexane																			
m/p-Xylenes	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Methyl ethyl ketone														<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																			<5.0
Methyl t-Butyl Ether																			<0.2
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Styrene														<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.9	<0.1
Toluene	**24**	* <0.5	* <0.5	<0.5	<0.5	* <0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	* <1.0	1.0	<1.0	* <1.0	* <0.6	* <0.8	1.1	<0.3	1.3	<0.3	0.8	0.8	1.1	0.5	1.0	1	<0.2	0.8
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2
Xylenes - total																			

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	32-II															
		Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18
1,1,1,2-Tetrachloroethane		<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		1.1	1.0	0.9	0.8	0.6	0.7	0.6	0.4	0.5	0.3	0.4	0.39	0.35	0.38	0.36	0.3
1,1-Dichloroethylene	**14 ****	0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.5		<0.2			<0.2		<0.2	<0.2	<0.2				<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	0.2	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Acetone		<10.0	<15.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chloroethane		0.3	<1.0			<0.2	<0.2										
Chloroform		<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chloromethane		<0.5	<2.0			<0.5	<0.5										
Cis-1,2-Dichloroethylene		0.8	<1.0	0.6	0.5	0.3	0.4	0.3	0.3	0.3	0.2	0.3	0.21	0.22	0.21	0.21	0.17
Cis-1,3-Dichloropropene		<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane										<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	16	<0.5	<0.5	<0.50	<0.50
Ethyl benzene	**2.4**	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Hexane										<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<15.0	<5	<5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<10.0	<5	<5.0			<5	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.2	<2.0	<0.2	<0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Styrene		<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	0.6	0.6	0.5	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.25	0.23	0.21	0.22	0.2
Trichlorofluoromethane		<0.2	<2.0			<0.2	<0.2			<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Xylenes - total												<0.1	<0.1	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	32-II			
		Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		0.32	0.27	0.26	0.22
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10
Benzene	5 **	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10
Chloroethane					
Chloroform		<0.10	<0.10	<0.10	<0.10
Chloromethane					
Cis-1,2-Dichloroethylene		0.19	0.14	0.16	0.15
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10
Hexane		<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	0.21	0.13	0.17	0.16
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	32-III																
		Sep-87	Nov-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Sep-96	Sep-97	Sep-98	Sep-99	Sep-00	Sep-01	Sep-02
1,1,1,2-Tetrachloroethane																			<0.1
1,1,1-Trichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<1.0	<1.0	<1.0	<1.0	1.0	1.3	1.5	1.7	0.7	<0.5	0.8	0.6	0.5	0.3	0.4	0.3	0.3	0.2
1,1-Dichloroethylene	**14 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,2-Dibromoethane				<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,2-Dichloroethane	**5 ****	<1.0	<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
1,4-Dichlorobenzene	**1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Acetone														<10.0	<10.0	<10.0	<10.0	<15.0	<10.0
Benzene	**5 ****	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Chloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Chloroform		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3	<2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	* <1.0	<1.0	<1.0	<1.0				0.3	0.2	<0.2	0.2	<0.2	0.2	0.1
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0										
Dichloromethane	**50 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.5	<1.0
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Hexane																			
m/p-Xylenes	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Methyl ethyl ketone														<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone																			<5.0
Methyl t-Butyl Ether																			<0.2
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Styrene														<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
Toluene	**24**	<0.5	<0.5	<0.5	<0.5	* <0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<1.0	<1.0	<1.0	* <1.0	* <0.7	* <0.8	0.8	1.3	0.5	<0.3	<0.3	0.3	<0.2	<0.2	* 0.1	0.2	<0.2	0.1
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2
Xylenes - total																			

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	32-III															
		Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18
1,1,1,2-Tetrachloroethane		<0.2	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.2	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.4	<1.0	<0.1	<0.1	<0.2	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.4	<0.5	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		*0.1	<0.4	0.2	0.1	<0.1	0.2	<0.5	0.3	0.4	0.34	<0.1	<0.1	<0.10	0.23	0.17	0.19
1,1-Dichloroethylene	**14 ****	<0.2	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.4	<0.5		<0.2			<1		<0.2	<0.2	<0.2				<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.5	<0.1	<0.2	<0.2	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.5	<0.1	<0.1	<0.1	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.2	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.5	<0.1	<0.2	<0.2	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.5	<0.1	<0.2	<0.2	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Acetone		<20.0	<15.0	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.2	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Bromomethane		<1.0	<3.0	<0.5	<0.5	<0.5	<0.5	<3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.2	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.2	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chloroethane		<0.4	<1.0			<0.2	<0.2										
Chloroform		<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Chloromethane		<1.0	<2.0			<0.5	<0.5										
Cis-1,2-Dichloroethylene		<0.2	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5	0.2	0.3	0.26	<0.1	<0.1	<0.10	0.15	0.11	0.11
Cis-1,3-Dichloropropene		<0.4	<0.14	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane										<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<3	<0.5	<0.5	<0.5	<0.5	15	<0.5	<0.5	<0.50	<0.50
Ethyl benzene	**2.4**	<0.2	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Hexane										<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.2	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Methyl ethyl ketone		<10.0	<15.0	<5	<5.0	<5	<5	<30	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<10.0	<10.0	<5	<5.0			<30	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.4	<2.0	<0.2	<0.2			<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.2	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Styrene		<0.2	<0.5	<0.1	<0.1	<0.1	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.2	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	<0.4	<0.5	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	0.32	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.2	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.4	<0.14	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.2	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	0.2	0.2	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.4	<2.0			<0.2	<0.2			<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20
Xylenes - total												<0.1	<0.1	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	32-III			
		Sep-19	Sep-20	Sep-21	Dec-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.10	0.19	0.10	0.34
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10
Benzene	5 **	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10
Chloroethane					
Chloroform		<0.10	<0.10	<0.10	<0.10
Chloromethane					
Cis-1,2-Dichloroethylene		<0.10	0.12	<0.10	0.18
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10
Hexane		<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	0.16
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	33-I																	
		Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-05	Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17
1,1,1,2-Tetrachloroethane										<0.1	<0.1	<0.1	<0.1	<0.1	<5	<1	<1	<2.0	<2.0	<0.20
1,1,1-Trichloroethane		<1.0	<1.0	<1.0	<1.0	0.8	<0.6	<0.6	<0.6	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.5	<0.5	<1.0	<1.0	<0.10
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.1	<0.2	<0.2	<0.2	<0.2	<5	<1	<1	<2.0	<2.0	<0.20
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<5	<1	<1	<2.0	<2.0	<0.20
1,1-Dichloroethane		9.4	11.5	<1.0	4.2	5.3	6.1	4.6	4.7	1.1	0.7	0.6	0.5	0.6	<2.5	<0.5	<0.5	<1.0	<1.0	0.22
1,1-Dichloroethylene	**14 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.5	<0.5	<1.0	<1.0	<0.10
1,2-Dibromoethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0					<0.2		<0.2	<5	<1				<0.20
1,2-Dichlorobenzene	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.1	<0.2	0.3	0.4	0.5	<5	<1	<1	<2.0	<2.0	0.31
1,2-Dichloroethane	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.1	<0.2	<0.2	<0.2	<0.2	<5	<1	<1	<2.0	<2.0	<0.20
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.5	<0.5	<1.0	<1.0	<0.10
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	* <1.0	<1.0	<0.3	<0.3	<0.3	<0.1	<0.2	<0.2	<0.2	<0.2	<5	<1	<1	<2.0	<2.0	<0.20
1,4-Dichlorobenzene	**1**	<1.0	* <1.0	<1.0	<1.0	<1.0	1.0	0.9	1.8	0.2	<0.2	1.7	2.0	2.1	<5	1.8	2.0	<2.0	2.1	1.1
Acetone										<10	<10	<10	<10	<10	<250	<50	<50	<100	<100	<10
Benzene	**5 ****	<0.5	* <0.5	* <0.5	<0.5	<0.5	1.7	<0.2	<0.2	<0.1	<0.1	1.5	1.6	2.0	<2.5	1.8	1.8	2	1.9	0.98
Bromodichloromethane		<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.5	<0.5	<1.0	<1.0	<0.10
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<5	<1	<1	<2.0	<2.0	<0.20
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<0.5	<0.5	<0.5	<0.5	<0.5	<13	<2.5	<2.5	<5.0	<5.0	<0.50
Carbon Tetrachloride	**5 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.5	<0.5	<1.0	<1.0	<0.10
Chlorobenzene	**80 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	1.5	0.2	<0.1	3.7	4.6	5.4	5.3	4.9	5.3	5.7	6.2	3.4
Chloroethane		<2.0	<2.0	<2.0	3.1	8.2	13.0	9.1	<2.3		0.6	6.6								
Chloroform		<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.5	<0.5	<1.0	<1.0	<0.10
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<2.3		<0.5	<0.5								
Cis-1,2-Dichloroethylene		<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0			0.1	0.1	0.2	0.2	0.2	<2.5	<0.5	<0.5	<1.0	<1.0	0.1
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7	<0.2	<0.2	<0.2	<0.2	<0.2	<5	<1	<1	<2.0	<2.0	<0.20
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<5	<1	<1	<2.0	<2.0	<0.20
Dichlorodifluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0							<0.5	<13	<2.5	<2.5	<5.0	<5.0	<0.50
Dichloromethane	**50 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<13	<2.5	17		<5.0	<0.50
Ethyl benzene	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.5	<0.5	<1.0	<1.0	<0.10
Hexane														<0.5	<0.5	<2.5	<2.5	<5.0	<5.0	<0.50
m/p-Xylenes	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.5	<0.5	<1.0	<1.0	<0.10
Methyl ethyl ketone										<5	<5	<5	<5	<5	<130	<25	<25	<50	<50	<5.0
Methyl Isobutyl Ketone										<5		<5	<5	<5	<130	<25	<25	<50	<50	<5.0
Methyl t-Butyl Ether										<0.2		<0.2	<0.2	<0.2	<5	<1	<1	<2.0	<2.0	<0.20
o-Xylene	**300 *****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.5	<0.5	<1.0	<1.0	<0.10
Styrene										<0.1	<0.2	<0.2	<0.2	<0.2	<5	<1	<1	<2.0	<2.0	<0.20
Tetrachloroethylene	**30 ****	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.5	<0.5	<1.0	<1.0	<0.10
Toluene	**24**	<0.5	<0.5	* <0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<5	<1	<1	<2.0	<2.0	<0.20
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.5	<0.5	<1.0	<1.0	<0.10
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<0.2	<0.2	<0.2	<0.2	<0.2	<5	<1	<1	<2.0	<2.0	<0.20
Trichloroethylene	**5 ****	<1.0	* <1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.5	<0.5	<1.0	<1.0	<0.10
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.2	<0.2		<0.2	<5	<1	<1	<2.0	<2.0	<0.20
Vinyl Chloride	**2 ****	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<0.2	<0.2	<0.2	<0.2	<0.2	<5	<1	<1	<2.0	<2.0	<0.20
Xylenes - total																<0.5	<0.5	<1.0	<1.0	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	33-I				
		Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<1.0	<2.0	<1.0	<0.50	<0.50
1,1,1-Trichloroethane		<0.50	<1.0	<0.50	<0.25	<0.25
1,1,2,2-Tetrachloroethane		<1.0	<2.0	<1.0	<0.50	<0.50
1,1,2-Trichloroethane		<1.0	<2.0	<1.0	<0.50	<0.50
1,1-Dichloroethane		<0.50	<1.0	<0.50	0.44	<0.25
1,1-Dichloroethylene	14 **	<0.50	<1.0	<0.50	<0.25	<0.25
1,2-Dibromoethane		<1.0	<2.0	<1.0	<0.50	<0.50
1,2-Dichlorobenzene	3	<1.0	<2.0	<1.0	<0.50	<0.50
1,2-Dichloroethane	5 **	<1.0	<2.0	<1.0	<0.50	<0.50
1,2-Dichloropropane		<0.50	<1.0	<0.50	<0.25	<0.25
1,3-Dichlorobenzene		<1.0	<2.0	<1.0	<0.50	<0.50
1,4-Dichlorobenzene	1	2	<2.0	<1.0	2.3	<0.50
Acetone		<50	<100	<50	<25	<25
Benzene	5 **	1.4	1.8	0.74	2.1	<0.25
Bromodichloromethane		<0.50	<1.0	<0.50	<0.25	<0.25
Bromoform		<1.0	<2.0	<1.0	<0.50	<0.50
Bromomethane		<2.5	<5.0	<2.5	<1.3	<1.3
Carbon Tetrachloride	5 **	<0.50	<1.0	<0.50	<0.25	<0.25
Chlorobenzene	80 **	5.4	5.3	2.6	7.4	<0.25
Chloroethane						
Chloroform		<0.50	<1.0	<0.50	<0.25	<0.25
Chloromethane						
Cis-1,2-Dichloroethylene		<0.50	<1.0	<0.50	<0.25	<0.25
Cis-1,3-Dichloropropene		<1.0	<2.0	<1.0	<0.50	<0.50
Dibromochloromethane		<1.0	<2.0	<1.0	<0.50	<0.50
Dichlorodifluoromethane		<2.5	<5.0	<2.5	<1.3	<1.3
Dichloromethane	50 **	<2.5	<5.0	<2.5	<1.3	<1.3
Ethyl benzene	2.4	<0.50	<1.0	<0.50	<0.25	<0.25
Hexane		<2.5	<5.0	<2.5	<1.3	<1.3
m/p-Xylenes	300 ***	<0.50	<1.0	<0.50	<0.25	<0.25
Methyl ethyl ketone		<25	<50	<25	<13	<13
Methyl Isobutyl Ketone		<25	<50	<25	<13	<13
Methyl t-Butyl Ether		<1.0	<2.0	<1.0	<0.50	<0.50
o-Xylene	300 ***	<0.50	<1.0	<0.50	<0.25	<0.25
Styrene		<1.0	<2.0	<1.0	<0.50	<0.50
Tetrachloroethylene	30 **	<0.50	<1.0	<0.50	<0.25	<0.25
Toluene	24	<1.0	<2.0	<1.0	<0.50	<0.50
trans-1,2-Dichloroethylene		<0.50	<1.0	<0.50	<0.25	<0.25
trans-1,3-Dichloropropene		<1.0	<2.0	<1.0	<0.50	<0.50
Trichloroethylene	5 **	<0.50	<1.0	<0.50	<0.25	<0.25
Trichlorofluoromethane		<1.0	<2.0	<1.0	<0.50	<0.50
Vinyl Chloride	2 **	<1.0	<2.0	<1.0	<0.50	<0.50
Xylenes - total		<0.50	<1.0	<0.50	<0.25	<0.25

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	34-I												
		Sep-87	Nov-87	Jul-88	Nov-88	Oct-89	Oct-90	Sep-91	Aug-92	Aug-93	Aug-94	Sep-95	Oct-96	Sep-99	Sep-00
1,1,1,2-Tetrachloroethane															
1,1,1-Trichloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.7	<0.6	<0.6	<0.6	<0.6	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.1	<1.1	<0.6		<0.2	<0.2	<0.2
1,1-Dichloroethane		* <1.0	1.7	1.5	1.7	1.4	5.4	4.1	4.5	3.1	<0.5	1.6	1.7	0.4	1.2
1,1-Dichloroethylene	14 **	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2
1,2-Dibromoethane				<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<0.2	<0.2	<0.2
1,2-Dichlorobenzene	3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2
1,2-Dichloroethane	5 **	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2
1,2-Dichloropropane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2
1,3-Dichlorobenzene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	0.3	<0.2	<0.2
Acetone														<10.0	<10.0
Benzene	5 **	* <0.5	* <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1
Bromodichloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2
Bromoform		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.2	<0.2
Bromomethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.4	<2.4	<2.4	<2.4	<1.0	<0.5	<0.5
Carbon Tetrachloride	5 **	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2
Chlorobenzene	80 **	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	<0.6	<0.6	<0.6	0.2	<0.2	<0.2
Chloroethane		* <2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.9	<2.3	<2.3	<2.3	1.3	<0.5	0.9
Chloroform		* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4		<0.2	<0.2	<0.2
Chloromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.3	<2.3	<3.8	<2.3	<1.0	<1.0	<1.0
Cis-1,2-Dichloroethylene		<1.0	<1.0	<1.0	* <1.0	<1.0	<1.0	<1.0	<1.0				0.2	<0.2	0.2
Cis-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7		<0.2	<0.2	<0.2
Dibromochloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4		<0.2	<0.2	<0.2
Dichlorodifluoromethane		<2.0	2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0						
Dichloromethane	50 **	* <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<1.0	<1.0	<1.0
Ethyl benzene	2.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2
Hexane															
m/p-Xylenes	300 ***	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2
Methyl ethyl ketone														<5.0	<5.0
Methyl Isobutyl Ketone															
Methyl t-Butyl Ether															
o-Xylene	300 ***	<0.5	<0.5	<0.5	<0.5	* <0.44	<0.5	<0.5	<0.5				<0.2	<0.2	<0.2
Styrene														<0.2	<0.2
Tetrachloroethylene	30 **	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	24	* <0.5	* <0.5	<0.5	<0.5	* <0.4	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	0.4	0.5	<0.2
trans-1,2-Dichloroethylene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.1	<0.2	<0.2	<0.2
Trichloroethylene	5 **	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2
Trichlorofluoromethane		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.3	<0.3	<0.3		<0.5	<0.5	<0.5
Vinyl Chloride	2 **	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.9	<2.9	<2.9	<2.9	<0.5	<0.5	<0.5
Xylenes - total															

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	34-I															
		Sep-01	Sep-02	Sep-03	Sep-04	Sep-06	Sep-07	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18
1,1,1,2-Tetrachloroethane			<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<1.0	<0.1	<0.2	<0.2	<0.2	<0.2	<1.0	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.2	0.6	1.0	1.6	1.1	0.7	0.5	0.5	0.7	<0.5	0.3	0.18	<0.10	0.3	0.27	0.23
1,1-Dichloroethylene	**14 ****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2		<0.2	<1.0	<0.5				<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.2	<0.2	<0.2	<1.0	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	0.1	0.1	<0.5	<0.2	<0.2	<0.2	0.3	0.5	<1.0	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
Acetone		<10.0	<10.0	<10.0	<15.0	<10.0	<10	<10	<10	<10	<50	<25	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<1.3	<0.5	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.2	0.2	0.2	<0.5	0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10
Chloroethane		<0.5	0.3	0.7	<1.0												
Chloroform		<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10
Chloromethane		<1.0	<0.5	<0.5	<2.0												
Cis-1,2-Dichloroethylene		<0.2	0.1	0.2	<1.0	0.2	<0.1	<0.1	<0.1	0.1	<0.5	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane										<0.5		<1.3	<0.5	<0.50	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<1.3	<0.5	<0.5	<0.5	<0.50	<0.50
Ethyl benzene	**2.4**	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10
Hexane										<0.5	<0.5	<1.3	<0.5	<0.5	<0.50	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	0.8	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<15.0	<5.0	<5	<5	<5	<5	<25	<13	<5	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone			<5.0	<5.0	<10.0	<5.0	<5	<5	<5	<5	<25	<13	<5	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether			<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.25	<0.1	<0.1	<0.10	<0.10	<0.10
Styrene		<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.2	<0.2	<0.2	<1.0	<0.5	<0.2	<0.1	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	0.3	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.25	<0.1	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.5	<0.2	<0.2	<2.0					<0.2		<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<0.5	<0.2	<0.20	<0.20	<0.20	<0.20
Xylenes - total												<0.25	<0.1	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	34-I			
		Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.10	<0.10	0.12	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10
Benzene	5 **	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10
Chloroethane					
Chloroform		<0.10	<0.10	<0.10	<0.10
Chloromethane					
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10
Hexane		<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	35-I				
		Sep-01	Sep-02	Sep-03	Sep-04	Sep-05
1,1,1,2-Tetrachloroethane			<0.1	<1.0	<0.5	<0.5
1,1,1-Trichloroethane		<0.2	<0.1	<1.0	<0.5	<0.5
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<2.0	<1.0	<0.5
1,1,2-Trichloroethane		<0.2	<0.2	<2.0	<0.5	<1
1,1-Dichloroethane		<0.2	<0.1	<1.0	<0.4	<0.5
1,1-Dichloroethylene	14 **	<0.2	<0.1	<1.0	<0.5	<0.5
1,2-Dibromoethane		<0.2	<0.2	<2.0	<0.5	
1,2-Dichlorobenzene	3	<0.2	<0.1	<1.0	<0.5	<0.5
1,2-Dichloroethane	5 **	<0.2	<0.1	<1.0	<0.5	<0.5
1,2-Dichloropropane		<0.2	<0.1	<1.0	<0.5	<0.5
1,3-Dichlorobenzene		<0.2	<0.1	<1.0	<0.5	<0.5
1,4-Dichlorobenzene	1	<0.2	<0.1	<1.0	<0.5	<0.5
Acetone		<10.0	31.7	<100.0	<15.0	<50
Benzene	5 **	<0.1	0.5	<1.0	<0.5	<0.5
Bromodichloromethane		<0.2	<0.1	<1.0	<0.2	<0.5
Bromoform		<0.2	<0.2	<2.0	<0.2	<1
Bromomethane		<0.5	<0.5	<5.0	<3.0	<3
Carbon Tetrachloride	5 **	<0.2	<0.1	<1.0	<0.5	<0.5
Chlorobenzene	80 **	<0.2	<0.1	<1.0	<0.5	<0.5
Chloroethane		<0.5	0.2	<2.0	<1.0	
Chloroform		<0.2	0.7	<1.0	<0.2	<0.5
Chloromethane		<1.0	0.6	<5.0	<2.0	
Cis-1,2-Dichloroethylene		<0.2	<0.1	<1.0	<1.0	<0.5
Cis-1,3-Dichloropropene		<0.2	<0.2	<2.0	<0.14	<1
Dibromochloromethane		<0.2	<0.2	<2.0	<0.2	<1
Dichlorodifluoromethane						
Dichloromethane	50 **	<1.5	<1.0	<5.0	<1.0	<3
Ethyl benzene	2.4	<0.2	<0.1	<1.0	<0.5	<0.5
Hexane						
m/p-Xylenes	300 ***	<0.2	0.2	<1.0	<0.5	<0.5
Methyl ethyl ketone		<5.0	6.3	<50.0	<15.0	<30
Methyl Isobutyl Ketone			<5.0	<50.0	<10.0	<30
Methyl t-Butyl Ether			0.2	<2.0	<2.0	<1
o-Xylene	300 ***	<0.2	0.3	<1.0	<0.5	<0.5
Styrene		<0.2	<0.1	<1.0	<0.5	<0.5
Tetrachloroethylene	30 **	<0.2	<0.1	<1.0	<0.5	<0.5
Toluene	24	<0.2	0.8	62.8	<0.5	4
trans-1,2-Dichloroethylene		<0.2	<0.1	<1.0	<1.0	<0.5
trans-1,3-Dichloropropene		<0.2	<0.2	<2.0	<0.14	<1
Trichloroethylene	5 **	<0.2	<0.1	<1.0	<0.5	<0.5
Trichlorofluoromethane		<0.5	<0.2	<2.0	<2.0	
Vinyl Chloride	2 **	<0.2	0.2	<2.0	<0.2	<1
Xylenes - total						

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	35-IR													
		Oct-10	May-11	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.5	<0.1	<0.3	<0.2	<1	<1	<0.20	<0.20	<0.20	<2.0	<1.0	<0.20	<0.50	<0.50
1,1,1-Trichloroethane		<0.5	<0.1	<0.3	<0.1	<0.5	<0.5	<0.10	<0.10	<0.10	<1.0	<0.50	<0.10	<0.25	<0.25
1,1,2,2-Tetrachloroethane		<1	<0.2	<0.5	<0.2	<1	<1	<0.20	<0.20	<0.20	<2.0	<1.0	<0.20	<0.50	<0.50
1,1,2-Trichloroethane		<1	<0.2	<0.5	<0.2	<1	<1	<0.20	<0.20	<0.20	<2.0	<1.0	<0.20	<0.50	<0.50
1,1-Dichloroethane		<0.5	<0.1	<0.3	<0.1	<0.5	<0.5	<0.10	<0.10	<0.10	<1.0	<0.50	<0.10	<0.25	<0.25
1,1-Dichloroethylene	**14 ****	<0.5	<0.1	<0.3	<0.1	<0.5	<0.5	<0.10	<0.10	<0.10	<1.0	<0.50	<0.10	<0.25	<0.25
1,2-Dibromoethane			<0.2	<0.5	<0.2	<1				<0.20	<2.0	<1.0	<0.20	<0.50	<0.50
1,2-Dichlorobenzene	**3**	<1	<0.2	<0.5	<0.2	<1	<1	<0.20	<0.20	<0.20	<2.0	<1.0	<0.20	<0.50	<0.50
1,2-Dichloroethane	**5 ****	<1	<0.2	<0.5	<0.2	<1	<1	<0.20	<0.20	<0.20	<2.0	<1.0	<0.20	<0.50	<0.50
1,2-Dichloropropane		<0.5	<0.1	<0.3	<0.1	<0.5	<0.5	<0.10	<0.10	<0.10	<1.0	<0.50	<0.10	<0.25	<0.25
1,3-Dichlorobenzene		<1	<0.2	<0.5	<0.2	<1	<1	<0.20	<0.20	<0.20	<2.0	<1.0	<0.20	<0.50	<0.50
1,4-Dichlorobenzene	**1**	<1	<0.2	<0.5	<0.2	<1	<1	<0.20	<0.20	<0.20	<2.0	<1.0	<0.20	<0.50	<0.50
Acetone		<50	<10	<30	<10	<50	<50	<10	<10	<10	<100	<50	<10	<25	<25
Benzene	**5 ****	<0.5	<0.1	<0.3	<0.1	<0.5	<0.5	<0.10	<0.10	<0.10	<1.0	<0.50	<0.10	<0.25	<0.25
Bromodichloromethane		<0.5	<0.1	<0.3	<0.1	<0.5	<0.5	<0.10	<0.10	<0.10	<1.0	<0.50	<0.10	<0.25	<0.25
Bromoform		<1	<0.2	<0.5	<0.2	<1	<1	<0.20	<0.20	<0.20	<2.0	<1.0	<0.20	<0.50	<0.50
Bromomethane		<3	<0.5	<1	<0.5	<2.5	<2.5	<0.50	<0.50	<0.50	<5.0	<2.5	<0.50	<1.3	<1.3
Carbon Tetrachloride	**5 ****	<0.5	<0.1	<0.3	<0.1	<0.5	<0.5	<0.10	<0.10	<0.10	<1.0	<0.50	<0.10	<0.25	<0.25
Chlorobenzene	**80 ****	<0.5	<0.1	<0.3	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<1.0	<0.50	<0.10	<0.25	<0.25
Chloroethane															
Chloroform		0.7	0.4	0.6	0.5	<0.5	<0.5	<0.1	<0.10	<0.10	<1.0	<0.50	<0.10	<0.25	<0.25
Chloromethane															
Cis-1,2-Dichloroethylene		<0.5	<0.1	<0.3	<0.1	<0.5	<0.5	<0.10	<0.10	<0.10	<1.0	<0.50	<0.10	<0.25	<0.25
Cis-1,3-Dichloropropene		<1	<0.2	<0.5	<0.2	<1	<1	<0.20	<0.20	<0.20	<2.0	<1.0	<0.20	<0.50	<0.50
Dibromochloromethane		<1	<0.2	<0.5	<0.2	<1	<1	<0.20	<0.20	<0.20	<2.0	<1.0	<0.20	<0.50	<0.50
Dichlorodifluoromethane				<1	<0.5	<2.5	<2.5	<0.50	<0.50	<0.50	<5.0	<2.5	<0.50	<1.3	<1.3
Dichloromethane	**50 ****	<3	<0.5	<1	<0.5	<2.5	<2.5	<0.5		<0.50	<5.0	<2.5	<0.50	<1.3	<1.3
Ethyl benzene	**2.4**	<0.5	<0.1	<0.3	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<1.0	<0.50	<0.10	<0.25	<0.25
Hexane				<0.5	<0.5	<2.5	<2.5	<0.5	<0.50	<0.50	<5.0	<2.5	<0.50	<1.3	<1.3
m/p-Xylenes	**300 *****	<0.5	<0.1	<0.3	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<1.0	<0.50	<0.10	<0.25	<0.25
Methyl ethyl ketone		<30	<5	<10	<5	<25	<25	<5.0	<5.0	<5.0	<50	<25	<5.0	<13	<13
Methyl Isobutyl Ketone		<30	<5	<10	<5	<25	<25	<5.0	<5.0	<5.0	<50	<25	<5.0	<13	<13
Methyl t-Butyl Ether		<1	<0.2	<0.5	<0.2	<1	<1	<0.20	<0.20	<0.20	<2.0	<1.0	<0.20	<0.50	<0.50
o-Xylene	**300 *****	<0.5	<0.1	<0.3	<0.1	<0.5	<0.5	<0.1	<0.10	<0.10	<1.0	<0.50	<0.10	<0.25	<0.25
Styrene		<1	<0.2	<0.5	<0.2	<1	<1	<0.1	<0.20	<0.20	<2.0	<1.0	<0.20	<0.50	<0.50
Tetrachloroethylene	**30 ****	<0.5	<0.1	<0.3	<0.1	<0.5	<0.5	<0.10	<0.10	<0.10	<1.0	<0.50	<0.10	<0.25	<0.25
Toluene	**24**	<1	<0.2	<0.5	<0.2	<1	<1	<0.20	<0.20	<0.20	<2.0	<1.0	<0.20	<0.50	<0.50
trans-1,2-Dichloroethylene		<0.5	<0.1	<0.3	<0.1	<0.5	<0.5	<0.10	<0.10	<0.10	<1.0	<0.50	<0.10	<0.25	<0.25
trans-1,3-Dichloropropene		<1	<0.2	<0.5	<0.2	<1	<1	<0.20	<0.20	<0.20	<2.0	<1.0	<0.20	<0.50	<0.50
Trichloroethylene	**5 ****	<0.5	<0.1	<0.3	<0.1	<0.5	<0.5	<0.10	<0.10	<0.10	<1.0	<0.50	<0.10	<0.25	<0.25
Trichlorofluoromethane				<0.5	<0.2	<1	<1	<0.20	<0.20	<0.20	<2.0	<1.0	<0.20	<0.50	<0.50
Vinyl Chloride	**2 ****	<1	<0.2	<0.5	<0.2	<1	<1	<0.20	<0.20	<0.20	<2.0	<1.0	<0.20	<0.50	<0.50
Xylenes - total						<0.5	<0.5	<0.10	<0.10	<0.10	<1.0	<0.50	<0.10	<0.25	<0.25

NOTES:

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	35-II									
		Sep-01	Sep-02	Sep-03	Sep-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10
1,1,1,2-Tetrachloroethane			<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-Trichloroethane		<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<1.0	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<0.2	<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethylene	**14 ****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dibromoethane		<0.2	<0.2	<0.2	<0.5		<0.2	<0.2		<0.2	
1,2-Dichlorobenzene	**3**	<0.2	<0.1	<0..1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2
1,2-Dichloropropane		<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-Dichlorobenzene		<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<0.2	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone		<10.0	<10.0	<10.0	<15.0	<10	<10.0	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane		<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane		<0.5	<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	**80 ****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroethane		<0.5	<0.2	<0.2	<1.0				<0.2		
Chloroform		<0.2	<0.1	0.5	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloromethane		<1.0	<0.5	<0.5	<2.0				<0.5		
Cis-1,2-Dichloroethylene		<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane											
Dichloromethane	**50 ****	<1.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethyl benzene	**2.4**	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexane											
m/p-Xylenes	**300 *****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methyl ethyl ketone		<5.0	<5.0	<5.0	<15.0	<5	<5.0	<5	<5	<5	<5
Methyl Isobutyl Ketone			<5.0	<5.0	<10.0	<5	<5.0	<5		<5	<5
Methyl t-Butyl Ether			<0.2	<0.2	<2.0	<0.2	<0.2	<0.2		<0.2	<0.2
o-Xylene	**300 *****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Styrene		<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	**24**	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<0.2	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichlorofluoromethane		<0.5	<0.2	<0.2	<2.0				<0.2		
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Xylenes - total											

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	35-IIR													
		Oct-10	May-11	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane			<0.2	<0.2	<0.2	<0.2				<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane															
Chloroform		0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane															
Cis-1,2-Dichloroethylene		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane				<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	**50 ****	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	**2.4**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane				<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	**300 *****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	0.19	<0.10
Methyl ethyl ketone		<5	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.33	<0.20
trans-1,2-Dichloroethylene		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane				<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total						<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10		0.19	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	35-III										35-IIIR							
		Sep-01	Sep-02	Sep-03	Oct-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Oct-10	May-11	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16
1,1,1,2-Tetrachloroethane			<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20
1,1,1-Trichloroethane		<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2		<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
1,1-Dichloroethane		<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2	<0.2			<0.2	<0.2		<0.2			<0.2	<0.2	<0.2	<0.2			
1,2-Dichlorobenzene	**3**	<0.2	<0.1	<0..1		<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
1,2-Dichloropropane		<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.1	<0.1		<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.1	<0.1		<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Acetone		<10.0	<10.0	<10.0		<10	<10.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.5	0.4	<0.1	<0.1	<0.1	<0.1	0.4	0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.10	0.24
Bromodichloromethane		<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Chlorobenzene	**80 ****	<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10
Chloroethane		<0.5	<0.2	<0.2					<0.2										
Chloroform		<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10
Chloromethane		<1.0	<0.5	<0.5					<0.5										
Cis-1,2-Dichloroethylene		<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Dichlorodifluoromethane														<0.5	<0.5	<0.5	<0.5	<0.50	<0.50
Dichloromethane	**50 ****	<1.5	<1.0	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	12	<0.5	<0.5
Ethyl benzene	**2.4**	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10
Hexane														<0.5	<0.5	<0.5	<0.5	<0.5	<0.50
m/p-Xylenes	**300 *****	<0.2	<0.1	<0.1	<0.5	0.2	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.11
Methyl ethyl ketone		<5.0	<5.0	<5.0		<5	<5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Methyl Isobutyl Ketone			<5.0	<5.0		<5	<5.0	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Methyl t-Butyl Ether			<0.2	<0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
o-Xylene	**300 *****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10
Styrene		<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.20
Tetrachloroethylene	**30 ****	<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.5	0.3	<0.2	<0.2	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Trichloroethylene	**5 ****	<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Trichlorofluoromethane		<0.5	<0.2	<0.2					<0.2					<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Xylenes - total																<0.1	<0.1	<0.10	0.11

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	35-IIIR					
		Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10	<10
Benzene	5 **	<0.10	0.14	<0.10	0.26	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane							
Chloroform		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane							
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	0.11	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	0.22	<0.20	1.4
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10	0.11	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	35-IV										35-IVR							
		Sep-01	Sep-02	Sep-03	Oct-04	Sep-05	Sep-06	Sep-07	Oct-08	Sep-09	Sep-10	Oct-10	May-11	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16
1,1,1,2-Tetrachloroethane			<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.20	<0.20
1,1,1-Trichloroethane		<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2		<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
1,1-Dichloroethane		<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2	<0.2			<0.2	<0.2		<0.2			<0.2	<0.2	<0.2	<0.2			
1,2-Dichlorobenzene	**3**	<0.2	<0.1	<0..1		<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
1,2-Dichloropropane		<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.1	<0.1		<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.1	<0.1		<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Acetone		<10.0	<10.0	<10.0		<10	<10.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Bromodichloromethane		<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Chlorobenzene	**80 ****	<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10
Chloroethane		<0.5	<0.2	<0.2					<0.2										
Chloroform		<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10
Chloromethane		<1.0	<0.5	<0.5					<0.5										
Cis-1,2-Dichloroethylene		<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Dichlorodifluoromethane														<0.5	<0.5	<0.5	<0.5	<0.50	<0.50
Dichloromethane	**50 ****	<1.5	<1.0	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	12	<0.5	
Ethyl benzene	**2.4**	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10
Hexane														<0.5	<0.5	<0.5	<0.5	<0.5	<0.50
m/p-Xylenes	**300 *****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0		<5	<5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Methyl Isobutyl Ketone			<5.0	<5.0		<5	<5.0	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Methyl t-Butyl Ether			<0.2	<0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
o-Xylene	**300 *****	<0.2	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10
Styrene		<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.20
Tetrachloroethylene	**30 ****	<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Trichloroethylene	**5 ****	<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10
Trichlorofluoromethane		<0.5	<0.2	<0.2					<0.2					<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
Xylenes - total																<0.1	<0.1	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	35-IVR					
		Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10	<10
Benzene	5 **	<0.10	<0.10	<0.10	0.12	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane							
Chloroform		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane							
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10	0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10	<0.10	0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	37-I (Refuse Monitor)			
		Sep-19	Sep-20	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<5.0	<5.0	<10	<10
1,1,1-Trichloroethane		<2.0	<2.5	<5.0	<5.0
1,1,2,2-Tetrachloroethane		<5.0	<5.0	<10	<10
1,1,2-Trichloroethane		<5.0	<5.0	<10	<10
1,1-Dichloroethane		<2.0	<2.5	<5.0	<5.0
1,1-Dichloroethylene	14 **	<2.0	<2.5	<5.0	<5.0
1,2-Dibromoethane		<2.0	<5.0	<10	
1,2-Dichlorobenzene	3	<5.0	<5.0	<10	<10
1,2-Dichloroethane	5 **	<5.0	<5.0	<10	<10
1,2-Dichloropropane		<2.0	<2.5	<5.0	<5.0
1,3-Dichlorobenzene		<5.0	<5.0	<10	<10
1,4-Dichlorobenzene	1	21	19	22	34
Acetone		<100	<250	<500	<500
Benzene	5 **	4.1	4.1	<5.0	<5.0
Bromodichloromethane		<5.0	<2.5	<5.0	<5.0
Bromoform		<10	<5.0	<10	<10
Bromomethane		<5.0	<13	<25	<25
Carbon Tetrachloride	5 **	<2.0	<2.5	<5.0	<5.0
Chlorobenzene	80 **	34	50	57	68
Chloroethane					<10
Chloroform		<2.0	<2.5	<5.0	<5.0
Chloromethane					<25
Cis-1,2-Dichloroethylene		<5.0	<2.5	<5.0	<5.0
Cis-1,3-Dichloropropene		<3.0	<5.0	<10	<10
Dibromochloromethane		<5.0	<5.0	<10	<10
Dichlorodifluoromethane		<10	<13	<25	
Dichloromethane	50 **	<20	<13	<25	<25
Ethyl benzene	2.4	54	67	77	100
Hexane		<10	<13	<25	
m/p-Xylenes	300 ***	140	240	270	370
Methyl ethyl ketone		<100	<130	<250	<250
Methyl Isobutyl Ketone		<50	<130	<250	
Methyl t-Butyl Ether		<5.0	<5.0	<10	
o-Xylene	300 ***	88	110	130	170
Styrene		<5.0	<5.0	<10	<10
Tetrachloroethylene	30 **	<2.0	<2.5	<5.0	<5.0
Toluene	24	3.5	<5.0	<10	<10
trans-1,2-Dichloroethylene		<5.0	<2.5	<5.0	<5.0
trans-1,3-Dichloropropene		<4.0	<5.0	<10	<10
Trichloroethylene	5 **	<2.0	<2.5	<5.0	<5.0
Trichlorofluoromethane		<5.0	<5.0	<10	<10
Vinyl Chloride	2 **	<2.0	<5.0	<10	<10
Xylenes - total		230	360	400	540

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	38-I											39-I	
		Oct-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-17	Sep-18	Sep-19	Sep-21	Sep-22
1,1,1,2-Tetrachloroethane		<0.1	<0.2	<0.2	<0.1	<0.2	<0.5	<0.2	<0.20	<0.20	<1.0	<1.0	<10	<10
1,1,1-Trichloroethane		<0.1	<0.2	<0.2	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.50	<0.50	<5.0	<5.0
1,1,2,2-Tetrachloroethane		<0.2	<0.4	<0.4	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<1.0	<1.0	<10	<10
1,1,2-Trichloroethane		<0.2	<0.4	<0.4	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<1.0	<1.0	<10	<10
1,1-Dichloroethane		2.2	2.2	1.5	0.8	0.7	0.7	0.61	1	0.84	0.77	1.2	<5.0	<5.0
1,1-Dichloroethylene	**14 ****	<0.1	<0.2	<0.2	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.50	<0.50	<5.0	<5.0
1,2-Dibromoethane			<0.4		<0.2	<0.2	<0.5			<0.20	<1.0	<1.0	<10	
1,2-Dichlorobenzene	**3**	<0.2	<0.4	<0.4	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<1.0	<1.0	<10	<10
1,2-Dichloroethane	**5 ****	<0.2	<0.4	<0.4	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<1.0	<1.0	<10	<10
1,2-Dichloropropane		<0.1	<0.2	<0.2	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.50	<0.50	<5.0	<5.0
1,3-Dichlorobenzene		<0.2	<0.4	<0.4	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<1.0	<1.0	<10	<10
1,4-Dichlorobenzene	**1**	<0.2	<0.4	<0.4	<0.2	<0.2	<0.5	<0.2	<0.20	0.41	<1.0	<1.0	32	32
Acetone		<10	<20	<20	<10	<10	<25	<10	<10	<10	<50	<50	<500	<500
Benzene	**5 ****	0.4	0.3	0.7	0.2	0.7	0.6	0.53	0.63	0.31	<0.50	<0.50	<5.0	<5.0
Bromodichloromethane		<0.1	<0.2	<0.2	0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.50	<0.50	<5.0	<5.0
Bromoform		<0.2	<0.4	<0.4	0.3	<0.2	<0.5	<0.2	<0.20	<0.20	<1.0	<1.0	<10	<10
Bromomethane		<0.5	<1	<1	<0.5	<0.5	<1.3	<0.5	<0.50	<0.50	<2.5	<2.5	<25	<25
Carbon Tetrachloride	**5 ****	<0.1	<0.2	<0.2	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.50	<0.50	<5.0	<5.0
Chlorobenzene	**80 ****	<0.1	<0.2	<0.2	<0.1	<0.1	<0.25	0.13	0.25	0.37	1.1	0.73	21	18
Chloroethane		<0.2	<0.4											<10
Chloroform		<0.1	<0.2	<0.2	<0.1	<0.1	<0.25	0.85	<0.1	<0.10	<0.50	<0.50	<5.0	<5.0
Chloromethane		<0.5	<1											<25
Cis-1,2-Dichloroethylene		0.6	0.9	0.9	0.4	0.5	0.4	0.5	0.61	0.49	0.56	0.82	<5.0	<5.0
Cis-1,3-Dichloropropene		<0.2	<0.4	<0.4	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<1.0	<1.0	<10	<10
Dibromochloromethane		<0.2	<0.4	<0.4	0.8	<0.2	<0.5	<0.2	<0.20	<0.20	<1.0	<1.0	<10	<10
Dichlorodifluoromethane					<0.5	<0.5	<1.3	<0.5	<0.50	<0.50	<2.5	<2.5	<25	
Dichloromethane	**50 ****	<0.5	<1	<1	<0.5	<0.5	<1.3	<0.5	<0.5	<0.50	<2.5	<2.5	<25	<25
Ethyl benzene	**2.4**	<0.1	<0.2	<0.2	<0.1	0.1	<0.25	0.1	0.12	<0.10	<0.50	<0.50	120	140
Hexane					<0.5	<0.5	<1.3	<0.5	<0.5	<0.50	<2.5	<2.5	<25	
m/p-Xylenes	**300 *****	<0.1	<0.2	<0.2	<0.1	0.3	<0.25	0.2	0.22	0.11	<0.50	<0.50	290	340
Methyl ethyl ketone		<5	<10	<10	<5	<5	<13	<5	<5.0	<5.0	<25	<25	<250	<250
Methyl Isobutyl Ketone			<10	<10	<5	<5	<13	<5	<5.0	<5.0	<25	<25	<250	
Methyl t-Butyl Ether			<0.4	<0.4	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<1.0	<1.0	<10	
o-Xylene	**300 *****	<0.1	<0.2	<0.2	<0.1	<0.1	<0.25	<0.1	<0.1	<0.10	<0.50	<0.50	120	130
Styrene		<0.2	<0.4	<0.4	<0.2	<0.2	<0.5	<0.2	<0.1	<0.20	<1.0	<1.0	<10	<10
Tetrachloroethylene	**30 ****	<0.1	<0.2	<0.2	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.50	<0.50	<5.0	<5.0
Toluene	**24**	<0.2	<0.4	<0.4	<0.2	0.5	<0.5	0.34	0.4	0.2	<1.0	<1.0	27	<10
trans-1,2-Dichloroethylene		<0.1	<0.2	<0.2	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.50	<0.50	<5.0	<5.0
trans-1,3-Dichloropropene		<0.2	<0.4	<0.4	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<1.0	<1.0	<10	<10
Trichloroethylene	**5 ****	<0.1	<0.2	<0.2	<0.1	<0.1	<0.25	<0.1	<0.10	<0.10	<0.50	<0.50	<5.0	<5.0
Trichlorofluoromethane		<0.2	<0.4		<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<1.0	<1.0	<10	<10
Vinyl Chloride	**2 ****	<0.2	<0.4	<0.6	<0.2	<0.2	<0.5	<0.2	<0.20	<0.20	<1.0	<1.0	<10	<10
Xylenes - total							<0.25	0.2	0.22	0.11	<0.50	<0.50	410	470

NOTES:

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	5-I BP															
		Oct-03	Jan-04	Oct-04	Oct-05	Apr-06	Sep-06	May-07	Sep-07	May-08	Oct-08	Apr-09	Sep-09	Apr-10	Sep-10	Apr-12	Sep-12
1,1,1,2-Tetrachloroethane			<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2
1,1,1-Trichloroethane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<1.0	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dibromoethane		<0.2	<0.2	<0.5	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-Dichlorobenzene		<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<0.1	<0.1	<0.5	0.2	0.3	0.3	0.3	<0.2	0.4	<0.2	0.2	0.2	<0.2	<0.2	<0.2	<0.2
Acetone		<10	<10.0	<15	<10.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane																<0.1	<0.1
Bromoform		*0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane		<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	**80 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroethane		<0.2	<0.2	<1.0			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloroform		5	2.7	0.9	0.5	0.3	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloromethane		<0.5	<0.5	<2.0			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cis-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		0.7	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		1.7	0.8	<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Dichloromethane	**50 ****	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethyl benzene	**2.4**	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexane																	
m/p-Xylenes	**300 *****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methyl ethyl ketone		<5	<5.0	<15	<5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Methyl Isobutyl Ketone		<5	<5.0	<10	<5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Methyl t-Butyl Ether			<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-Xylene	**300 *****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Styrene		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	**24**	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichlorofluoromethane		<0.2	<0.2	<2.0			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Xylenes - total																	

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	5-I BP															
		Apr-13	Sep-13	Apr-14	Sep-14	Apr-15	Sep-15	Apr-16	Sep-16	Apr-17	Sep-17	May-18	Sep-18	Apr-19	Sep-19	Apr-20	Sep-20
1,1,1,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2			<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.2	<0.2	<0.10	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.1	<0.1	<0.1	<0.1	<0.20	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.20	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.1	<0.1					<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.50	<0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.5	<0.10	<0.10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.1	<0.1	<0.1	<0.1	<0.20	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane		<0.2	<0.2	<0.2	<0.2	<0.10	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<5.0	<0.20
Chloroform		<0.1	<0.1	<0.1	<0.1	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane		<0.5	<0.5	<0.5	<0.5	<0.10	<0.10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Cis-1,2-Dichloroethylene		<0.1	<0.1	<0.1	<0.1	<0.20	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.10	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane				<0.1	<0.1	<0.10	<0.10										
Dichloromethane	**50 ****	<0.5	<0.5	<0.1	<0.1	<0.10	<0.10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	**2.4**	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane																	
m/p-Xylenes	**300 *****	<0.1	<0.1	<5	<5	<5.0	<5.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5	<5	<0.2	<0.2	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.2	<0.2	<0.1	<0.1	<0.50	<0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.1	<0.1	<0.2	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.2	<0.2	<0.1	<0.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.2	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.1	<0.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.1	<0.1	<0.2	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.1	<0.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.1	<0.1	<0.2	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.1	<0.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total					<1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	5-I BP			
		Apr-21	Sep-21	Apr-22	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10
Benzene	5 **	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10
Chloroethane		<0.20	<0.20	<0.20	<0.20
Chloroform		<0.10	<0.10	<0.10	<0.10
Chloromethane		<0.50	<0.50	<0.50	<0.50
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane					
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10
Hexane					
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	5-II BP															
		Oct-03	Jan-04	Oct-04	Oct-05	Apr-06	Sep-06	May-07	Sep-07	May-08	Oct-08	Apr-09	Sep-09	Apr-10	Sep-10	Apr-12	Sep-12
1,1,1,2-Tetrachloroethane			<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2
1,1,1-Trichloroethane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<1.0	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dibromoethane		<0.2	<0.2	<0.5	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-Dichlorobenzene		<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone		<10	<10.0	<15	<10.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane																<0.1	<0.1
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane		<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	**80 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroethane		<0.2	<0.2	<1.0	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloroform		2.5	1.1	0.3	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloromethane		<0.5	<0.5	<2.0	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cis-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		0.6	0.2	<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Dichloromethane	**50 ****	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethyl benzene	**2.4**	0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexane																	
m/p-Xylenes	**300 *****	0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methyl ethyl ketone		<5	<5.0	<15	<5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Methyl Isobutyl Ketone		<5	<5.0	<10	<5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Methyl t-Butyl Ether			<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-Xylene	**300 *****	0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Styrene		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	**24**	0.3	0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichlorofluoromethane		<0.2	<0.2	<2.0	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Xylenes - total																	

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	5-II BP															
		Apr-13	Sep-13	Apr-14	Sep-14	Apr-15	Sep-15	Apr-16	Sep-16	Apr-17	Sep-17	May-18	Sep-18	Apr-19	Sep-19	Apr-20	Sep-20
1,1,1,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2			<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.2	<0.2	<0.10	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.1	<0.1	<0.1	<0.1	<0.20	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	0.13	<0.1	<0.1	<0.1	<0.20	<0.20	<0.10	<0.10	0.25	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.1	<0.1					<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.50	<0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.5	<0.10	<0.10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.1	<0.1	<0.1	<0.1	<0.20	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane		<0.2	<0.2	<0.2	<0.2	<0.10	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<5.0	<0.20
Chloroform		<0.1	<0.1	<0.1	<0.1	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane		<0.5	<0.5	<0.5	<0.5	<0.10	<0.10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Cis-1,2-Dichloroethylene		<0.1	<0.1	<0.1	<0.1	<0.20	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.10	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane				<0.1	<0.1	<0.10	<0.10										
Dichloromethane	**50 ****	<0.5	<0.5	<0.1	<0.1	<0.10	<0.10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	**2.4**	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane																	
m/p-Xylenes	**300 *****	<0.1	<0.1	<5	<5	<5.0	<5.0	<0.10	<0.10	0.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5	<5	<0.2	<0.2	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.2	<0.2	<0.1	<0.1	<0.50	<0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.1	<0.1	<0.2	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.2	<0.2	<0.1	<0.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.2	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.1	<0.1	<0.20	<0.20	<0.20	<0.20	0.21	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.1	<0.1	<0.2	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.1	<0.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.1	<0.1	<0.2	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.1	<0.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total					<1	<0.10	<0.10	<0.10	<0.10	0.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	5-II BP			
		Apr-21	Sep-21	Apr-22	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10
Benzene	5 **	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10
Chloroethane		<0.20	<0.20	<0.20	<0.20
Chloroform		<0.10	<0.10	<0.10	<0.10
Chloromethane		<0.50	<0.50	<0.50	<0.50
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane					
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10
Hexane					
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	5-III BP															
		Oct-03	Jan-04	Oct-04	Oct-05	Apr-06	Sep-06	May-07	Sep-07	May-08	Oct-08	Apr-09	Sep-09	Apr-10	Sep-10	Apr-12	Sep-12
1,1,1,2-Tetrachloroethane			<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2
1,1,1-Trichloroethane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<1.0	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dibromoethane		<0.2	<0.2	<0.5	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-Dichlorobenzene		<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone		<10	<10.0	<15	<10.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	0.5	0.2	<0.5	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	0.2	0.2	0.2	0.2	<0.1	<0.1
Bromodichloromethane																<0.1	<0.1
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane		<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	**80 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroethane		<0.2	<0.2	<1.0			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloroform		1.6	0.6	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloromethane		<0.5	<0.5	<2.0			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cis-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<0.2	0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		0.2	<0.1	<0.2	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Dichloromethane	**50 ****	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethyl benzene	**2.4**	0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexane																	
m/p-Xylenes	**300 *****	0.1	0.1	<0.5	0.1	<0.1	0.1	<0.1	<0.1	<0.1	0.1	<0.1	0.1	<0.1	0.1	<0.1	<0.1
Methyl ethyl ketone		<5	<5.0	<15	<5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Methyl Isobutyl Ketone		<5	<5.0	<10	<5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Methyl t-Butyl Ether			<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-Xylene	**300 *****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Styrene		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	**24**	0.3	0.3	<0.5	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	0.3	<0.2	0.3	<0.2	<0.2
trans-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichlorofluoromethane		<0.2	<0.2	<2.0			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Xylenes - total																	

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	5-III BP															
		Apr-13	Sep-13	Apr-14	Sep-14	Apr-15	Sep-15	Apr-16	Sep-16	Apr-17	Sep-17	May-18	Sep-18	Apr-19	Sep-19	Apr-20	Sep-20
1,1,1,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2			<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.2	<0.2	<0.10	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.1	<0.1	<0.1	<0.1	<0.20	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	**5 ****	0.3	<0.1	<0.1	<0.1	<0.20	<0.20	0.19	<0.10	<0.10	0.11	<0.10	<0.10	0.33	<0.10	<0.10	0.1
Bromodichloromethane		<0.1	<0.1					<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.50	<0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.5	<0.10	<0.10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	**80 ****	<0.1	<0.1	<0.1	<0.1	<0.20	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroethane		<0.2	<0.2	<0.2	<0.2	<0.10	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<5.0	<0.20
Chloroform		<0.1	<0.1	<0.1	<0.1	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane		<0.5	<0.5	<0.5	<0.5	<0.10	<0.10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Cis-1,2-Dichloroethylene		<0.1	<0.1	<0.1	<0.1	<0.20	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.10	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane				<0.1	<0.1	<0.10	<0.10										
Dichloromethane	**50 ****	<0.5	<0.5	<0.1	<0.1	<0.10	<0.10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	**2.4**	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hexane																	
m/p-Xylenes	**300 *****	0.14	<0.1	<5	<5	<5.0	<5.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.19	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5	<5	<0.2	<0.2	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.2	<0.2	<0.1	<0.1	<0.50	<0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	**300 *****	<0.1	<0.1	<0.2	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene		<0.2	<0.2	<0.1	<0.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.2	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Toluene	**24**	0.32	<0.2	<0.1	<0.1	<0.20	<0.20	0.22	<0.20	<0.20	<0.20	<0.20	<0.20	0.35	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.1	<0.1	<0.2	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.1	<0.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	**5 ****	<0.1	<0.1	<0.2	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.1	<0.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes - total					<1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.19	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	5-III BP			
		Apr-21	Sep-21	Apr-22	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10
Benzene	5 **	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10
Chloroethane		<0.20	<0.20	<0.20	<0.20
Chloroform		<0.10	<0.10	<0.10	<0.10
Chloromethane		<0.50	<0.50	<0.50	<0.50
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane					
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10
Hexane					
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	5-IV BP															
		Oct-03	Jan-04	Oct-04	Oct-05	Apr-06	Sep-06	May-07	Sep-07	May-08	Oct-08	Apr-09	Sep-09	Apr-10	Sep-10	Apr-12	Sep-12
1,1,1,2-Tetrachloroethane			<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.2	<0.2
1,1,1-Trichloroethane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<1.0	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane		<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane		<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1
1,2-Dibromoethane		<0.2	<0.2	<0.5	<0.2	<0.2		<0.4	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	**3**	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloroethane	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2
1,2-Dichloropropane		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1
1,3-Dichlorobenzene		<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2
1,4-Dichlorobenzene	**1**	<0.1	<0.1	<0.5	<0.1	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2
Acetone		26.7	<10.0	<15	<10.0	<10	<10	<20	<10	<10	<10	<10	<20	<10	<10	<10	<10
Benzene	**5 ****	0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromodichloromethane																<0.1	<0.1
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2
Bromomethane		<0.5	<0.5	<3.0	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	**80 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1
Chloroethane		<0.2	<0.2	<1.0	<0.2		<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2
Chloroform		<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1
Chloromethane		<0.5	<0.5	<2.0	<0.5		<0.5	<1	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
Cis-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane		<0.1	<0.1	<0.2	<0.1	<0.1		<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1		
Dichloromethane	**50 ****	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
Ethyl benzene	**2.4**	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1
Hexane																	
m/p-Xylenes	**300 *****	0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1
Methyl ethyl ketone		<5	<5.0	<15	<5.0	<5	<5	<10	<5	<5	<5	<5	<10	<5	<5	<5.0	<5.0
Methyl Isobutyl Ketone		<5	<5.0	<10	<5.0	<5	<5	<10	<5	<5	<5	<5	<10	<5	<5	<5.0	<5.0
Methyl t-Butyl Ether			<0.2	<2.0	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2
o-Xylene	**300 *****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1
Styrene		<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1
Toluene	**24**	0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethylene		<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1
trans-1,3-Dichloropropene		<0.2	<0.2	<0.14	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2
Trichloroethylene	**5 ****	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1
Trichlorofluoromethane		<0.2	<0.2	<2.0	<0.2		<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2
Xylenes - total																	

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	5-IV BP															
		Apr-13	Sep-13	Apr-14	Sep-14	Apr-15	Sep-15	Apr-16	Sep-16	Apr-17	Sep-17	May-18	Sep-18	Apr-19	Sep-19	Apr-20	Sep-20
1,1,1,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20
1,1,1-Trichloroethane		<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20
1,1,2-Trichloroethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20
1,1-Dichloroethane		<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.10
1,1-Dichloroethylene	**14 ****	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.10
1,2-Dibromoethane		<0.2	<0.2			<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20
1,2-Dichlorobenzene	**3**	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20
1,2-Dichloroethane	**5 ****	<0.2	<0.2	<0.2	<0.2	<0.10	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20
1,2-Dichloropropane		<0.1	<0.1	<0.1	<0.1	<0.20	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.10
1,3-Dichlorobenzene		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20
1,4-Dichlorobenzene	**1**	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20
Acetone		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<25	<10	<10
Benzene	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.20	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.10
Bromodichloromethane		<0.1	<0.1					<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.10
Bromoform		<0.2	<0.2	<0.2	<0.2	<0.50	<0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20
Bromomethane		<0.5	<0.5	<0.5	<0.5	<0.10	<0.10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.3	<0.50	<0.50
Carbon Tetrachloride	**5 ****	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.10
Chlorobenzene	**80 ****	<0.1	<0.1	<0.1	<0.1	<0.20	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.10
Chloroethane		<0.2	<0.2	<0.2	<0.2	<0.10	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<5.0	<0.20
Chloroform		<0.1	<0.1	<0.1	<0.1	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.10
Chloromethane		<0.5	<0.5	<0.5	<0.5	<0.10	<0.10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.3	<0.50	<0.50
Cis-1,2-Dichloroethylene		<0.1	<0.1	<0.1	<0.1	<0.20	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20
Dibromochloromethane		<0.2	<0.2	<0.2	<0.2	<0.10	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20
Dichlorodifluoromethane				<0.1	<0.1	<0.10	<0.10										
Dichloromethane	**50 ****	<0.5	<0.5	<0.1	<0.1	<0.10	<0.10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.3	<0.50	<0.50
Ethyl benzene	**2.4**	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.10
Hexane																	
m/p-Xylenes	**300 *****	<0.1	<0.1	<5	<5	<5.0	<5.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.10
Methyl ethyl ketone		<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<13	<5.0	<5.0
Methyl Isobutyl Ketone		<5	<5	<0.2	<0.2	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<13	<5.0	<5.0
Methyl t-Butyl Ether		<0.2	<0.2	<0.1	<0.1	<0.50	<0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20
o-Xylene	**300 *****	<0.1	<0.1	<0.2	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.10
Styrene		<0.2	<0.2	<0.1	<0.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20
Tetrachloroethylene	**30 ****	<0.1	<0.1	<0.2	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.10
Toluene	**24**	<0.2	<0.2	<0.1	<0.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.1	<0.1	<0.2	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.10
trans-1,3-Dichloropropene		<0.2	<0.2	<0.1	<0.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20
Trichloroethylene	**5 ****	<0.1	<0.1	<0.2	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.10
Trichlorofluoromethane		<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20
Vinyl Chloride	**2 ****	<0.2	<0.2	<0.1	<0.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20
Xylenes - total					<1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.25	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-3
GROUNDWATER ORGANIC CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	ODWQS	5-IV BP			
		Apr-21	Sep-21	Apr-22	Sep-22
1,1,1,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane		<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		<0.10	<0.10	<0.10	<0.10
1,1-Dichloroethylene	14 **	<0.10	<0.10	<0.10	<0.10
1,2-Dibromoethane		<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	3	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5 **	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene		<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene	1	<0.20	<0.20	<0.20	<0.20
Acetone		<10	<10	<10	<10
Benzene	5 **	<0.10	<0.10	<0.10	<0.10
Bromodichloromethane		<0.10	<0.10	<0.10	<0.10
Bromoform		<0.20	<0.20	<0.20	<0.20
Bromomethane		<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5 **	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	80 **	<0.10	<0.10	<0.10	<0.10
Chloroethane		<0.20	<0.20	<0.20	<0.20
Chloroform		<0.10	<0.10	<0.10	<0.10
Chloromethane		<0.50	<0.50	<0.50	<0.50
Cis-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10
Cis-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Dibromochloromethane		<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane					
Dichloromethane	50 **	<0.50	<0.50	<0.50	<0.50
Ethyl benzene	2.4	<0.10	<0.10	<0.10	<0.10
Hexane					
m/p-Xylenes	300 ***	<0.10	<0.10	<0.10	<0.10
Methyl ethyl ketone		<5.0	<5.0	<5.0	<5.0
Methyl Isobutyl Ketone		<5.0	<5.0	<5.0	<5.0
Methyl t-Butyl Ether		<0.20	<0.20	<0.20	<0.20
o-Xylene	300 ***	<0.10	<0.10	<0.10	<0.10
Styrene		<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	30 **	<0.10	<0.10	<0.10	<0.10
Toluene	24	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethylene		<0.10	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene		<0.20	<0.20	<0.20	<0.20
Trichloroethylene	5 **	<0.10	<0.10	<0.10	<0.10
Trichlorofluoromethane		<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	2 **	<0.20	<0.20	<0.20	<0.20
Xylenes - total		<0.10	<0.10	<0.10	<0.10

NOTES: 1) All units are in µg/L
2) ODWQS - Ontario Drinking Water Quality Standards
3)* - Indicates parameter concentration detected below the Reportable Detection Limit (RDL)
** - Indicates value is a health related Standard.
*** - Indicates Standard is for total of all xylenes.
Blank indicates parameter not analysed.

TABLE C-4
DUPLICATE SAMPLES RELATIVE PERCENT DIFFERENCES - Field Duplicates
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

		GROUNDWATER																			
		16-I				21-IR				32-I				35-I				26-I			
		September 2022				September 2022				September 2022				September 2022				September 2022			
PARAMETER	UNITS	RDL	Original	Duplicate	RPD (%)	RDL	Original	Duplicate	RPD (%)	RDL	Original	Duplicate	RPD (%)	RDL	Original	Duplicate	RPD (%)	RDL	Original	Duplicate	RPD (%)
Alkalinity	mg/L	1	41	41	<1	1	470	390	19	1	420	480	13	1	14	13	7	1	220	220	<1
Ammonia	mg/L	0.050	19	19	<1	0.050	<0.050	0.053	<2RDL	0.050	0.89	<0.050	**>2RDL**	0.05	41	40	2	0.05	3.4	3.4	<1
BOD	mg/L	2	<40	<2	<2RDL	2	3	3	<1	2	7	<2	**>2RDL**	2	2	3	<2RDL	2	<2	<2	<2RDL
Chloride	mg/L	1	16000	17000	6	1	7.4	7.7	4	2	210	180	15	20	67000	65000	3	5	470	470	<1
Conductivity	umho/cm	1	48000	48000	<1	1	3500	3600	3	1	2100	2100	<1	1	>100000	>100000	<1	1	3600	3600	<1
Hardness	mg/L	1	9700	9700	<1	1	1100	960	14	1	640	850	**28**	1	50000	47000	6	1	540	550	2
Iron	mg/L	0.20	<0.20	<0.20	<2RDL	0.20	<0.20	<0.20	<2RDL	0.02	<0.02	<0.02	<2RDL	0.20 / 2.0	<0.20	<2.0	<2RDL	0.02	<0.02	<0.02	<2RDL
Nitrate	mg/L	0.10	<0.10	<0.10	<2RDL	0.10	0.4	0.51	<2RDL	0.10	0.28	<0.10	<2RDL	1.0 / 2.0	<1.0	<2.0	<2RDL	0.10	<0.10	<0.10	<2RDL
Nitrite	mg/L	0.010	<0.010	0.012	<2RDL	0.010	0.058	0.107	**59**	0.010	0.048	<0.010	**>2RDL**	0.10 / 0.20	<0.10	<0.20	<2RDL	0.010	<0.010	<0.010	<2RDL
pH	pH		7.31	7.31	<1		8.13	8.14	<1		7.77	7.93	2		6.5	6.51	<1		8.09	8.07	<1
Phenols	mg/L	0.001	0.031	0.020	**43**	0.001	<0.001	<0.001	<2RDL	0.001	<0.001	<0.001	<2RDL	0.001	0.22	0.20	10	0.001	<0.001	<0.001	<2RDL
Potassium	mg/L	1	170	170	<1	1	19	15	**24**	1	25	19	**27**	1	380	330	14	1	30	30	<1
Sodium	mg/L	0.5	7900	7800	1	0.5	500	510	2	0.5	220	200	10	5	20000	19000	5	0.5	560	610	9
Sulphate	mg/L	1	1600	1600	<1	1	1500	1700	13	2	330	400	19	1	800	780	3	5	870	870	<1
Total Kjeldahl Nitrogen	mg/L	0.20	24	26	8	0.20	0.11	0.23	<2RDL	0.10	0.99	0.21	**130**	0.20	52	46	12	0.10	3.4	3.3	3

		SURFACE WATER															
		SW1A				SW1A				SW2				SW1A			
		April 2022				June 2022				September 2022				December 2022			
PARAMETER	UNITS	RDL	Original	Duplicate	RPD (%)	RDL	Original	Duplicate	RPD (%)	RDL	Original	Duplicate	RPD (%)	RDL	Original	Duplicate	RPD (%)
Alkalinity	mg/L	1	260	260	<1	1	300	300	<1	1	330	330	<1	1	240	240	<1
Ammonia	mg/L	0.05	<0.05	<0.05	<2RDL	0.050	0.067	0.076	<2RDL	0.05	<0.05	<0.05	<2RDL	0.05	<0.05	<0.05	<2RDL
BOD	mg/L	2	<2	<2	<2RDL	2	<2	<2	<2RDL	2	<2	<2	<2RDL	2	<2	<2	<2RDL
Chloride	mg/L	1	84	87	4	1	99	99	<1	1	85	84	1	2	200	190	5
Conductivity	µmho/cm	1	770	790	3	1	920	920	<1	1	1000	1000	<1	1	1200	1200	<1
Hardness	mg/L	1	310	310	<1	1	370	380	3	1	460	450	2	1	420	420	<1
Iron	mg/L	0.02	0.28	0.25	11	0.02	1.7	1.7	<1	0.02	0.45	0.46	2	0.02	0.06	0.09	<2RDL
Nitrate	mg/L	0.10	<0.10	<0.10	<2RDL	0.10	0.33	0.31	<2RDL	0.10	<0.10	<0.10	<2RDL	0.10	<0.10	<0.10	<2RDL
Nitrite	mg/L	0.010	<0.010	<0.010	<2RDL	0.010	<0.010	<0.010	<2RDL	0.010	<0.010	<0.010	<2RDL	0.010	<0.010	<0.010	<2RDL
pH	pH		8.44	8.26	2		8.27	8.27	<1		8.27	8.21	<1		8.04	8.05	<1
Phenols	mg/L	0.001	<0.001	<0.001	<2RDL	0.001	<0.001	<0.001	<2RDL	0.001	<0.001	<0.001	<2RDL	0.001	0.001	<0.001	<2RDL
Phosphorus	mg/L	0.004	0.026	0.028	7	0.04	0.30	0.13	**79**	0.004	0.072	0.070	3	0.004	0.040	0.043	7
Potassium	mg/L	1	2	2	<2RDL	1	4	4	<2RDL	1	7	7	<1	1	4	4	<2RDL
Sodium	mg/L	0.5	47	50	6	0.5	59	59	<1	0.5	55	56	2	0.5	90	90	<1
Total Kjeldahl Nitrogen	mg/L	0.10	0.18	0.2	11	0.10	0.30	0.15	<2RDL	0.10	0.19	0.17	11	0.10	<0.10	0.12	<2RDL
Total Suspended Solids	mg/L	10	10	11	10	10	170	79	**73**	10	18	18	<1	10	<10	<10	<2RDL

NOTES: 1) RPD = Relative Percent Difference
2) RDL = Reportable Detection Limit RPD = $\frac{X1 - X2}{Xavg} \times 100$

TABLE C-5
GROUNDWATER CHEMISTRY RESULTS - Meridian Brick Property
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	UNITS	5	6A	6B	7A	7B
		May	May	May	May	May
Hardness	mg/L	270	380	660	330	610
Ammonia (As N)	mg/L	0.74	1.3	1.3	3.1	0.57
BOD5	mg/L	7	4	3	<2	3
Conductivity	µmho/cm	1.09	3.86	1.52	1.03	1.34
TKN (As N)	mg/L	0.83	1.3	1.4	2.9	0.66
pH (20 Deg C)	pH units	8.01	8.06	7.68	7.95	7.60
Phenolic Compounds	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Sulphate	mg/L	110	300	47	46	39
Alkalinity (As CaCO3)	mg/L	390	310	850	480	680
Chloride	mg/L	39	820	16	18	29
Nitrite	mg/L	0.308	0.085	<0.010	<0.010	<0.010
Nitrate	mg/L	1.56	<0.10	<0.10	<0.10	<0.10
Nitrate & Nitrite	mg/L	1.87	0.15	<0.10	<0.10	<0.10
Organic Nitrogen	mg/L	0.09	<0.05	0.10	<0.05	0.09
Iron	mg/L	0.11	<0.10	8.6	<0.10	3.1
Magnesium	mg/L	25	29	66	38	56
Acetone (2-Propanone)	µg/L	<10	<10	<10	<10	<10
Benzene	µg/L	<0.20	<0.20	3.5	<0.20	<0.20
Bromodichloromethane	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Bromoform	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	µg/L	<0.19	<0.19	<0.19	<0.19	<0.19
Chlorobenzene	µg/L	<0.20	<0.20	1.4	<0.20	<0.20
Chloroform	µg/L	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochlormethane	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Dichlorobenzene 1,2- (o-DCB)	µg/L	<0.40	<0.40	<0.40	<0.40	<0.40
Dichlorobenzene 1,3- (m-DCB)	µg/L	<0.40	<0.40	<0.40	<0.40	<0.40
Dichlorobenzene 1,4- (p-DCB)	µg/L	<0.40	<0.40	<0.40	<0.40	<0.40
Dichlorodifluoromethane (Freon 12)	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Dichloroethane 1,1-	µg/L	<0.20	<0.20	9.6	2.4	<0.20
Dichloroethane 1,2-	µg/L	<0.49	<0.49	0.79	<0.49	<0.49
Dichloroethylene 1,1-	µg/L	<0.20	<0.20	<0.20	<0.20	<0.20
Dichloroethylene, cis-1,2-	µg/L	<0.50	<0.50	39	3.4	1.7
Dichloroethylene, trans-1,2-	µg/L	<0.50	<0.50	7.7	<0.50	<0.50
Dichloropropane 1,2-	µg/L	<0.20	<0.20	0.21	<0.20	<0.20
Dichloropropene, cis-1,3	µg/L	<0.30	<0.30	<0.30	<0.30	<0.30
Dichloropropene, trans-1,3	µg/L	<0.40	<0.40	<0.40	<0.40	<0.40
Ethylbenzene	µg/L	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	<0.19	<0.19	<0.19	<0.19	<0.19
Hexane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene Chloride (Dichloromethane)	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0
Methyl Isobutyl Ketone	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Ethyl Ketone (2-Butanone)	µg/L	<10	<10	<10	<10	<10
Methyl t-Butyl Ether (MTBE)	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Styrene	µg/L	<0.40	<0.40	<0.40	<0.40	<0.40
Tetrachloroethane 1,1,1,2-	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethane 1,1,2,2-	µg/L	<0.40	<0.40	<0.40	<0.40	<0.40
Tetrachloroethylene	µg/L	<0.20	<0.20	<0.20	<0.20	<0.20
Toluene	µg/L	<0.20	<0.20	0.60	<0.20	<0.20
Trichloroethane 1,1,1-	µg/L	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethane 1,1,2-	µg/L	<0.40	<0.40	<0.40	<0.40	<0.40
Trichloroethylene	µg/L	<0.20	<0.20	0.49	<0.20	0.40
Vinyl Chloride	µg/L	<0.20	0.31	51	13	0.97
m-Xylene & p-Xylene	µg/L	<0.20	<0.20	0.30	<0.20	<0.20
o-Xylene	µg/L	<0.20	<0.20	0.65	<0.20	<0.20
Total Xylene	µg/L	<0.20	<0.20	0.95	<0.20	<0.20
Trichlorofluoromethane (Freon 11)	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50

NOTES: 1) Blank indicates parameter not analysed.
2) Data presented in this table was provided by Meridian Brick.

TABLE C-5
GROUNDWATER CHEMISTRY RESULTS - Meridian Brick Property
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	UNITS	8A	8B	9	10A
		May	May	May	May
Hardness	mg/L	1300	1200	860	17000
Ammonia (As N)	mg/L	<0.050	<0.050	<0.050	19
BOD5	mg/L	4	4	3	<2
Conductivity	µmho/cm	2.97	2.95	2.98	64.9
TKN (As N)	mg/L	0.28	0.34	0.18	22
pH (20 Deg C)	pH units	7.53	7.69	7.92	7.17
Phenolic Compounds	mg/L	<0.0010	<0.0010	<0.0010	0.0130
Sulphate	mg/L	30	28	32	1300
Alkalinity (As CaCO3)	mg/L	1400	1500	1700	190
Chloride	mg/L	190	180	67	26000
Nitrite	mg/L	<0.010	<0.010	<0.010	0.026
Nitrate	mg/L	<0.10	0.15	<0.10	36.4
Nitrate & Nitrite	mg/L	<0.10	0.15	<0.10	36.4
Organic Nitrogen	mg/L	0.28	0.34	0.18	3.0
Iron	mg/L	2.0	0.83	0.47	<1.0
Magnesium	mg/L	230	220	160	1300
Acetone (2-Propanone)	µg/L	<20	<10	<10	<10
Benzene	µg/L	2.0	2.0	0.95	<0.20
Bromodichloromethane	µg/L	<1.0	<0.50	<0.50	<0.50
Bromoform	µg/L	<2.0	<1.0	<1.0	<1.0
Bromomethane	µg/L	<1.0	<0.50	<0.50	<0.50
Carbon Tetrachloride	µg/L	<0.38	<0.19	<0.19	<0.19
Chlorobenzene	µg/L	44	17	0.95	<0.20
Chloroform	µg/L	<0.40	<0.20	<0.20	<0.20
Dibromochlormethane	µg/L	<1.0	<0.50	<0.50	<0.50
Dichlorobenzene 1,2- (o-DCB)	µg/L	<0.80	<0.40	<0.40	<0.40
Dichlorobenzene 1,3- (m-DCB)	µg/L	<0.80	<0.40	<0.40	<0.40
Dichlorobenzene 1,4- (p-DCB)	µg/L	4.5	4.2	<0.40	<0.40
Dichlorodifluoromethane (Freon 12)	µg/L	<2.0	<1.0	<1.0	<1.0
Dichloroethane 1,1-	µg/L	5.0	4.5	3.4	<0.20
Dichloroethane 1,2-	µg/L	<0.98	<0.49	<0.49	<0.49
Dichloroethylene 1,1-	µg/L	<0.40	<0.20	<0.20	<0.20
Dichloroethylene, cis-1,2-	µg/L	20	8.5	2.0	<0.50
Dichloroethylene, trans-1,2-	µg/L	<1.0	<0.50	<0.50	<0.50
Dichloropropane 1,2-	µg/L	<0.40	<0.20	<0.20	<0.20
Dichloropropene, cis-1,3	µg/L	<0.60	<0.30	<0.30	<0.30
Dichloropropene, trans-1,3	µg/L	<0.80	<0.40	<0.40	<0.40
Ethylbenzene	µg/L	<0.40	<0.20	<0.20	<0.20
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	<0.38	<0.19	<0.19	<0.19
Hexane	µg/L	<2.0	<1.0	<1.0	<1.0
Methylene Chloride (Dichloromethane)	µg/L	<4.0	<2.0	<2.0	<2.0
Methyl Isobutyl Ketone	µg/L	<10	<5.0	<5.0	<5.0
Methyl Ethyl Ketone (2-Butanone)	µg/L	<20	<10	<10	<10
Methyl t-Butyl Ether (MTBE)	µg/L	<1.0	<0.50	<0.50	<0.50
Styrene	µg/L	<0.80	<0.40	<0.40	<0.40
Tetrachloroethane 1,1,1,2-	µg/L	<1.0	<0.50	<0.50	<0.50
Tetrachloroethane 1,1,2,2-	µg/L	<0.80	<0.40	<0.40	<0.40
Tetrachloroethylene	µg/L	<0.40	<0.20	<0.20	<0.20
Toluene	µg/L	<0.40	0.29	<0.20	<0.20
Trichloroethane 1,1,1-	µg/L	<0.40	<0.20	<0.20	<0.20
Trichloroethane 1,1,2-	µg/L	<0.80	<0.40	<0.40	<0.40
Trichloroethylene	µg/L	<0.40	<0.20	<0.20	<0.20
Vinyl Chloride	µg/L	4.8	2.6	0.34	<0.20
m-Xylene & p-Xylene	µg/L	<0.40	<0.20	<0.20	<0.20
o-Xylene	µg/L	<0.40	<0.20	<0.20	<0.20
Total Xylene	µg/L	<0.40	<0.20	<0.20	<0.20
Trichlorofluoromethane (Freon 11)	µg/L	<1.0	<0.50	<0.50	<0.50

NOTES: 1) Blank indicates parameter not analysed.
2) Data presented in this table was provided by Meridian Brick.

TABLE C-5
GROUNDWATER CHEMISTRY RESULTS - Meridian Brick Property
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

PARAMETER	UNITS	10B	11	12A	12B
		May	May	May	May
Hardness	mg/L	1600	1100	2200	2000
Ammonia (As N)	mg/L	15	29	2.4	1.0
BOD5	mg/L	8	7	<2	2
Conductivity	µmho/cm	5.01	3.39	5.76	4.83
TKN (As N)	mg/L	18	31	3.1	2.0
pH (20 Deg C)	pH units	7.59	7.49	7.38	7.42
Phenolic Compounds	mg/L	0.0025	0.0021	<0.0010	<0.0010
Sulphate	mg/L	340	<1.0	1000	340
Alkalinity (As CaCO3)	mg/L	1300	1200	850	1200
Chloride	mg/L	790	410	940	810
Nitrite	mg/L	<0.010	<0.010	<0.010	<0.010
Nitrate	mg/L	<0.10	<0.10	<0.10	<0.10
Nitrate & Nitrite	mg/L	<0.10	<0.10	<0.10	<0.10
Organic Nitrogen	mg/L	3.0	2.0	0.70	1.0
Iron	mg/L	11	3.5	0.63	<0.10
Magnesium	mg/L	210	160	250	290
Acetone (2-Propanone)	µg/L	<20	<10	<10	<10
Benzene	µg/L	3.1	4.3	0.49	0.68
Bromodichloromethane	µg/L	<1.0	<0.50	<0.50	<0.50
Bromoform	µg/L	<2.0	<1.0	<1.0	<1.0
Bromomethane	µg/L	<1.0	<0.50	<0.50	<0.50
Carbon Tetrachloride	µg/L	<0.38	<0.19	<0.19	<0.19
Chlorobenzene	µg/L	81	5.9	39	21
Chloroform	µg/L	<0.40	<0.20	<0.20	<0.20
Dibromochlormethane	µg/L	<1.0	<0.50	<0.50	<0.50
Dichlorobenzene 1,2- (o-DCB)	µg/L	4.8	0.4	<0.40	<0.40
Dichlorobenzene 1,3- (m-DCB)	µg/L	1.1	<0.40	<0.40	<0.40
Dichlorobenzene 1,4- (p-DCB)	µg/L	8.9	1.7	3.8	1.5
Dichlorodifluoromethane (Freon 12)	µg/L	<2.0	<1.0	<1.0	<1.0
Dichloroethane 1,1-	µg/L	<0.40	<0.20	0.49	0.38
Dichloroethane 1,2-	µg/L	<0.98	<0.49	<0.49	<0.49
Dichloroethylene 1,1-	µg/L	<0.40	<0.20	<0.20	<0.20
Dichloroethylene, cis-1,2-	µg/L	<1.0	<0.50	0.51	<0.50
Dichloroethylene, trans-1,2-	µg/L	<1.0	<0.50	<0.50	<0.50
Dichloropropane 1,2-	µg/L	<0.40	<0.20	<0.20	<0.20
Dichloropropene, cis-1,3	µg/L	<0.60	<0.30	<0.30	<0.30
Dichloropropene, trans-1,3	µg/L	<0.80	<0.40	<0.40	<0.40
Ethylbenzene	µg/L	<0.40	<0.20	<0.20	<0.20
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	<0.38	<0.19	<0.19	<0.19
Hexane	µg/L	<2.0	<1.0	<1.0	<1.0
Methylene Chloride (Dichloromethane)	µg/L	<4.0	<2.0	<2.0	<2.0
Methyl Isobutyl Ketone	µg/L	<10	<5.0	<5.0	<5.0
Methyl Ethyl Ketone (2-Butanone)	µg/L	<20	<10	<10	<10
Methyl t-Butyl Ether (MTBE)	µg/L	<1.0	<0.50	<0.50	<0.50
Styrene	µg/L	<0.80	<0.40	<0.40	<0.40
Tetrachloroethane 1,1,1,2-	µg/L	<1.0	<0.50	<0.50	<0.50
Tetrachloroethane 1,1,2,2-	µg/L	<0.80	<0.40	<0.40	<0.40
Tetrachloroethylene	µg/L	<0.40	<0.20	<0.20	<0.20
Toluene	µg/L	<0.40	<0.20	<0.20	<0.20
Trichloroethane 1,1,1-	µg/L	<0.40	<0.20	<0.20	<0.20
Trichloroethane 1,1,2-	µg/L	<0.80	<0.40	<0.40	<0.40
Trichloroethylene	µg/L	<0.40	<0.20	<0.20	<0.20
Vinyl Chloride	µg/L	<0.40	<0.20	<0.20	<0.20
m-Xylene & p-Xylene	µg/L	<0.40	<0.20	<0.20	<0.20
o-Xylene	µg/L	<0.40	<0.20	<0.20	<0.20
Total Xylene	µg/L	<0.40	<0.20	<0.20	<0.20
Trichlorofluoromethane (Freon 11)	µg/L	<1.0	<0.50	<0.50	<0.50

NOTES: 1) Blank indicates parameter not analysed.
2) Data presented in this table was provided by Meridian Brick.

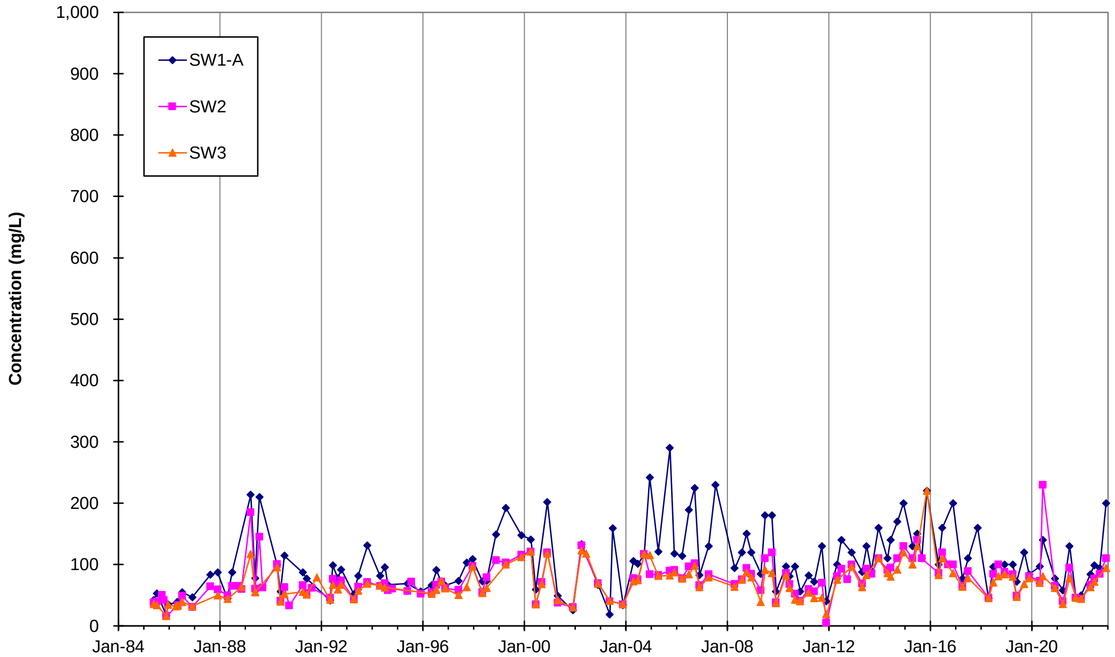
APPENDIX

D SURFACE WATER CHEMISTRY

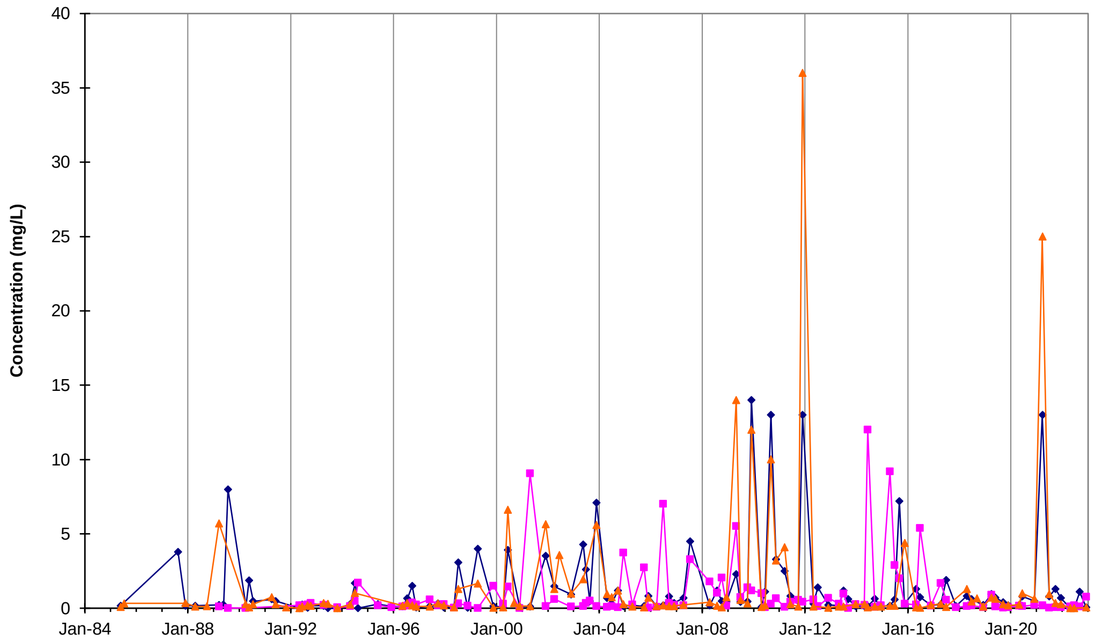
FIGURE D-1

TIME CONCENTRATION GRAPHS - Surface Water : Falcon Creek

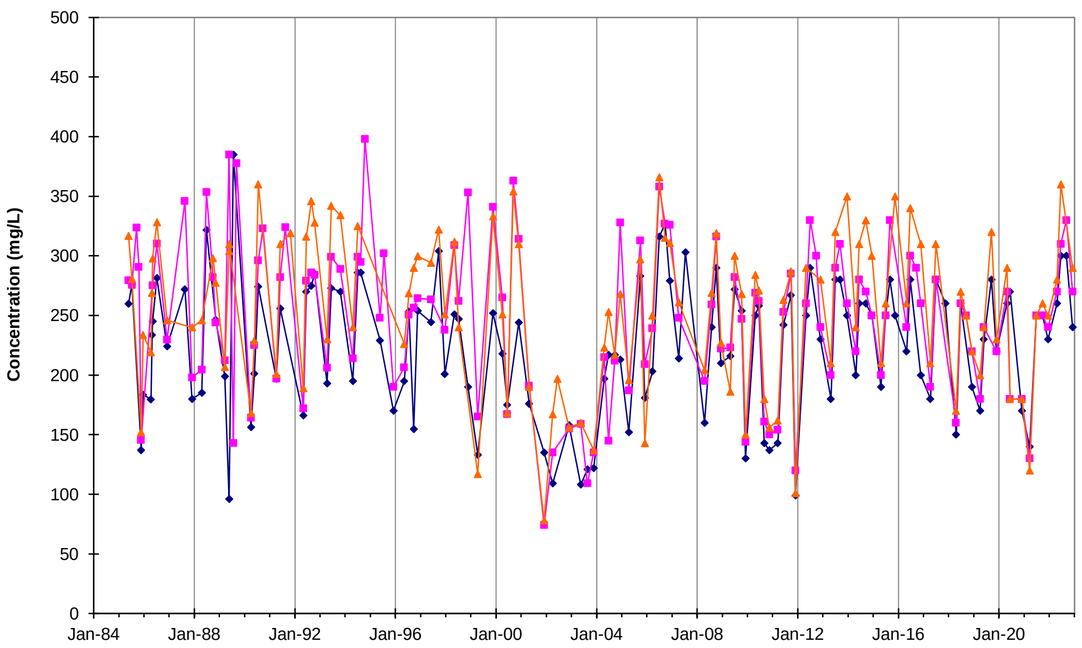
CHLORIDE



IRON



ALKALINITY



NITROGEN

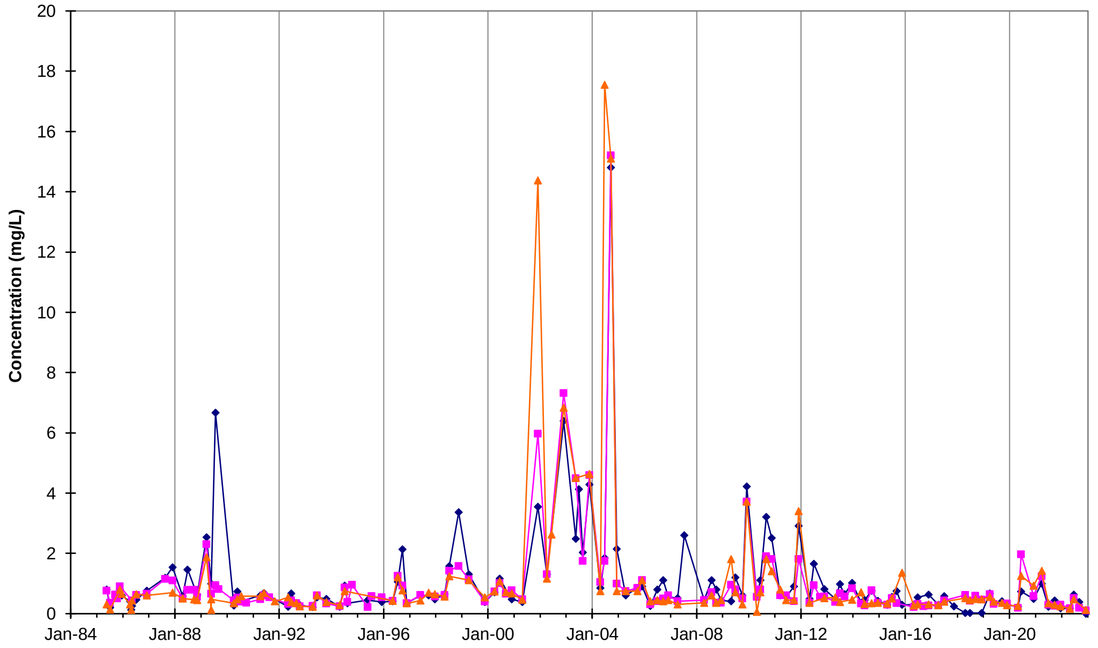
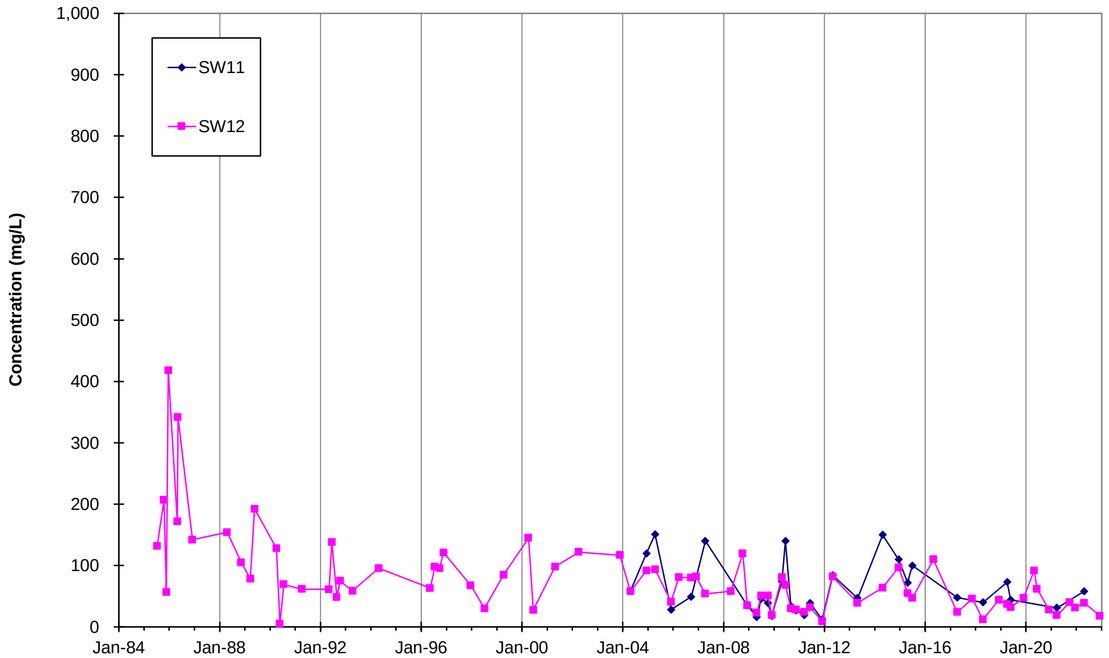


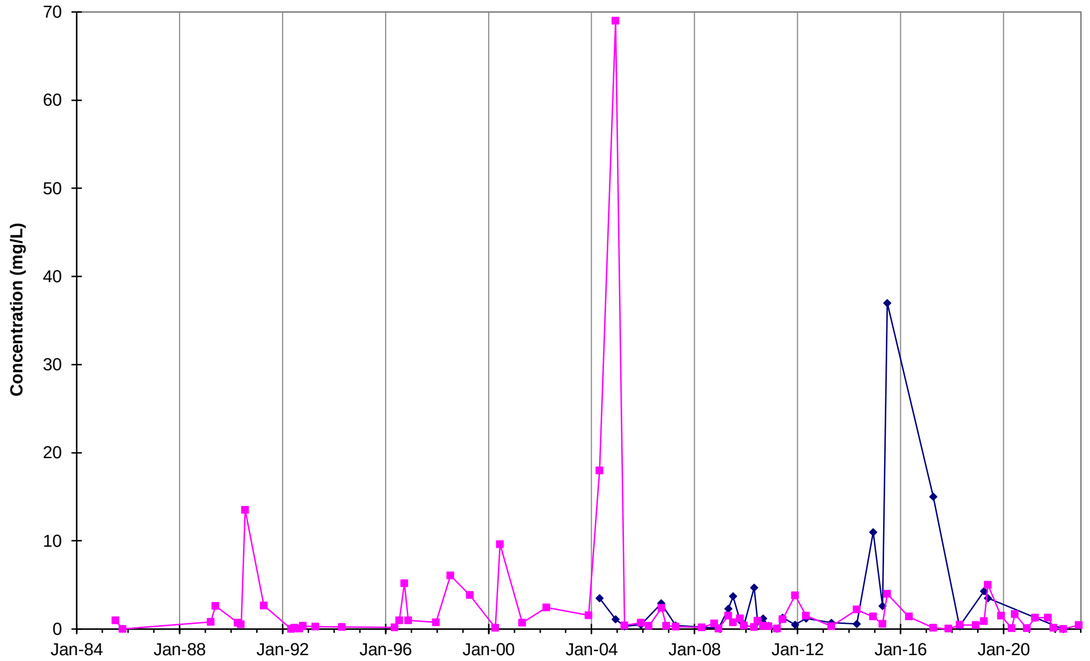
FIGURE D-2

TIME CONCENTRATION GRAPHS - Surface Water : Falcon Creek (Downstream)

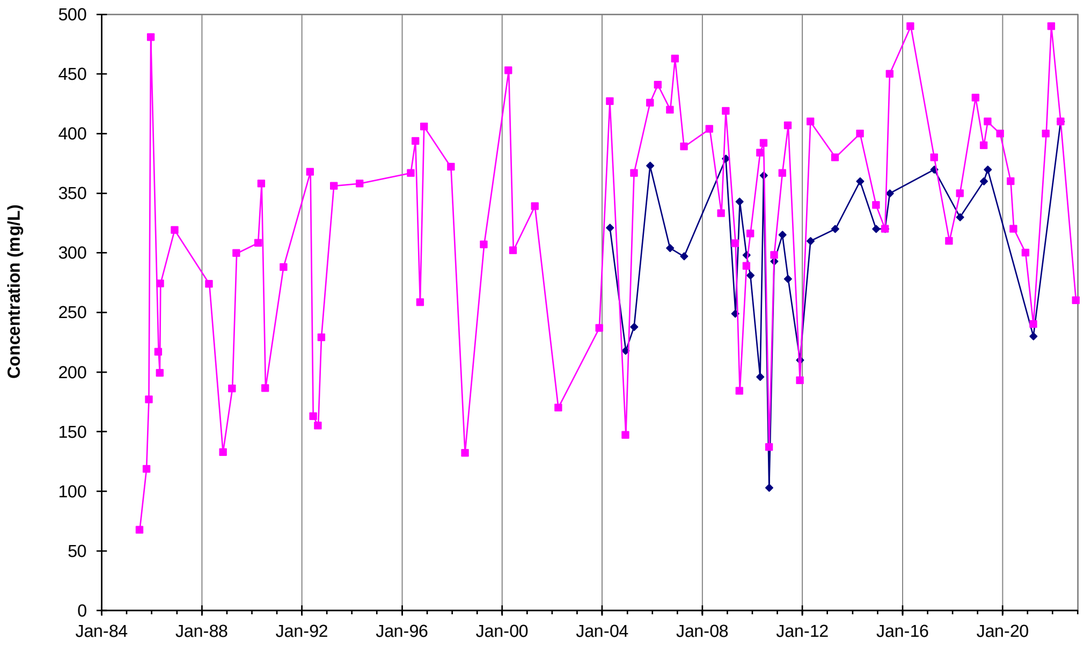
CHLORIDE



IRON



ALKALINITY



NITROGEN

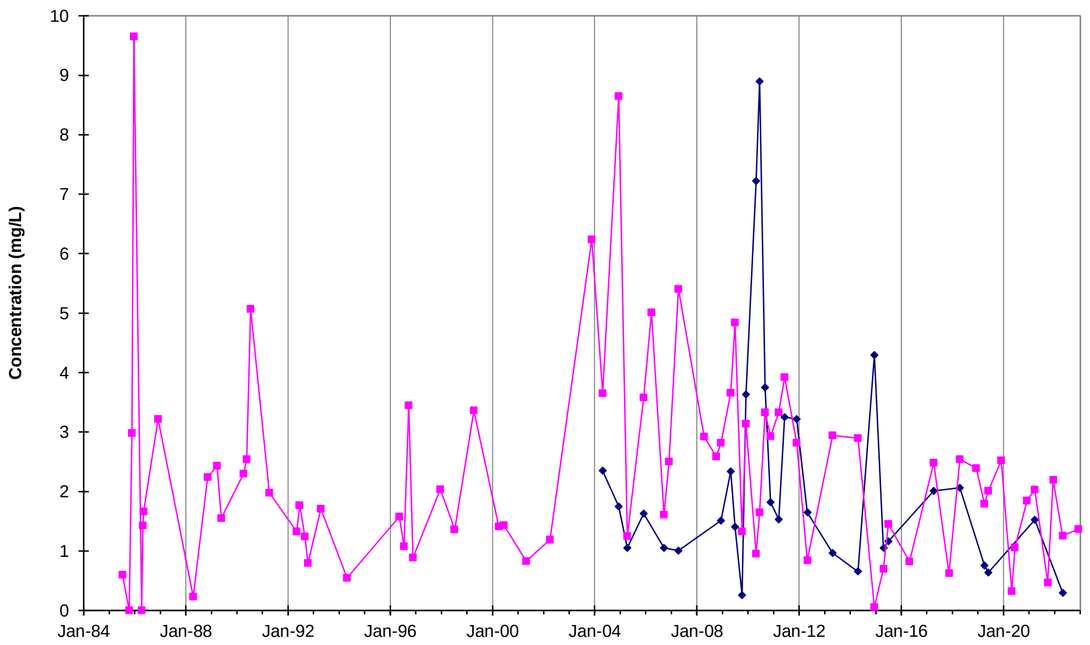
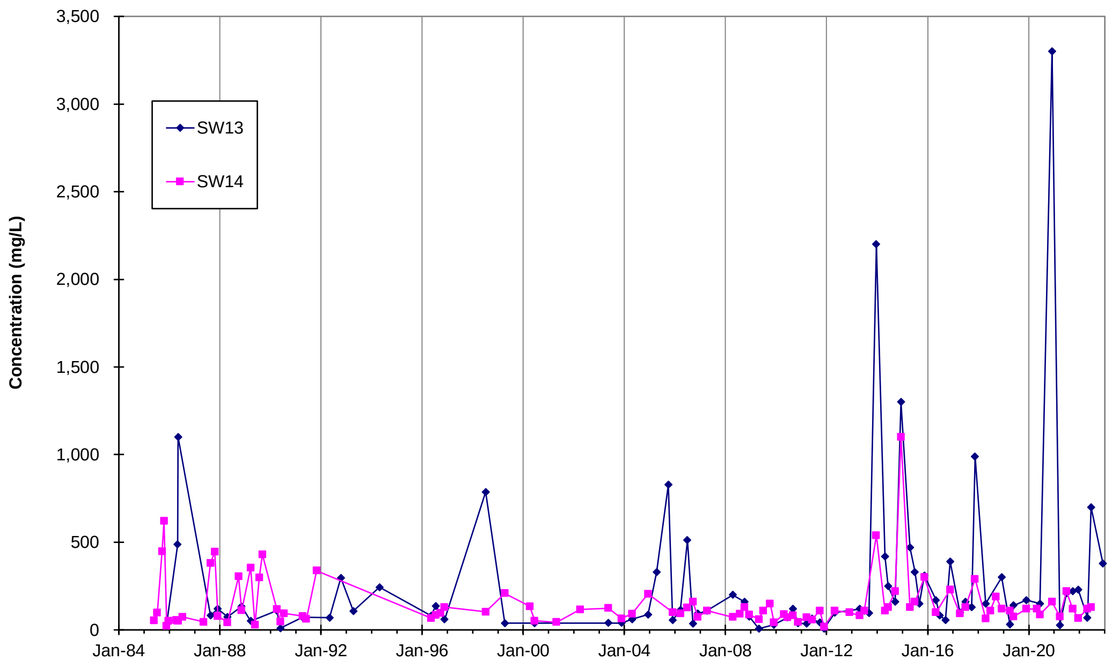


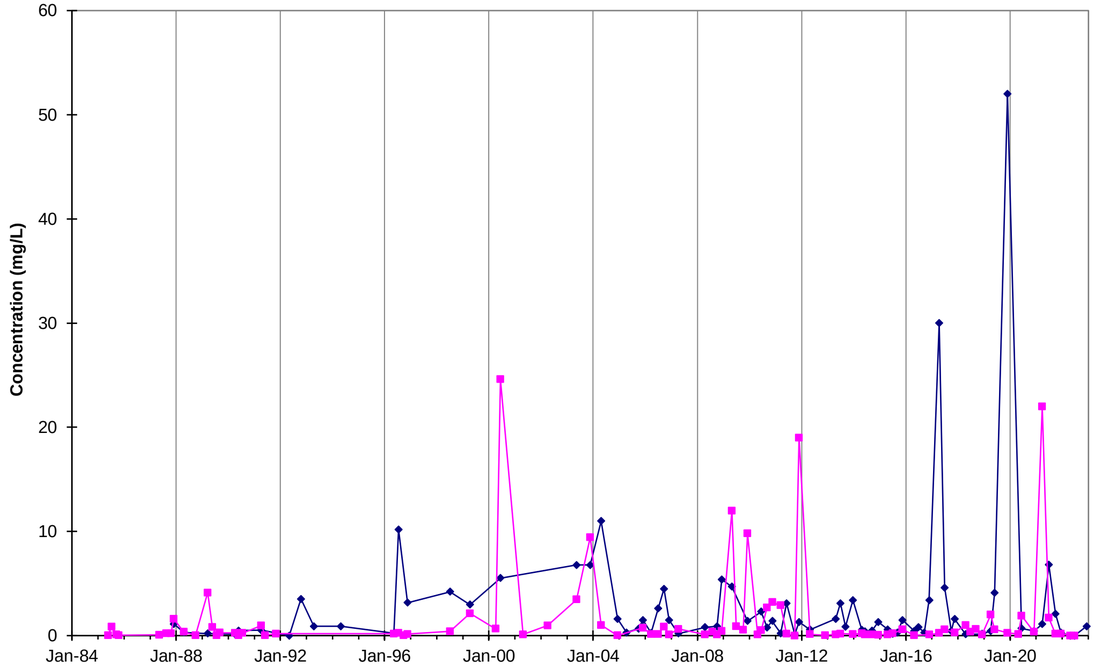
FIGURE D-3

TIME CONCENTRATION GRAPHS - Surface Water : Falcon Creek (Downstream)

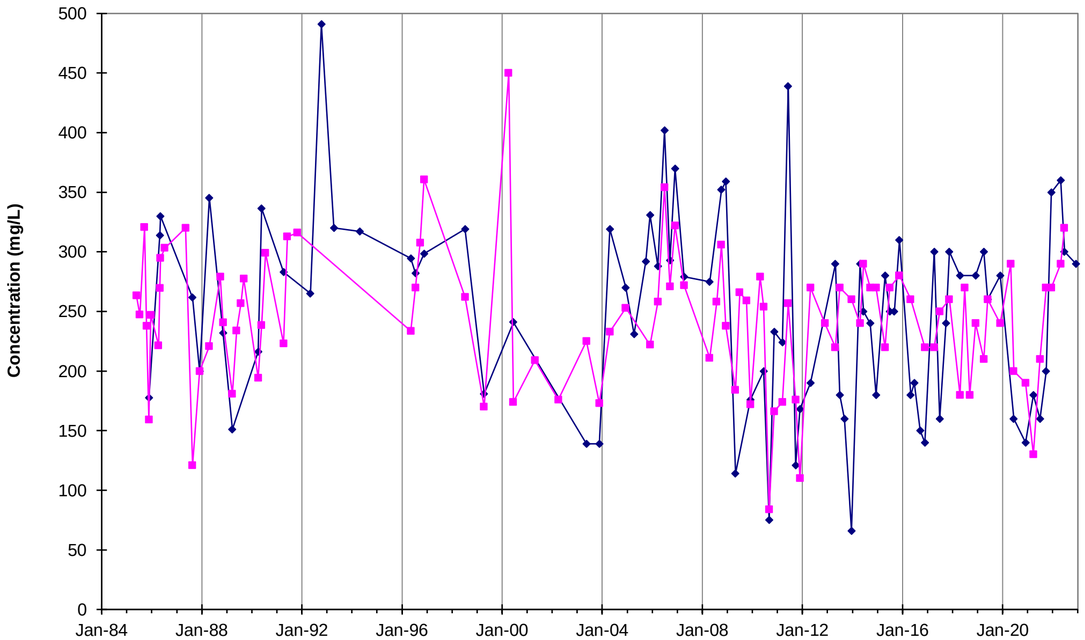
CHLORIDE



IRON



ALKALINITY



NITROGEN

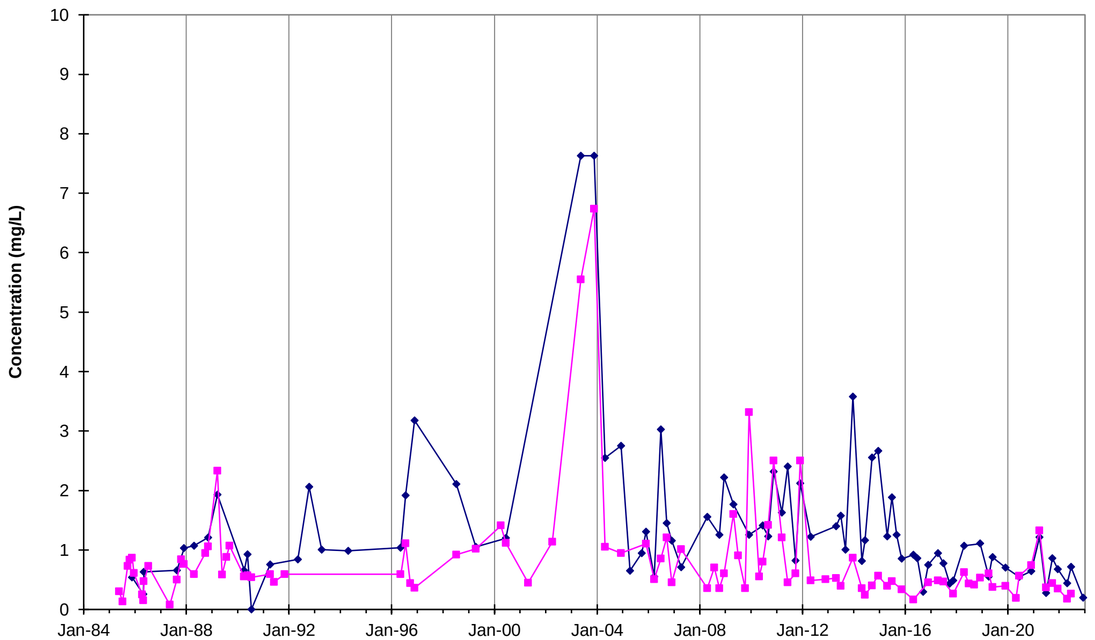
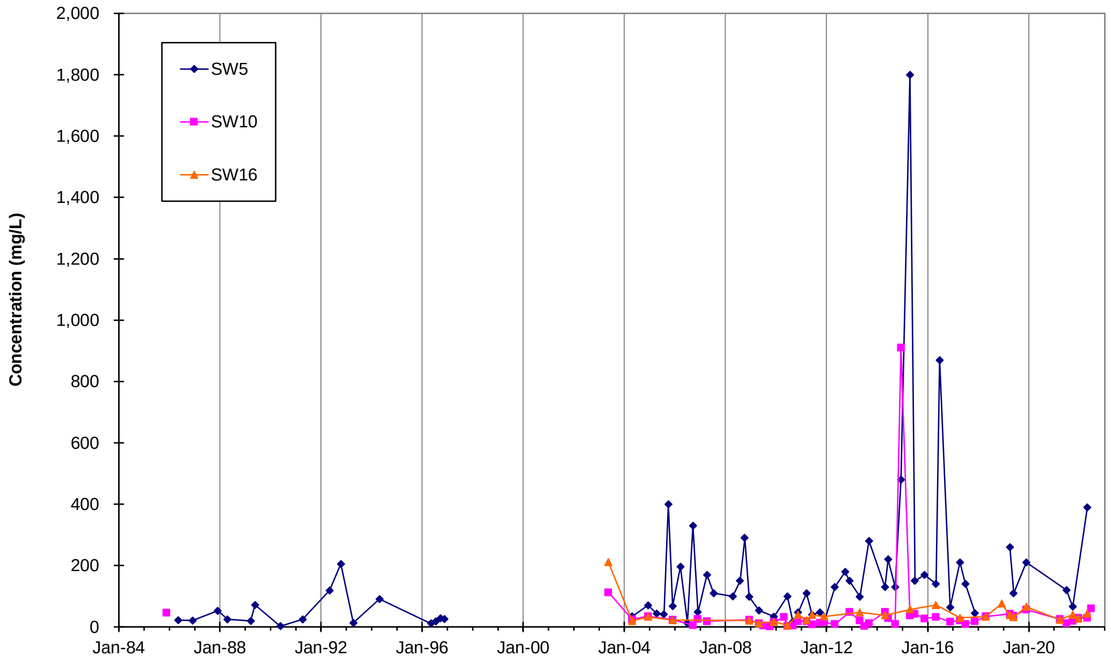


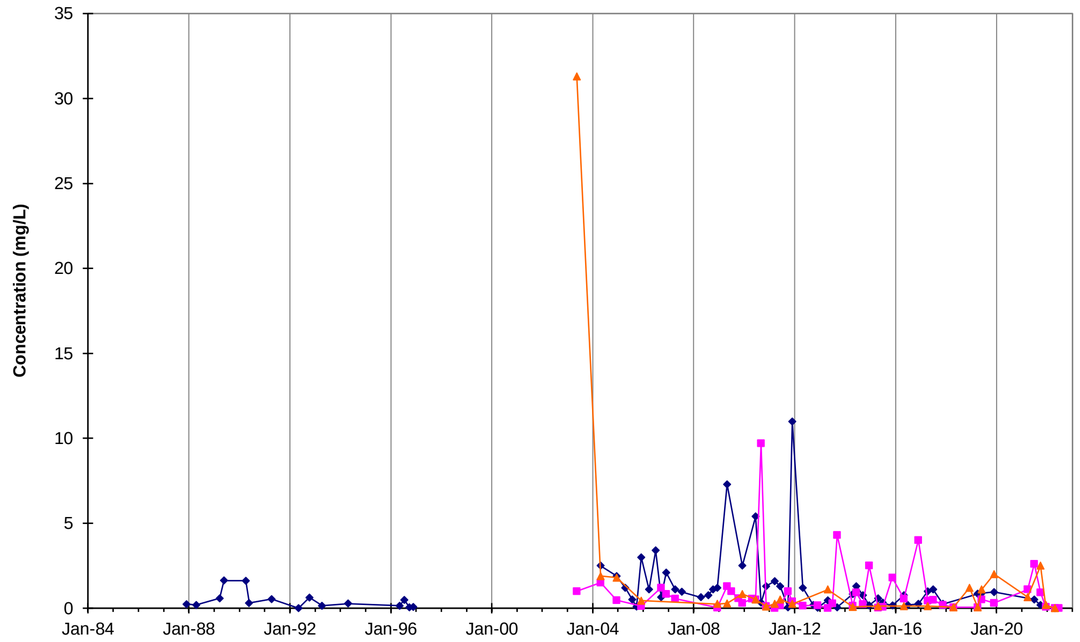
FIGURE D-4

TIME CONCENTRATION GRAPHS - Surface Water : Indian Creek

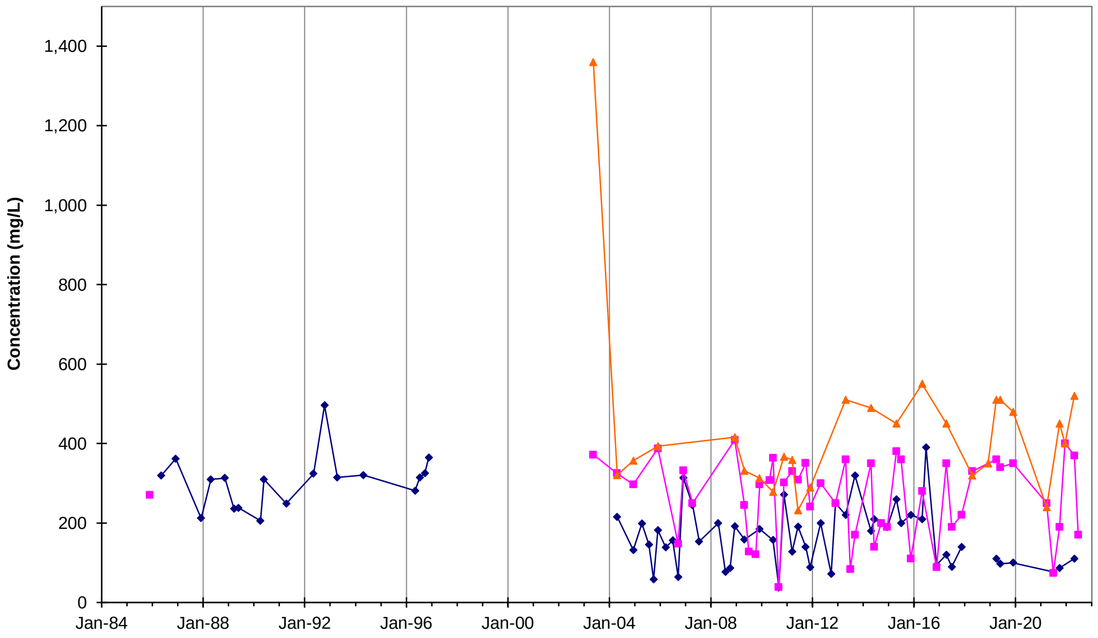
CHLORIDE



IRON



ALKALINITY



NITROGEN

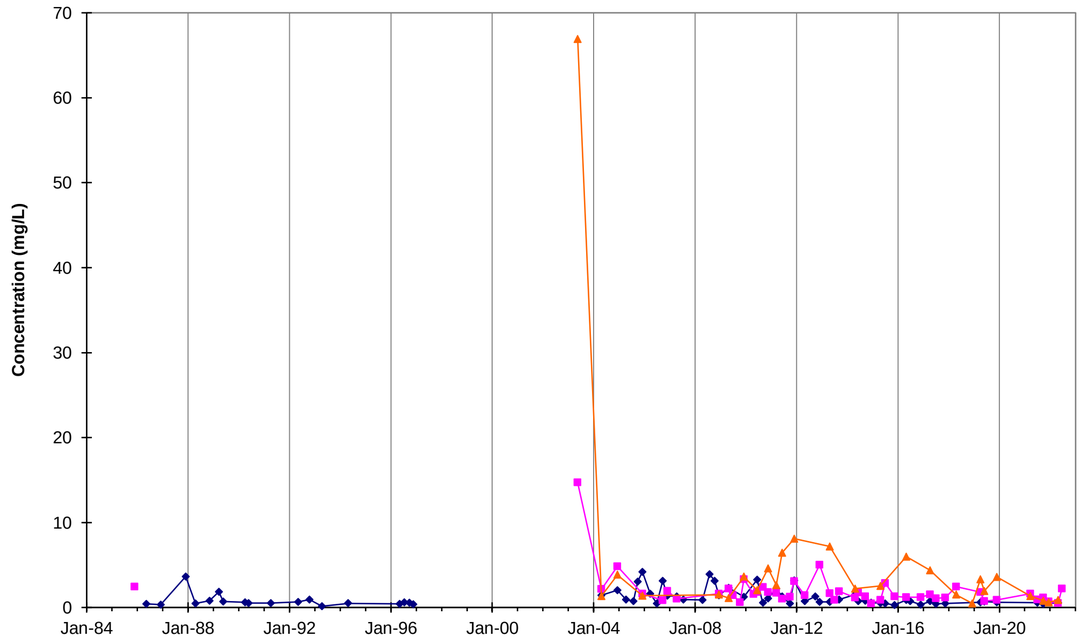


TABLE D-1
SURFACE WATER FIELD CHEMICAL RESULTS
BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

WATERSHED	MONITORING STATION	DATE	Temperature (°C)	pH (as units)	Conductivity (µS/cm)	Flow Rate (L/sec)
FALCON CREEK (West of Site)	SW1A	April 27, 2022	5.7	8.60	687	15.0
		June 22, 2022	18.8	7.85	1100	1.0
		September 6, 2022	16.1	7.22	906	NMF
		December 7, 2022	4.8	8.77	953	NMF
	SW2	April 27, 2022	5.9	8.60	692	19.3
		June 22, 2022	20.8	8.30	1175	2.9
		September 6, 2022	18.1	7.83	1011	NMF
		December 7, 2022	5.1	8.46	810	NMF
	SW3	April 27, 2022	5.8	8.78	669	36.2
		June 22, 2022	21.6	8.15	2705	1.4
		September 6, 2022		Dry		
		December 7, 2022	4.7	7.94	770	2.6
FALCON CREEK (South of Site)	SW11	April 27, 2022	6.4	8.21	913	NMF
		June 22, 2022		Dry		
		September 6, 2022		Dry		
		December 7, 2022		Dry		
	SW12	April 27, 2022	6.8	8.38	864	1.4
		June 22, 2022		Dry		
		September 6, 2022		Dry		
		December 7, 2022	5.6	8.01	729	NMF
	SW13	April 27, 2022	6.8	8.06	826	NMF
		June 22, 2022	21.4	7.50	1775	NMF
		September 6, 2022		Dry		
		December 7, 2022	7.4	8.62	2069	NMF
	SW14	April 27, 2022	7.8	8.80	813	61.7
		June 22, 2022	23.3	8.14	1180	2.2
		September 6, 2022		Dry		
		December 7, 2022		Dry		
INDIAN CREEK	SW5	April 27, 2022	10.1	8.20	1375	NMF
		June 22, 2022		Dry		
		September 6, 2022		Dry		
		December 7, 2022		Dry		
	SW10	April 27, 2022	6.9	8.51	733	NMF
		June 22, 2022	13.0	7.55	1565	NMF
		September 6, 2022		Dry		
		December 7, 2022		Dry		
	SW16	April 27, 2022	5.6	8.55	973	NMF
		June 22, 2022		Dry		
		September 6, 2022		Dry		
		December 7, 2022		Dry		

NOTES: 1) "-" - Dry condition. No sample obtained.
2) NMF - No measureable flow, but sample obtained

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW1-A	May-85	8.11	669	42	260	316	0.40	<0.05	<1	0.40	0.005	0.0	0.16		0.04		0.4	0.5
	Jul-85	8.13	696	53	276	321				0.20	0.010	12.9					0.6	0.8
	Nov-85	8.08	381	17	137	169	0.30	<0.05	<1	0.50	<0.005	0.0			0.06		0.2	0.3
	Dec-85	8.20	528	35	183	238	0.30	<0.05	<1	0.30	<0.005	0.0			0.02		0.6	0.6
	Apr-86	8.50	483		180	223		<0.05	<1	0.30	0.080	5.8					0.4	0.3
	Apr-86	8.53	577	39	234	274	<0.20	<0.05	<1	<0.05	0.005	14.4			<0.02		0.8	0.7
	May-86	8.52	596	39	245	286	0.20	1.35	97	0.05	0.010	4.3			0.20		0.6	0.3
	Jul-86	8.24	723	55	282	315	0.40	<0.05	<1	0.05	0.015	59.4			0.10		1.2	4.0
	Dec-86	8.16	642	47	224	280	0.30	0.15	3	0.45	0.010				0.05		0.6	
	Aug-87	8.58	660	84	272	373	0.24			0.94	<0.02	200	3.80		0.12		<0.5	3.9
	Dec-87	8.30	410	87	180	248	<0.05	<0.01	<1	1.50	<0.02	4.0	0.16		<0.02		1.9	<1
	Apr-88	8.17	495	45	185	227	0.40	0.01	<1	0.16	0.020	5.0	0.16		0.04		0.5	1.0
	Jun-88	8.01	606	88	322	392	0.94	<0.02	<1	0.51	<0.02	65.6			0.21		<0.5	<1
	Nov-88	7.99	627		246	294	0.38	<0.01	<1	0.23	<0.02	23.3						<1
	Mar-89	8.13	1140	214	199	334	1.33	0.05	1	1.19	0.020	2.0	0.22		0.05	101	<2.0	0.5
	May-89	8.33	699	78	96	153	0.55	<0.01	<1	0.44	<0.02	9.2	<0.48		0.11		6.0	0.3
	Jul-89	8.38	1250	210	385	562	6.30	0.40	30	0.34	0.030	983	8.00		0.79	46	7.0	1.5
	Apr-90	8.18	617	100	156	210	0.15	0.05	2	<0.2	0.020	4.0	0.14		0.08	53	1.0	0.3
	May-90	8.29	647	56	201	245	0.62	0.05	2	<0.2	0.020	68.4	1.86		0.20	38	2.0	0.5
	Jul-90	8.17	862	114	274	369	0.29	0.05	2	<0.2	0.020	12.0	0.47		0.09	49	1.7	1.7
	Apr-91	8.35	564	87	197	252	0.53	<0.05	<1	<0.1	0.020	22.8	0.60		0.24	44	<1.0	<0.5
	Jun-91	8.29	1000	77	256	330	0.46	<0.05	<1	0.20	0.020	32.0	0.48			36	<2.0	2.0
	May-92	8.35	580	41	166	210	0.18	<0.05	<1	<0.1	<0.01	19.0	0.29		0.07	25	<2.0	<0.7
	Jun-92	8.19	852	99	270	380	0.46	<0.05	<1	0.20	<0.01	62.0	0.25		0.25	47	<2.0	<0.7
	Aug-92	8.34	756	78	275	510	0.29	<0.02	<1	<0.1	<0.01	14.9	<0.08		0.11	45	<2.0	<0.5
	Oct-92	8.30	818	92	285	350	0.18	<0.02	<1	0.10	<0.01	8.4	0.17		0.07	42	<2.0	<0.5
	Apr-93	8.42	512	52	193	230	0.20	<0.01	<1	<0.02	<0.01	9.2	0.16		<0.04	34	<2.0	<0.3
	Jun-93	8.31	778	82	273	350	0.27	0.01	<1	0.26	<0.01	12.0	0.18		0.12	41	<2.0	<0.3
	Oct-93	7.98	1030	131	270	390	0.48	<0.01	<1	<0.02	<0.01	51.2	0.30		0.17	77	2.3	1.8
	Apr-94	8.30	668	82	195	250	0.22	0.02	<1	<0.02	<0.01	2.0	0.26		0.05	42	<1.0	1.7
	Jul-94	8.28	878	96	286	360	0.48	<0.02	<1	0.44	<0.02	40.0	1.70		0.18	46	<1.0	0.9
	Aug-94	8.18	853	67	286	380	0.33	<0.02	<1	<0.02	<0.02	41.0	1.33		0.19	40	<1.0	1.1
	May-95	8.43	718	69	229	300	0.39	<0.03	<1	0.05	<0.01	<0.9	0.27		0.04	38	<2.0	0.8
	Dec-95	8.15	580	56	170	220	0.20	<0.03	<1	0.18	<0.009	<4.2	0.13		0.03	35	<1.0	<5.0
	May-96	8.24	626	66	195	229	0.26	0.04	1	<0.10	<0.20	5.4	0.13		0.03	40	<0.5	0.7
	Jul-96	8.03	832	91	253	335	0.37	<0.02	<1	0.59	<0.20	24.7	0.67		0.20	45	<0.5	1.5
	Sep-96	7.91	553	71	155	224	1.43	<0.02	<1	0.60	<0.20	335	1.50		<0.10	34	<0.5	2.7
	Nov-96	8.15	744	66	254	316	0.20	<0.02	<1	<0.10	<0.20	3.2	0.05		<0.05	38	<1.0	1.3
	May-97	8.26	672	74	244	297	0.30	0.04	1	0.20	<0.20	6.5	0.14		<0.05	39	<1.0	1.3
	Sep-97	8.25	786	103	304	339	0.20	<0.02	<1	0.30	<0.20	17.4	0.31		0.07	44	<1.0	0.3
	Dec-97	8.23	778	109	201	285	0.28	0.05	1	<0.20	<0.20	2.7	0.06		<0.05	57	<1.0	0.9
	May-98	8.24	716	73	251	296	0.25	<0.02	<1	0.30	<0.20	9.0	0.07	2.5	0.04	40	<1.0	1.8
	Jul-98	8.15	746	73	247	311	0.78	0.04	2	0.70	<0.20	73.0	3.08	5.5	0.16	45	<1.0	2.3
	Nov-98	7.51	1154	149	190	518	1.07	0.05	<1	2.20	<0.20	4.0	0.03	5.0	0.12	61	<1.0	9.0
	Apr-99	7.95	891	192	133	220	0.80	<0.02	<1	0.40	<0.20	94.0	4.01	4.0	0.17	104	<1.0	1.5
	Nov-99	7.83	1021	148	252	363	0.18	0.02	<1	<0.20	<0.20	8.0	0.15	2.9	0.04	72	<1.0	1.3

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
' * - Indicates associated value is suspected to be anomalous.
2) Blank indicates parameter not analysed.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW1-A	Apr-00	8.21	888	141	218	314	0.31	<0.03	<1	<0.4	<0.4	3	0.06	2.9	<0.002	73	<1.0	2.0
	Jun-00	8.13	512	59	175	200	0.56	0.03	1	0.50	<0.2	146	3.91	2.7	0.23		<1.0	<0.5
	Nov-00	7.95	1083	202	244	386	0.18	<0.03	<1	0.20	<0.2	4	0.11	3.8	0.05	97	<1.0	0.8
	Apr-01	7.62	655	49	176	246	0.19	<0.03	<1	<0.2	<0.2	6	0.10	2.0	0.02	54	<1.0	1.4
	Nov-01	8.02	550	25	135	254	1.45	<0.03	<1	2.00	<0.2	60	3.53	6.5	0.21	17	<1.0	1.6
	Apr-02	8.00	827	133	109	244	0.71	<0.03	<1	<0.2	<1.0	25	1.47	2.0	0.06	70	<1.0	<0.5
	Nov-02	8.01	834	67	158	378	0.99	0.04	<1	5.30	<0.2	15	0.93	11.0	0.13	41	<1.0	1.2
	May-03	8.22	344	19	108	159	2.29	0.11	3	<0.2	<0.2	53	4.29	6.0	0.24	11	<1.0	2.3
	Jun-03	8.10	1061	159	686	284	1.13	0.15	7	2.90	<0.2	89	2.61	8.8	0.35	101	<1.0	1.5
	Aug-03	7.80	* 15760	* 4640	121	* 5396	0.93	0.18	5	<0.2	<2.0	75	0.47	43.0	0.08	* 1420	<1.0	1.3
	Nov-03	8.04	537	34	122	230	1.79	<0.03	<1	2.40	<0.2	96	7.10	10.5	0.47	19	<1.0	<0.5
	Apr-04	8.35	742	106	197	250	0.70	<0.05	<1	0.10	<0.1	19	0.70	2.1	<0.02	58	<1.0	<3
	Jun-04	8.22	1150	101	217	499	1.30	0.18	10	<1	<0.1	4	0.29		0.03	66	<1.0	<4
	Sep-04	8.16	1010	117	217	349	0.80	<0.05	<1	13.90	0.100	23	1.20	16.0	0.05	74	1.0	4.0
	Dec-04	8.21	1180	242	213	360	0.60	<0.05	<1	1.50	<0.1	9	0.15	3.2		120	<1.0	<2
	Apr-05	8.30	730	121	152	217	0.50	0.06	2	<0.1	<0.1	2	0.20	2.3	<0.02	71	<1.0	<2
	Sep-05	8.31	1470	290	283		0.40	<0.05	<1	0.30	<0.3	7	0.13	4.0	0.04	160	<1.0	<2
	Dec-05	8.25	744	118	181	220	0.60	<0.05	<1	0.30	<0.01	10	0.82	3.2	0.06	80	<1.0	<2
	Mar-06	8.40	795	114	203	230	0.20	<0.05	<1	<0.1	<0.01	6	0.15	2.4	0.01	79	<1.0	<2
	Jun-06	8.30	1300	189	316	390	0.50	0.07	3	0.30	<0.01	2	0.18	3.3	0.04	120	<1.0	<2
	Sep-06	8.30	1370	225	327	360	0.40	0.05	2	0.70	<0.01	51	0.79	3.3	0.08	130	<1.0	<2
	Nov-06	8.30	765	83	279	270	0.50	0.09	2	<0.1	<0.01	9	0.35	2.5	0.03	55	<1.0	<2
	Apr-07	8.40	853	130	214	260	0.50	0.06	2	<0.1	<0.01	19	0.70	2.7	0.03	81	<1.0	<2
	Jul-07	8.30	1300	230	303	400	2.30	0.11	8	0.30	<0.01	520	4.50	4.4	0.41	130	<1.0	<2
	Apr-08	8.30	658	94	160	180	0.40	<0.05	<1	<0.1	<0.01	11	0.18	2.0	0.02	61	<1.0	<2
	Jul-08	8.20	862	120	240	270	0.80	<0.05	<1	0.30	<0.01	28	1.20	3.0	<0.100	74	<1.0	<2
	Oct-08	8.40	1020	150	290	310	0.60	<0.05	<1	0.20	<0.01	17	0.49	3.0	0.05	84	<1.0	<2
	Dec-08	8.20	803	120	210	250	0.40	<0.05	<1	<0.1	<0.01	31	0.43	3.0	0.05	61	<1.0	<2
	Apr-09	8.00	683	85	216	220	0.30	<0.05	<1	0.10	<0.01	83	2.30	2.0	0.13	50	<1.0	<2
	Jun-09	8.30	1110	180	272	300	0.90	0.08	5	0.30	<0.01	12	0.42	3.0	0.06	94	<1.0	<2
	Oct-09	8.30	1140	180	254	310	0.20	<0.05	<3	0.40	<0.01	<10	0.45	4.0	0.05	110	<1.0	<2
	Dec-09	8.00	506	56	130	150	2.20	<0.05	<1	2.00	0.020	140	14.00	6.0	0.65	38	<1.0	<2
	Apr-10	8.50	796	97	250	290	0.50	<0.05	<1	<0.1	<0.01	<10	0.08	3.0	0.01	60	<1.0	<2
	Jun-10	8.30	774	81	258	270	0.60	0.08	4	0.50	<0.01	27	1.10	3.0	0.07	55	<1.0	<2
	Sep-10	8.10	660	97	143	180	1.80	<0.05	<1	1.40	0.010	320	13.00	5.0	0.45	68	<1.0	3.0
	Nov-10	8.09	502	56	137	160	2.00	<0.05	<1	0.50	<0.01	49	3.30	4.0	0.27	37	4.0	3.0
	Mar-11	8.09	582	82	143	180	0.50	<0.05	<1	0.10	<0.01	73	2.50	2.0	0.11	50	<1	<2
	Jun-11	8.43	718	72	242	250	0.50	<0.05	<1	<0.1	<0.01	24	0.83	3.0	0.10	56	<1	<2
	Sep-11	8.23	1020	130	267	370	0.50	<0.05	<1	0.40	<0.01	280	0.48	4.0	0.06	72	<1	<2
	Nov-11	7.84	395	40	99	120	1.90	<0.05	<1	1.00	<0.01	390	13.00	5.0	0.62	30	4.0	<2
	Apr-12	8.20	860	100	250	300	0.43	<0.05	<1	<0.10	<0.010	<10	0.29	2.0	0.55	59	<1	<2.0
	Jun-12	8.17	1100	140	290	360	1.40	<0.05	<1	0.24	0.014	40	1.40	4.0	0.10	71	<1	<2.0
	Nov-12	8.15	1000	120	230	380	0.76	0.09	2	<0.1	<0.01	<10	0.22	2.0	0.02	73	<1	<2.0
	Apr-13	8.39	720	88	180	250	0.43	0.06	3	<0.1	<0.01	10	0.16	2.0	0.02	55	<1	<2
	Jun-13	8.25	990	130	280	350	0.59	0.06	3	0.38	<0.01	44	1.20	3.0	0.07	76	<1	<2
	Sep-13	8.16	890	90	280	370	0.46	0.05	2	0.18	<0.01	170	0.62	5.0	0.07	56	<1	<2
	Dec-13	8.05	1200	160	250	400	0.97	0.08	1	<0.1	<0.01	<10	0.13	3.0	0.03	90	2.2	<2

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
2) Blank indicates parameter not analysed.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW1-A	Apr-14	8.30	840	110	200	270	0.30	<0.05	<1	<0.1	<0.01	<10	0.14	3.0	<0.1	63	<1	<2
	Jun-14	8.34	1000	140	260	340	0.24	<0.05	<1	0.20	<0.01	35	0.14	3.0	<0.1	82	<1	<2
	Sep-14	8.32	1200	170	260	410	0.56	<0.05	<1	0.20	<0.01	<10	0.63	4.0	<0.1	100	<1	<2
	Dec-14	8.10	1300	200	250	400	0.37	<0.05	<1	<0.1	<0.01	<10	0.12	4.0	<0.1	110	1.0	<2
	Apr-15	8.27	890	130	190	300	0.24	<0.050	<1	<0.1	<0.01	21	0.16	3.0	0.04	73	<1	<2
	Jun-15	8.31	1000	150	250	360	0.50	<0.050	<1	<0.1	<0.01	29	0.58	3.0	0.08	81	<1	<2
	Sep-15	8.21	950	110	280	360	0.51	<0.050	<1	0.23	<0.01	740	7.20	6.0	0.30	58	<1	<2
	Nov-15	8.03	1300	220	250	400	0.24	<0.050	<1	<0.1	<0.01	110	0.28	4.0	0.10	110	<1	<2
	Apr-16	8.39	810	100	220	280	0.24	<0.050	<1	<0.1	<0.01	<10	1.30	3	0.05	65	<1	2.0
	Jun-16	8.27	1200	160	280	380	0.24	<0.050	<1	0.30	<0.01	33	0.74	4	0.07	96	<1	<2.0
	Nov-16	7.86	1100	200	200	350	0.36	<0.050	<1	<0.5	<0.05	12	0.19	6	0.70	98	2.4	17.0 *
	Apr-17	8.21	670	77	180	220	0.24	<0.050	<1	<0.1	<0.01	<10	0.25	2	0.03	50	1.2	<2
	Jun-17	8.46	930	110	280	320	0.28	<0.050	<1	0.30	<0.01	46	1.90	3	0.10	75	<1	<2
	Nov-17	8.37	1100	160	260	340	0.19	<0.050	<1	<0.1	<0.01	10	0.14	4	0.09	83	<2	<2
	Apr-18	8.19	580	45	150	170	0.21	<0.050	<1	0.37	<0.01	22	0.82	2	0.06	46	<1	<2
	Jun-18	8.27	810	96	260	280	0.29	<0.050	<1	0.25	<0.01	35	0.61	3	0.09	62	<1	<2
	Dec-18	8.24	780	100	190	250	0.16	0.05	1	0.37	<0.01	17	0.21	3	0.04	60	<1	<2
	Apr-19	8.27	700	100	170	200	0.27	<0.050	<1	0.39	<0.010	36	0.96	2	0.05	52	<1	<2
	May-19	8.45	700	72	230	240	0.20	<0.050	<1	0.13	<0.010	21	0.71	3	0.06	50	<1	<2
	Sep-19	8.40	990	120	280	350	0.15	<0.050	<1	0.25	<0.010	24	0.41	4	0.07	70	<1	<2
	Nov-19	8.23	770	84	220	300	0.24	<0.050	<1	<0.10	<0.010	<10	0.19	3	0.05	52	<1	<2
	Apr-20	8.41	840	97	260	290	0.18	<0.050	<1	<0.10	<0.010	<10	0.20	3	0.02	60	<1	<2
	Jun-20	8.30	990	140	270	310	0.32	<0.050	<1	0.41	<0.010	23	0.80	4	0.08	90	<1	<2
	Dec-20	8.15	690	77	170	220	0.23	0.05	<1	0.26	<0.010	11	0.48	3	0.09	44	<1	<2
	Mar-21	8.14	500	58	140	150	0.35	<0.050	<1	0.65	<0.010	470	13	4	0.46	37	<1	3
	Jun-21	8.37	950	130	250	290	0.23	<0.050	<1	<0.10	<0.010	19	0.79	5	0.087	84	<1	<2
	Sep-21	8.48	650	45	250	280	0.31	0.057	4	0.13	<0.010	49	1.3	4	0.09	32	<1	<2
	Dec-21	8.32	640	50	230	250	0.18	<0.050	<1	<0.10	<0.010	30	0.68	3	0.053	38	<1	<2
	Apr-22	8.44	770	84	260	310	0.18	<0.050	<1	<0.10	<0.010	10	<0.01	2.4	<0.01	49	<1	<2
	Jun-22	8.27	920	99	300	370	0.30	0.067	4	0.33	<0.010	170	<1	3.8	0.15	61	<1	<2
	Sep-22	8.38	900	94	300	380	0.17	0.12	<1	0.22	<0.010	37	1.1	6	0.093	53	<1	<2
	Dec-22	8.04	1200	200	240	420	<0.10	<0.050	<1	<0.10	<0.010	<10	0.06	4	0.04	90	1.0	<2

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.

* - Indicates associated value is suspected to be anomalous.

2) Blank indicates parameter not analysed.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW2	May-85	8.13	714	38	280	335	0.20	<0.05	<1	0.55	0.010	0.0	0.11		0.04		0.4	0.3
	Jul-85	8.15	678	39	275	328		<0.05	<1	0.30	0.030	9.1					8.0	0.8
	Sep-85	7.98	883	51	324	420	0.60	<0.05	<1	<0.05	<0.005	23.2	<0.03		0.02		0.4	0.4
	Oct-85	7.84	834	42	291	383	0.30	<0.05	<1	0.20	<0.005	0.0	<0.03		0.12		0.2	0.6
	Nov-85	8.06	397	16	146	177	0.40	<0.05	<1	0.50	<0.005	0.0			0.08		0.2	0.3
	May-86	8.55	646	34	275	326	0.40	0.20	14	<0.05	0.010	5.1			0.04		0.8	0.3
	Jul-86	8.13	785	49	310	374	0.20	0.15	7	0.40	0.015	25.1			0.08		1.8	1.8
	Dec-86	8.25	570	31	230	272	0.20	0.15	3	0.45	0.005				0.05		0.6	
	Aug-87	8.32	700	65	346	407	0.51			0.54	<0.2	13.0	<0.4		<0.02		<0.5	8.4
	Dec-87	8.25	370	60	198	268	<0.05	<0.01	<1	1.02	0.050	4.5	0.18		<0.02		1.4	<1.0
	Apr-88	8.33	501	50	204	264	0.30	0.17	6	0.18	0.020	3.5	0.23		0.04		0.5	1.0
	Jun-88	8.11	647	65	353	431	0.48	0.02	<1	0.30	<0.02	11.6	0.34		0.10		<0.5	<1.0
	Sep-88	7.80	564	65	282		0.33	0.03	<1	0.45	<0.02	10.8	0.22				1.0	<1.0
	Nov-88	7.99	454	60	244	318	0.37	<0.01	<1	0.18	<0.02	17.5					1.8	
	Mar-89	8.11	960	185	212	332	1.33	0.03	<1	0.96	<0.02	4.0	<0.10		0.08	81	4.0	0.4
	May-89	8.36	650	61	385	508	0.40	<0.01	<1	0.25	<0.02	2.8	<0.25		0.05		<2.0	0.3
	Jul-89	8.28	1040	145	143	534	0.70	0.40	24	0.20	0.040	61.2	0.48		0.24	36	<2.0	0.3
	Sep-89	7.49	910	63	378	297	0.50	0.14	1	0.30	<0.02	18.7	1.72		0.13	38	<2.0	3.2
	Apr-90	8.20	557	101	164	216	0.22	0.05	1	0.20	0.020	8.4	0.20		0.09	36	1.0	0.3
	May-90	8.24	594	41	225	266	0.31	0.05	2	0.20	0.020	11.2	0.06		0.10	27	2.0	0.5
	Jul-90	8.13	844	63	296	366	0.28	0.05	2	<0.20	0.020	6.4	0.11		0.13	37	1.7	2.5
	Sep-90	7.97	6560	33	323	384	0.30	<0.05	<1	<0.10	<0.10	3.0	0.18		0.08	36	<2.0	<2.5
	Apr-91	8.45	497	67	197	253	0.41	<0.05	<1	<0.10	0.020	14.0	0.37		0.11	29	<1.0	<0.5
	Jun-91	8.27	1060	54	282	370	0.50	<0.05	<1	0.10	0.010	13.6	0.24		0.88	35	<2.0	2.2
	Aug-91	8.18	916	62	324	430	0.32	<0.05	<1	0.20	0.020	16.0	0.59		0.12	42	<2.0	4.0
	May-92	8.31	628	46	172	230	0.21	0.07	3	0.10	<0.01	8.0	0.20		0.06	26	<2.0	<0.7
	Jun-92	8.06	835	77	279	390	0.33	<0.05	<1	0.10	<0.01	6.8	0.28		0.09	41	<2.0	<0.7
	Aug-92	8.24	780	66	286	370	0.29	<0.02	<1	<0.1	<0.01	15.6	<0.08		0.20	37	<2.0	<0.5
	Oct-92	8.17	838	74	284	360	0.19	<0.02	<1	<0.1	<0.01	3.2	0.33		0.09	39	<2.0	<0.5
	Apr-93	8.44	549	44	206	250	0.16	<0.01	<1	0.09	<0.01	4.0	0.16		0.11	30	<2.0	<0.3
	Jun-93	8.23	826	64	299	380	0.32	0.03	1	0.28	<0.01	15.2	0.21		0.14	38	<2.0	<0.3
	Oct-93	7.96	857	71	289	410	0.32	<0.01	<1	<0.02	<0.01	6.8	1.51		0.23	46	<2.0	1.4
	Apr-94	8.38	671	65	214	280	0.23	0.04	2	<0.02	<0.01	6.0	0.29		0.08	35	<1.0	1.5
	Jul-94	8.29	858	69	299	370	0.60	0.02	1	0.25	<0.02	28.0	1.46		0.18	40	<1.0	0.8
	Aug-94	8.05	837	58	295	380	0.36	0.04	1	<0.02	<0.02	37.0	1.64		0.21	35	<1.0	0.8
	Oct-94	7.54	929	61	398	430	0.89	0.17	1	0.05	<0.02	88.0	9.06		0.60	37	7.0	3.3
	May-95	8.52	739	57	248	330	0.19	<0.03	<1	<0.04	<0.01	<0.9	<0.25		0.06	32	<2.0	0.5
	Jul-95	8.27	934	72	302	410	0.29	0.04	2	0.28	0.010		0.62		0.12	39	<2.0	0.8
	Dec-95	8.24	610	52	190	240	0.22	<0.03	<1	0.31	<0.009	<4.2	0.10		0.04	32	<1.0	<5.0
	May-96	8.28	645	55	206	250	0.28	0.03	1	<0.10	<0.20	6.9	0.15		0.03	34	<0.5	0.8
	Jul-96	7.86	762	67	251	330	0.48	0.04	<1	0.67	<0.20	13.1	0.36		0.30	33	<0.5	2.2
	Sep-96	8.00	763	72	256	327	0.53	0.03	<1	0.30	<0.20	61.3	0.50		<0.10	33	<0.5	1.5
	Nov-96	8.14	768	62	264	340	0.20	<0.02	<1	<0.10	<0.20	2.7	0.13		<0.05	35	<1.0	2.2
	May-97	8.36	677	58	263	319	0.32	0.03	1	0.20	<0.20	4.9	0.08		<0.05	33	<1.0	1.1
	Dec-97	8.09	769	98	238	320	0.37	<0.02	<1	<0.20	<0.20	3.3	0.13		0.05	49	<1.0	1.0
	May-98	8.32	786	55	309	359	0.32	<0.02	<1	0.20	<0.20	4.0	0.07	3.6	0.06	37	<1.0	1.6
	Jul-98	8.19	771	79	262	313	0.82	0.04	2	0.50	<0.20	94.0	3.73	5.1	0.18	49	<1.0	2.9
	Nov-98	7.63	1219	107	353	593	1.38	0.04	<1	<0.20	<0.20	21.0	0.24	10.0	0.42	56	1.0	9.6
	Apr-99	8.04	690	103	165	264	0.64	<0.02	<1	0.40	<0.20	59.0	2.74	5.0	0.09	49	<1.0	1.3
	Nov-99	8.09	1145	116	341	520	0.20	0.12	3	<0.20	<0.20	2.0	0.03	4.8	0.04	62	<1.0	1.0

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
2) Blank indicates parameter not analysed.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW2	Apr-00	8.24	925	121	265	370	0.33	<0.03	<1	<0.4	<0.4	3	0.08	4.0	0.00	67	<1.0	1.2
	Jun-00	8.13	383	35	167	197	0.51	0.06	2	0.40	<0.2	154	7.02	5.6	0.26		<1.0	1.5
	Sep-00	8.18	847	71	363	470	0.36	<0.03	<1	0.20	<0.2	10	0.34	4.2	0.05	43	1.0	1.4
	Nov-00	8.03	989	120	314	485	0.28	<0.03	<1	0.40	<0.2	8	0.22	4.0	0.04	54	<1.0	0.7
	Apr-01	7.66	660	37	191	269	0.28	<0.03	<1	<0.2	<0.2	8	0.20	4.0	0.03	47	<1.0	1.9
	Nov-01	7.69	418	31	74	167	1.87	<0.03	<1	4.00	<0.2	71	3.29	8.0	0.36	13	<1.0	0.7
	Apr-02	8.10	831	131	135	248	0.70	<0.03	<1	<0.2	<1.0	32	1.78	3.0	0.06	69	<1.0	<0.5
	Nov-02	7.98	829	69	155	359	1.01	0.03	<1	6.20	<0.2	23	1.02	11.0	0.04	41	<1.0	1.3
	May-03	8.18	664	40	159	305	1.69	0.04	1	2.70	<0.2	28	2.06	7.0	0.16	25	<1.0	1.5
	Aug-03	7.86	* 14400	* 4040	109	* 4680	0.64	<0.03	<1	<0.2	<2.0	46	0.16	44.0	0.05	* 1350	<1.0	1.6
	Nov-03	7.91	592	35	135	256	1.49	<0.03	<1	3.00	<0.2	85	5.51	10.2	0.39	21	<1.0	0.8
	Apr-04	8.36	700	78	215	269	0.70	<0.05	<1	0.30	<0.1	16	0.74	2.6	<0.02	41	<1.0	<3
	Jun-04	8.42	927	76	145	393	1.20	<0.05	<1	<1	<0.1	38	1.40		0.04	60	<1.0	<4
	Sep-04	8.18	1010	117	212	351	1.10	<0.05	<1	14.00	0.100	27	1.20	16.0	1.11	73	1.0	<3
	Dec-04	7.87	1110	84	328	536	0.90	<0.05	<1	<0.1	<0.1	22	1.00	5.9		62	<1.0	<2
	Apr-05	8.22	684	83	187	254	0.50	<0.05	<1	0.20	<0.1	<1	<0.1	2.7	0.03	48	<1.0	<2
	Sep-05	8.36	931	90	313		0.60	<0.05	<1	<0.2	<0.3	5	0.30	5.2	0.04	62	<1.0	<2
	Dec-05	8.23	731	91	209	250	0.70	<0.05	<1	0.40	<0.01	4	0.65	4.1	0.06	61	<1.0	<2
	Mar-06	8.30	759	78	239	260	0.10	<0.05	<1	0.20	<0.01	4	0.10		0.01	58	<1.0	<2
	Jun-06	8.20	1020	97	358	400	0.30	0.07	3	0.10	<0.01	13	0.43	5.4	0.06	62	<1.0	<2
	Sep-06	8.20	937	102	327	340	0.30	0.10	4	0.20	<0.01	49	0.57	4.8	0.05	59	<1.0	<2
	Nov-06	8.20	819	66	326	320	0.50	0.15	3	0.10	<0.01	8	0.43	4.5	0.05	46	<1.0	<2
	Apr-07	8.40	766	84	248	280	0.40	0.08	3	<0.1	<0.01	19	0.59	3.5	0.03	54	<1.0	<2
	Apr-08	8.30	635	68	195	210	0.40	<0.05	<1	<0.1	<0.01	<10	0.13	3.0	0.03	42	<1.0	<2
	Jul-08	8.20	779	76	259	300	0.50	<0.05	<1	0.20	<0.01	17	0.69	4.5	<0.100	52	<1.0	<2
	Oct-08	8.40	934	94	316	350	0.30	<0.05	<1	<0.1	<0.01	<10	0.29	4.0	0.06	61	<1.0	<2
	Dec-08	8.10	727	85	222	250	0.30	<0.05	<1	<0.1	<0.01	45	0.98	3.0	0.08	47	<1.0	<2
	Apr-09	7.90	626	58	223	230	0.90	<0.05	<1	<0.1	<0.01	83	<0.02	<1	0.16	<0.5	<1.0	<2
	Jun-09	8.30	932	110	282	320	0.50	0.19	12	0.30	<0.01	17	0.26	4.0	0.06	62	<1.0	<2
	Oct-09	8.20	901	120	247	310	0.30	<0.05	<3	0.20	<0.01	<10	0.21	4.0	0.06	65	<1.0	<2
	Dec-09	8.00	463	38	144	160	1.90	<0.05	<1	1.80	0.020	130	12.00	5.0	0.57	27	<1.0	<2
	Apr-10	8.40	812	86	269	320	0.50	<0.05	<1	<0.1	<0.01	<10	0.08	3.0	0.03	52	<1.0	<2
	Jun-10	8.30	745	68	262	280	0.40	<0.05	<1	0.40	<0.01	<10	0.18	2.0	0.04	46	<1.0	<2
	Sep-10	8.20	537	52	161	200	1.30	<0.05	<1	0.60	<0.01	310	9.20	5.0	0.34	35	<1.0	<2
	Nov-10	8.14	476	41	150	170	1.10	<0.05	<1	0.70	<0.01	46	2.90	5.0	0.25	27	4.0	3.0
	Mar-11	8.11	534	60	154	200	0.50	<0.05	<1	0.10	0.010	72	2.00	3.0	0.09	36	<1	<2
	Jun-11	8.32	702	56	253	280	0.40	<0.05	<1	0.20	<0.01	16	0.30	3.0	0.06	42	<1	<2
	Sep-11	8.18	877	70	285	360	0.30	<0.05	<1	0.10	<0.01	77	0.23	4.0	0.05	41	<1	<2
	Nov-11	7.90	259	5	120	120	1.50	<0.05	<1	0.30	<0.01	240	5.40	11.0	0.30	2	4.0	<2
	Apr-12	8.30	830	81	260	320	0.31	<0.05	<1	<0.10	<0.01	<10	0.16	2.0	0.57	50	<1	<2.0
	Jun-12	8.04	1000	93	330	390	0.81	<0.05	<1	0.11	0.020	56	1.70	5.0	0.12	57	<1	<2.0
	Sep-12	7.88	970	76	300	400	0.50	0.24	7	<0.10	<0.01	52	0.56	5.0	0.09	50	<1	<2.0
	Nov-12	8.04	980	100	240	400	0.51	0.07	1	<0.1	<0.01	<10	0.05	2.0	0.04	59	1.1	<2.0
	Apr-13	8.41	670	69	200	250	0.33	0.44	22	<0.1	<0.01	<10	0.14	3.0	0.02	44	<1	<2
	Jun-13	8.24	910	93	290	370	0.41	0.10	5	0.26	<0.01	<10	0.18	4.0	0.05	55	<1	<2
	Sep-13	8.04	1000	85	310	420	0.51	<0.05	<1	<0.1	<0.01	<10	0.07	5.0	0.04	55	<1	<2
	Dec-13	7.99	1000	110	260	410	0.79	0.05	<1	<0.1	<0.01	32	0.90	4.0	0.10	64	1.6	<2

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
2) Blank indicates parameter not analysed.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW2	Apr-14	8.28	800	91	220	290	0.28	0.05	1	<0.1	<0.01	<10	0.11	3.0	<0.1	54	<1	<2
	Jun-14	8.28	900	95	280	340	0.22	<0.05	<1	<0.1	<0.01	<10	0.04	4.0	<0.1	56	<1	<2
	Sep-14	8.28	970	110	270	400	0.67	<0.05	<1	0.10	<0.01	<10	0.07	4.0	<0.1	64	<1	<2
	Dec-14	8.12	1000	130	250	370	0.31	<0.05	<1	<0.1	<0.01	<10	0.16	4.0	<0.1	69	<1	<2
	Apr-15	8.31	840	110	200	300	0.24	<0.05	<1	<0.1	<0.010	<10	0.13	3	0.03	64	<1	<2
	Jun-15	8.35	1000	140	250	360	0.46	<0.05	<1	<0.1	<0.010	14	0.22	4	0.07	76	<1	<2
	Sep-15	8.14	1100	110	330	450	0.29	0.06	3	<0.1	<0.010	<10	0.18	5	0.07	68	<1	<2
	Apr-16	8.32	790	86	240	300	0.16	<0.05	<1	<0.10	<0.010	<10	0.03	3.0	0.02	52	<1	<2.0
	Jun-16	8.14	1100	120	300	400	0.21	<0.05	<1	0.11	<0.010	<10	0.06	5	0.04	63	<1	<2.0
	Sep-16	8.16	1000	100	290	410	0.19	<0.05	<1	<0.10	<0.010	<10	0.05	5	0.04	57	<1	<2.0
	Nov-16	8.18	950	100	260	380	0.21	<0.05	<1	<0.10	<0.010	<10	0.11	5	0.20	53	1.4	<2.0
	Apr-17	8.30	660	65	190	230	0.21	<0.05	<1	<0.10	<0.010	12	0.20	3	0.04	45	<1	<2
	Jun-17	8.44	860	89	280	330	0.19	<0.05	<1	0.24	<0.010	<10	0.12	4	0.06	62	<1	<2
	Apr-18	8.24	510	46	160	180	0.26	<0.05	<1	0.35	<0.010	20	0.77	3	0.06	33	<1	<2
	Jun-18	8.39	800	85	260	290	0.22	<0.05	<1	0.20	<0.010	<10	0.39	4	0.07	57	<1	<2
	Sep-18	8.34	850	100	250	290	0.17	<0.05	<1	0.42	<0.010	16	0.50	4	0.07	64	0.001	<2
	Dec-18	8.34	760	88	220	260	0.13	<0.05	<1	0.33	<0.010	<10	0.14	3	0.04	51	<1	<2
	Apr-19	8.30	680	84	180	220	0.26	<0.050	<1	0.38	<0.010	23	0.74	3	0.04	45	<1	<2
	May-19	8.43	660	49	240	250	0.18	<0.050	<1	0.14	<0.010	19	0.59	3	0.06	40	<1	<2
	Nov-19	8.26	760	81	220	300	0.28	<0.050	<1	<0.10	<0.010	<10	0.16	4	0.06	50	<1	<2
	Apr-20	8.41	800	73	270	320	0.14	<0.050	<1	<0.10	<0.010	<10	0.13	3	0.02	47	<1	<2
	Jun-20	8.09	1200	230	180	180	0.63	<0.050	<1	1.32	0.02	10	0.58	4	0.09	170	<1	<2
	Dec-20	8.18	660	65	180	240	0.21	<0.050	<1	0.36	<0.010	<10	0.33	3	0.08	39	<1	<2
	Mar-21	8.12	420	40	130	140	0.35	<0.050	<1	0.89	<0.010	630	18	6	0.61	26	<1	<2
	Jun-21	8.33	830	95	250	280	0.3	<0.050	<1	<0.10	<0.010	26	0.74	5	0.12	61	<1	<2
	Sep-21	8.54	670	46	250	290	0.26	<0.050	<1	<0.10	<0.010	18	0.53	4	0.074	33	<1	<2
	Dec-21	8.28	620	44	240	270	0.19	<0.050	<1	0.11	<0.010	12	0.28	3	0.054	31	<1	<2
	Apr-22	8.48	750	67	270	320	0.18	<0.050	<1	<0.10	<0.010	<10	<0.01	2.7	<0.01	40	<1	<2
	Jun-22	8.24	910	77	310	380	0.24	0.088	6	0.28	<0.010	37	<1	4.7	0.16	50	<1	<2
	Sep-22	8.27	1000	85	330	460	0.19	<0.050	<1	<0.10	<0.010	18	0.45	7	0.072	55	<1	<2
	Dec-22	8.12	1000	110	270	420	0.10	<0.050	<1	<0.10	<0.010	14	0.2	5	0.08	54	<1	<2

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
2) Blank indicates parameter not analysed.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW3	May-85	8.15	792	36	317	385	0.20	<0.05	<1	0.10	0.005	0.0	0.08		0.04		0.4	0.4
	Jul-85	8.22	676	34	281	322		<0.05	<1	0.10	0.010	7.0	0.32				6.4	0.8
	Nov-85	7.98	420	16	152	190	0.40	<0.05	<1	0.40	<0.005	10.5			0.08		0.2	0.3
	Dec-85	8.26	647	35	234	303	0.30	<0.05	<1	0.35	<0.005	0.0			0.04		0.2	0.5
	Apr-86	8.57	555	32	219	267	0.20	<0.05	<1	0.10	<0.005	10.0			0.02		0.2	0.1
	Apr-86	8.48	651	33	269	311	<0.20	<0.05	<1	<0.05	0.005	61.6			<0.02		2.0	0.6
	May-86	8.46	707	33	298	352	0.40	<0.05	<1	<0.05	0.015	73.2			0.08		0.6	0.3
	Jul-86	8.36	759	39	328	367	0.40	<0.05	<1	0.20	0.040	47.9			0.12		1.4	1.5
	Dec-86	8.10	625	32	246	299	0.20	0.15	2	0.40	0.005				0.05		0.4	
	Dec-87	8.29	400	50	240	300	<0.05	0.01	<1	0.66	<0.02	8.5	0.34		<0.02		0.9	<1.0
	Apr-88	8.27	493	44	246	303	0.40	0.09	3	0.08	0.020	5.0	0.11		0.06		0.5	1.0
	Sep-88	8.00	531		298					0.43	0.040	25.0	0.13				2.8	1.0
	Nov-88	8.06	513	64	278	372	0.25	<0.01	<1	0.19	<0.02	27					4.1	2.0
	Mar-89	7.99	836	117	207	325	1.36	0.14	2	0.50	0.020	58.0	5.71		0.10	58	3.0	0.3
	May-89	8.37	945	55	304	388	* <0.20	<0.05	<1	<0.05	<0.005				0.02	33	<2.0	1.2
	May-89	8.41	757	55	310	387	0.28	0.01	<1	0.18	0.020	3.6			0.06	40		0.3
	Apr-90	8.16	543	96	168	226	0.23	0.07	2	<0.2	0.020	18.0	0.28		0.12	27	1.0	0.3
	May-90	8.25	613	39	229	279	0.25	0.05	2	0.20	0.020	13.2	0.06		0.18	39	2.0	0.5
	Jul-90	8.29	848	52	360	425	0.36	0.06	4	0.20	0.020	5.2	0.27		0.23	42	1.3	2.2
	Apr-91	8.37	504	56	201	275	0.47	<0.05	<1	0.10	0.010	28.8	0.74		0.19	25	<1.0	<0.5
	Jun-91	8.36	933	51	310	400	0.58	<0.05	<1	0.10	<0.01	21.2	0.26		0.20	36	2.0	3.2
	Oct-91	7.56	1200	79	319	570	0.35	<0.05	<1	<0.10	<0.01	2.0	<0.12		0.24	48	2.6	4.2
	May-92	8.27	632	43	189	240	0.43	0.06	2	0.10	<0.01	145.0	0.90		0.27	26	<2.0	<0.7
	Jun-92	8.11	864	67	316	430	0.32	<0.05	<1	<0.10	0.010	6.0	0.11		<0.06	44	<2.0	<0.7
	Aug-92	8.23	818	59	346	370	0.29	<0.02	<1	<0.10	<0.01		0.18			38	<2.0	
	Oct-92	8.14	893	67	328	410	0.19	<0.02	<1	<0.10	<0.01	4.4	0.17		0.11	41	<2.0	<0.5
	Apr-93	8.43	559	43	230	280	0.22	<0.01	<1	<0.02	<0.01	62.0	0.34		0.15	31	<2.0	<0.3
	Jun-93	8.24	892	58	342	420	0.44	<0.01	<1	0.16	<0.01	16.0	0.30		0.17	41	<2.0	<0.3
	Oct-93	7.92	1010	69	334	470	0.37	<0.01	<1	<0.02	<0.01	3.6	0.25		0.26	49	7.2	3.0
	Apr-94	8.35	653	66	240	310	0.27	0.04	2	<0.02	<0.01	6.1	0.25		0.06	37	<1.0	1.5
	Jul-94	8.28	946	62	325	410	0.53	0.12	7	0.21	<0.02	30.0	1.02		0.14	43	<1.0	1.1
	May-96	8.25	675	52	226	283	0.27	<0.02	<1	<0.10	<0.02	5.3	0.16		0.03	35	<0.5	1.0
	Jul-96	7.86	840	59	269	354	0.50	0.03	<1	0.62	<0.02	14.3	0.35		0.20	33	<0.5	2.6
	Sep-96	8.08	866	73	290	441	0.48	<0.02	<1	0.20	<0.02	14.3	0.20		<0.10	39	<0.5	2.2
	Nov-96	8.14	860	61	300	384	0.19	<0.02	<1	<0.1	<0.02	4.4	0.11		<0.05	39	<1.0	1.4
	May-97	8.32	725	50	294	358	0.29	0.04	1	<0.1	<0.02	3.1	0.11		<0.05	35	<1.0	0.3
	Sep-97	8.28	663	63	322	384	0.39	0.05	2	0.20	<0.02	12.5	0.33		0.09	37	<1.0	0.2
	Dec-97	8.12	870	96	251	372	0.44	0.03	<1	<0.2	<0.02	4.2	0.19		0.07	53	<1.0	1.3
	May-98	8.29	802	54	312	360	0.27	<0.02	<1	0.20	<0.02	3.0	0.06	3.9	0.04	36	<1.0	1.4
	Jul-98	8.11	703	62	240	301	0.64	0.05	2	0.50	<0.02	46.0	1.30	4.0	0.14	37	<1.0	2.8

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
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TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW3	Apr-99	8.08	680	100	117	258	0.61	<0.02	<1	0.40	<0.200	84	1.66	3.0	0.07	50	<1.0	1.2
	Nov-99	7.95	1142	112	333	509	0.34	<0.02	<1	<0.20	<0.200	2	0.03	4.6	0.07	57	<1.0	1.0
	Apr-00	8.19	931	121	251	381	0.33	<0.03	<1	<0.4	<0.4	3	0.06	3.9	0.00	67	<1.0	1.0
	Jun-00	8.15	382	35	168	191	0.57	0.08	3	0.40	<0.2	141	6.62	6.6	0.20		<1.0	<0.5
	Sep-00	8.44	796	68	354	439	0.41	0.03	2	0.20	<0.2	39	0.36	4.0	0.05	42	<1.0	0.6
	Nov-00	8.08	988	118	310	483	0.27	<0.03	<1	0.30	<0.2	4	0.14	4.4	0.04	55	<1.0	0.8
	Apr-01	7.69	700	42	190	266	0.26	<0.03	<1	<0.2	<0.2	6	0.15	4.0	0.03	47	<1.0	1.5
	Nov-01	7.67	523	30	78	218	1.88	0.07	<1	12.40	<0.2	95	5.65	8.4	0.39	15	<1.0	1.2
	Apr-02	8.08	868	123	167	263	0.56	<0.03	<1	<0.2	<1.0	27	1.30	2.0	0.04	70	<1.0	<0.5
	Jun-02	8.07	908	118	197	323	1.73	0.84	29	0.80	<0.2	86	3.58	8.0	0.41	66	<1.0	1.8
	Nov-02	8.05	835	69	156	370	0.94	0.03	<1	5.80	<0.2	14	0.98	10.0	0.05	41	<1.0	1.2
	May-03	8.20	675	41	160	306	1.60	0.03	<1	2.80	<0.2	30	1.95	7.0	0.15	24	<1.0	1.1
	Nov-03	7.97	592	35	137	244	1.53	<0.03	<1	3.00	<0.2	59	5.59	10.0	0.38	21	<1.0	<0.5
	Apr-04	8.35	697	73	223	282	0.50	<0.05	<1	0.20	<0.1	22	0.96	2.9	<0.02	38	<1.0	<3
	Jun-04	8.14	1980	74	253	1180	1.10	<0.05	<1	16.40	<0.1	14	0.75		0.05	74	<1.0	<4
	Sep-04	8.15	1010	117	217	348	1.00	<0.05	<1	14.00	0.1	19	1.20	16.0	1.12	75	1.0	<3
	Dec-04	8.08	976	115	268	427	0.30	0.06	<1	0.40	<0.1	7	0.28	4.4		52	<1.0	<2
	Apr-05	8.29	688	82	196	261	0.50	0.05	2	0.20	<0.1	5	0.10	3.0	0.04	48	<1.0	<2
	Sep-05	8.20	868	82	297		0.50	<0.05	<1	<0.2	<0.3	25	0.06	5.0	0.03	57	<1.0	<2
	Dec-05	7.91	498	87	143	250	0.70	<0.05	<1	0.40	<0.01	9	0.71	4.3	0.06	58		<2
	Mar-06	8.40	772	77	250	280	0.20	<0.05	<1	0.20	<0.01	3	0.14		0.03	54	<1.0	<2
	Jun-06	8.40	997	84	366	400	0.40	0.06	4	<0.1	<0.01	2	0.18	5.5	0.04	55	<1.0	<2
	Sep-06	8.30	896	98	315	340	0.20	<0.05	<1	0.20	<0.01	5	0.15	5.2	0.05	61	<1.0	<2
	Nov-06	8.30	796	63	311	310	0.40	0.11	3	<0.1	<0.01	2	0.15	4.7	0.04	43	<1.0	<2
	Apr-07	8.30	793	79	261	310	0.30	0.05	1	<0.1	<0.01	8	0.22	3.4	0.02	51	<1.0	<2
	Apr-08	8.30	648	64	204	240	0.30	<0.05	<1	<0.1	<0.01	10	0.41	3.0	0.02	43	<1.0	<2
	Jul-08	8.20	797	75	269	300	0.40	<0.05	<1	0.20	<0.01	<10	0.17	4.3	<0.10	49	<1.0	<2
	Oct-08	8.20	927	87	319	350	0.30	<0.05	<1	<0.1	<0.01	<10	0.07	4.0	0.04	54	<1.0	<2
	Dec-08	8.20	730	79	227	260	0.40	<0.05	<1	<0.1	<0.01	19	0.73	3.0	0.07	44	<1.0	<2
	Apr-09	7.60	538	39	186	210	1.60	0.05	<1	0.20	<0.01	450	14.00	5.0	0.61	27	<1	<2
	Jun-09	8.30	928	91	300	330	0.50	0.06	4	0.20	<0.01	20	0.57	4.0	0.07	53	3.0	<2
	Oct-09	8.20	858	86	268	330	0.20	<0.05	<3	0.10	<0.01	<10	0.32	5.0	0.06	51	<1	<2
	Dec-09	7.90	483	37	150	170	2.00	<0.05	<1	1.70	0.010	160	12.00	6.0	0.56	26	<1	<2
	Apr-10	8.40	847	82	284	350		<0.05	<1	<0.1	<0.01	<10	0.09	4.0		52	<1	<2
	Jun-10	8.40	761	62	271	300	0.40	<0.05	<1	0.30	<0.01	<10	0.18	5.0	0.04	44	<1	<2
	Sep-10	8.20	578	43	180	220	1.40	<0.05	<1	0.40	0.010	350	10.00	7.0	0.39	32	<1	<2
	Nov-10	8.09	490	40	156	180	1.00	<0.05	<1	0.40	0.010	67	3.20	5.0	0.26	28	2.0	2.0
	Mar-11	8.12	538	54	162	200	0.70	<0.05	<1	0.10	<0.01	140	4.10	4.0	0.16	35	<1	<2
	Jun-11	8.37	696	45	263	290	0.40	<0.05	<1	<0.1	<0.01	<10	0.26	4.0	0.06	38	<1	<2
	Sep-11	8.23	822	46	287	350	0.40	<0.05	<1	<0.1	<0.01	<10	0.12	5.0	0.06	39	<1	<2
	Nov-11	7.81	300	19	101	120	3.00	<0.05	<1	0.40	<0.01	910	36.00	9.0	1.50	11	4.0	<2
	Apr-12	8.28	860	75	290	340	0.30	<0.05	<1	<0.10	<0.010	<10	0.12	3.0	0.56	52	<1	<2.0
	Nov-12	8.13	1000	96	280	450	0.46	<0.05	<1	<0.1	<0.01	<10	0.03	3.0	0.05	58	<1	<2.0
	Apr-13	8.37	690	63	210	270	0.48	0.10	5	<0.1	<0.01	<10	0.12	3.0	0.02	43	1.2	<2
	Jun-13	8.22	950	83	320	400	0.33	0.05	3	<0.1	<0.01	<10	0.11	5.0	0.04	54	<1	<2
	Dec-13	8.05	1200	110	350	500	0.41	<0.05	<1	<0.1	<0.01	<10	0.26	5.0	0.04	63	1.5	<2

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
2) Blank indicates parameter not analysed.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW3	Apr-14	8.26	820	86	240	290	0.66	0.05	1	<0.1	<0.01	12	0.27	3.0	<0.1	52	<1	<2
	Jun-14	8.30	920	80	310	380	0.27	<0.05	<1	<0.1	<0.01	<10	0.05	5.0	<0.1	53	<1	<2
	Sep-14	8.33	1000	92	330	430	0.29	<0.05	<1	<0.1	<0.01	<10	0.10	5.0	<0.1	60	<1	<2
	Dec-14	8.18	1100	120	300	430	0.30	<0.05	<1	<0.1	<0.01	<10	0.11	5.0	<0.1	68	<1	<2
	Apr-15	8.28	840	100	210	320	0.28	<0.05	<1	<0.1	<0.01	<10	0.17	3	0.03	60	<1	<2
	Jun-15	8.31	1000	130	260	370	0.45	<0.05	<1	<0.1	<0.01	<10	0.16	4	0.06	73	<1	<2
	Nov-15	7.90	1800	220	350	700	1.30	0.13	1	<0.1	<0.01	100	4.4	9	0.06	100	<1	9.0
	Apr-16	8.15	850	83	260	320	0.22	<0.05	<1	<0.1	<0.01	<10	0.05	3.0	0.02	52	<1	<2
	Jun-16	8.04	1100	110	340	440	0.25	<0.05	<1	<0.1	<0.01	<10	0.02	5	0.05	64	<1	<2
	Nov-16	8.14	1000	86	310	440	0.25	<0.05	<1	<0.1	<0.01	<10	0.21	6	0.21	49	<1	5.0
	Apr-17	8.28	670	64	210	250	0.23	<0.05	<1	<0.10	<0.01	14	0.29	3	0.04	42	<1	<2
	Jun-17	8.41	890	78	310	360	0.23	<0.05	<1	0.16	<0.01	<10	0.08	5	0.05	57	<1	<2
	Apr-18	8.23	540	45	170	180	0.19	<0.05	<1	0.32	<0.01	27	1.30	3	0.08	32	<1	<2
	Jun-18	8.34	810	71	270	290	0.26	<0.05	<1	0.18	<0.01	<10	0.45	4	0.07	55	<1	<2
	Sep-18	8.35	800	81	250	290	0.14	<0.05	<1	0.35	<0.01	19	0.66	5	0.09	51	<1	<2
	Dec-18	8.24	780	84	220	280	0.15	<0.05	<1	0.32	<0.01	<10	0.12	3	0.04	50	<1	<2
	Apr-19	8.27	690	80	200	240	0.19	<0.050	<1	0.36	<0.010	25	0.72	3	0.04	43	<1	<2
	May-19	8.42	670	47	240	270	0.25	<0.050	<1	0.13	0.01	18	0.64	3	0.06	36	<1	<2
	Sep-19	8.31	810	68	320	390	0.30	0.06	3	<0.10	<0.010	31	0.27	5	0.04	47	<1	<2
	Nov-19	8.22	780	78	230	310	0.23	0.06	1	<0.10	<0.010	<10	0.18	4	0.07	47	<1	<2
	Apr-20	8.40	840	70	290	340	0.20	<0.050	<1	<0.10	<0.010	12	0.24	4	0.02	45	<1	<2
	Jun-20	8.05	640	81	180	170	1.20	<0.050	<1	<0.10	<0.010	24	1.00	5	0.13	58	<1	4
	Dec-20	8.22	670	62	180	240	0.19	0.05	<1	0.74	<0.010	12	0.64	4	0.08	37	<1	<2
	Mar-21	8.07	390	36	120	130	0.35	<0.050	<1	1.07	<0.010	940	25.00	6	0.83	23	<1	3
	Jun-21	8.33	780	78	250	280	0.35	<0.050	<1	<0.10	<0.010	39	0.94	6	0.13	54	<1	<2
	Sep-21	8.46	690	46	260	320	0.29	<0.050	<1	<0.10	<0.010	15	0.34	4	0.08	33	<1	<2
	Dec-21	8.27	660	44	250	290	0.10	<0.050	<1	0.14	<0.010	<10	0.28	3	0.05	31	<1	<2
	Apr-22	8.44	760	63	280	330	0.17	<0.050	<1	<0.10	<0.010	<10	<0.01	3	<0.01	39	<1	<2
	Jun-22	8.21	970	72	360	440	0.26	0.091	6	0.19	0.025	58	<1	6	0.15	51	<1	<2
	Dec-22	8.19	970	94	290	440	0.13	<0.050	<1	<0.10	<0.010	<10	0.05	6	0.09	47	<1	<2

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
2) Blank indicates parameter not analysed.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW5	May-86	8.33	797	22	320	395	0.40	<0.05	<1	<0.05	0.005	77.4			0.06		1.0	0.3
	Dec-86	8.26	931	21	362	297	0.20	0.15	3	0.15	0.005				0.03		0.2	
	Dec-87	8.19	500	53	212	372	0.06	0.01	<1	3.58	<0.02	9.5	0.24		<0.02		14.8	<1.0
	Apr-88	8.18	613	24	310	420	0.40	0.05	1	0.07	0.020	15.0	0.19		0.03		3.7	1.0
	Nov-88	7.93			313		0.61	<0.01	<1	0.19	<0.02	11.5					3.1	2.0
	Mar-89	7.96	661	19	236	319	1.37	0.10	1	0.49	<0.02	11.0	0.59		0.06	22	3.0	0.3
	May-89	8.26	874	72	238	444	0.48	0.04	2	0.20	0.020	144.0	1.63		0.30		<2.0	0.6
	Apr-90	8.13	556		206	285	0.37	0.24	6	0.20	0.020	22.8	1.61		0.15	13	1.0	0.3
	May-90	8.36	723	2	309	393	0.31	0.05	2	0.20	0.020	33.2	0.30		0.18	19	2.0	0.5
	Apr-91	8.23	583	25	249	358	0.47	<0.05	<1	<0.10	<0.01	23.2	0.54		0.22	13	<1.0	<0.5
	May-92	8.20	1290	119	324	450	0.60	<0.05	<1	<0.10	<0.01	93.0	0.87		0.18	60	<2.0	0.9
	Oct-92	8.07	1590	205	496	690	0.87	<0.02	<1	<0.10	<0.01	23.2	0.63		0.21	110	<2.0	<0.5
	Apr-93	8.44	693	13	315	380	0.13	<0.01	<1	<0.02	<0.01	8.8	0.15		0.17	25	<2.0	<0.3
	Apr-94	8.13	1040	91	321	420	0.48	<0.01	<1	<0.02	<0.01	10.8	0.27		0.07	50	<1.0	1.8
	May-96	8.29	723	11	281	360	0.28	<0.02	<1	<0.10	<0.20	14.1	0.15		0.03	18	<0.5	0.9
	Jul-96	7.92	861	18	315	465	0.51	0.03	1	<0.02	<0.20	39.2	0.49		0.20	23	<0.5	2.3
	Sep-96	7.88	919	28	325	471	0.42	<0.02	<1	<0.10	<0.20	6.1	<0.10		0.80	22	<0.5	1.4
	Nov-96	8.16	1019	26	365	543	0.21	<0.02	<1	<0.10	<0.20	3.5	0.07		<0.05	30	<1.0	1.4
	Apr-04	8.13	654	34	215	314	0.90	<0.05	<1	0.50	<0.1	60	2.50	4.5	0.06	23	<1.0	<3
	Dec-04	8.02	683	70	132	284	0.80	0.14	2	1.20	<0.1	37	1.90	5.5		31	<1.0	<2
	Apr-05	8.32	690	44	199	314	0.70	<0.05	<1	0.20	<0.1	5	1.20	6.0	0.05	31	<1.0	<2
	Apr-05	8.30	522	41	146	234	0.50	<0.05	<1	<0.2	<0.3	9	0.51	4.9	<0.05	29	<1.0	<2
	Sep-05	7.84	2140	400	58		0.50	<0.05	<1	2.40	<0.3	9	0.09	21.0	0.04	220	1.0	<2
	Dec-05	8.10	778	68	182	300	4.00	<0.05	<1	0.20	<0.01	13	3.00	8.0	<0.02	45	<1.0	<2
	Mar-06	8.00	1610	196	139	540	0.40	0.21	3	1.20	0.030	27	1.10		0.02	130	<1.0	<2
	Jun-06	8.10	395	13	156	170	0.40	0.08	4	<0.1	<0.01	36	3.40	4.2	0.10	12	<1.0	<2
	Sep-06	7.80	2110	330	64	610	0.70	<0.05	<1	2.30	0.140	17	0.65	20.0	0.02	200	<1.0	<2
	Nov-06	8.10	927	48	314	410	1.10	0.21	4	0.30	<0.01	40	2.10	7.0	0.07	32	<1.0	<2
	Apr-07	8.20	1250	170	245	390	0.90	0.06	1	0.40	<0.01	21	1.10	7.3	0.04	110	<1	<2
	Jul-07	8.00	754	110	154	210	0.90	0.13	5	<0.1	<0.01	11	0.96	6.1	0.04	74	1.0	<2
	Apr-08	8.30	966	100	200	320	0.70	<0.05	<1	0.20	<0.01	18	0.64	6.0	0.03	74	<1	<2
	Jul-08	7.70	1420	150	77	450	0.70	0.07	1	3.10	0.130	21	0.76	18.0	<0.100	94	<1	<2
	Oct-08	7.90	2280	290	87	720	1.20	0.05	<1	1.90	0.050	55	1.10	22.0	0.06	190	<1	<2
	Dec-08	8.10	803	98	192	260	0.90	0.06	<1	0.50	0.020	27	1.20	5.0	0.11	54	<1	<2
	Apr-09	7.30	552	54	158	180	2.10	0.08	<1	0.20	0.010	240	7.30	5.0	0.32	33	<1	<2
	Dec-09	8.00	553	33	185	200	1.20	<0.05	<1	<0.1	<0.01	35	2.50	6.0	0.24	32	<1	<2
	Jun-10	7.70	717	100	157	88	3.20	0.20	5	<0.1	0.010	180	5.40	4.0	0.53	110	1.0	7.0
	Sep-10	7.80	151	17	38	40	0.50	<0.05	<1	<0.1	<0.01	<10	0.32	2.0	0.11	13	<1	3.0
	Nov-10	8.17	804	47	271	240	1.00	<0.05	<1	<0.1	<0.01	85	1.30	5.0	0.17	80	<1	<2
	Mar-11	7.95	1170	110	128	420	0.70	0.06	<1	1.50	0.020	64	1.60	10.0	0.07	88	<1	<2
	Jun-11	8.19	644	40	191	260	1.10	<0.05	<1	0.20	<0.01	41	1.30	4.0	0.10	36	<1	<2
	Sep-11	8.05	664	47	140	260	0.40	<0.05	<1	<0.1	<0.01	<10	0.05	2.0	0.01	33	<1	<2
	Nov-11	7.81	284	15	89	120	1.40	<0.05	<1	1.80	<0.01	220	11.00	6.0	0.50	9	4.0	<2
	Apr-12	8.11	1000	130	200	290	0.59	<0.05	<1	0.13	<0.010	28	1.20	5.0	0.61	91	<1	<2.0
	Sep-12	7.83	1500	180	72	460	0.50	0.24	6	0.79	0.024	10	0.18	15.0	0.03	130	<1	<2.0
	Nov-12	7.96	1500	150	250	590	0.58	0.06	<1	<0.1	<0.01	<10	0.03	8.0	0.01	110	<1	<2.0
	Apr-13	8.16	910	98	220	300	0.49	0.08	2	0.14	<0.01	110	0.47	5.0	0.04	69	1.2	<2
	Sep-13	7.64	1900	280	320	600	0.86	0.05	<1	<0.1	<0.01	68	0.06	5.0	0.11	170	<1	3.0

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
** - Indicates associated value is an estimated quantity.
2) Blank indicates parameter not analysed.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW5	Apr-14	8.13	1300	130	180	430	0.53	0.11	2	1.01	<0.01	27	0.83	11.0	<0.1	92	<1	<2
	Jun-14	8.05	1600	220	210	450	0.53	0.07	1	0.19	<0.01	25	1.30	9.0	<0.1	180	<1	<2
	Sep-14	8.15	1400	130	200	500	0.72	<0.05	<1	<0.1	<0.01	<10	0.77	8.0	<0.1	100	<1	<2
	Dec-14	8.03	2100	480	190	350	0.39	<0.05	<1	0.16	<0.01	<10	0.17	5.0	<0.1	290	<1	<2
	Apr-15	8.08	6100	1800	260	640	0.48	0.14	2	<0.1	<0.01	16	0.58	7.0	0.06	1100	<1	<2
	Jun-15	8.00	1300	150	200	420	0.41	<0.05	<1	<0.1	<0.01	11	0.32	9.0	0.04	110	<1	<2
	Nov-15	8.06	1400	170	220	440	0.25	<0.05	<1	<0.1	<0.01	<10	0.16	7.0	0.03	120	<1	<2
	Apr-16	8.17	1500	140	210	520	0.27	<0.05	<1	0.59	<0.01	19	0.76	12.0	0.04	120	<1	3
	Jun-16	7.91	4100	870	390	1100	0.36	0.08	2	0.38	<0.01	13	0.19	10.0	0.08	480	<1	<2
	Nov-16	8.13	450	64	95	130	0.23	<0.05	<1	0.11	0.01	10	0.25	2.0	0.02	40	<1	<2
	Apr-17	8.08	1100	210	120	200	0.31	<0.05	<1	0.41	<0.01	23	1.00	4.0	0.05	150	<1	<2
	Jun-17	8.02	730	140	90	120	0.23	<0.05	<1	0.18	<0.01	36	1.10	2.0	0.05	100	<1	<2
	Nov-17	7.91	500	45	140	160	0.31	<0.05	<1	0.16	0.01	73	0.25	2.0	0.04	33	<5	<2
	Apr-19	8.02	1200	260	110	170	0.21	0.07	1	0.41	<0.010	11	0.85	4.0	0.04	150	<1	<2
	May-19	8.10	620	110	98	130	0.36	0.15	5	0.31	0.02	24	0.89	3.0	0.06	65	<1	<2
	Nov-19	7.89	1100	210	100	160	0.26	<0.050	<1	0.35	0.01	31	0.95	3.0	0.04	160	<1	<2
	Jun-21	8.02	560	120	77	97	0.31	<0.050	<1	0.23	0.01	17	0.52	1.0	0.03	67	<1	2.0
	Sep-21	8.14	420	66	87	100	0.26	<0.050	<1	0.15	<0.010	10	0.18	2.0	0.02	44	<1	<2
	Apr-22	8.06	1600	390	110	180	0.22	<0.050	<1	0.33	0.01	20	<0.01	2.7	<0.01	240	<1	<2

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
** - Indicates associated value is an estimated quantity.
2) Blank indicates parameter not analysed.

Station had insufficient water for sampling, during the monitoring events in 2018.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW10	Nov-85	8.27	975	46	270	471	1.05	<0.05	<1	1.15	0.24	57			1.42		0.2	5.8
	May-03	7.91	1659	112	372	754	4.42	2.78	43	7.00	3.30	41	1.00	22.0	0.10	84	<1.0	1.3
	Apr-04	8.20	808	25	325	427	1.30	0.39	9	0.80	<0.1	57	1.50	6.9	<0.02	18	<1.0	<3
	Dec-04	8.13	769	35	297	422	1.40	0.06	1	3.40	<0.1	30	0.47	6.1		17	1.0	8.0
	Dec-05	8.27	811	23	387	440	1.00	0.16	4	0.60	0.02	3	0.12	5.8	0.05	14	<1.0	3.0
	Sep-06	8.00	401	5	148	190	0.70	0.16	5	0.10	0.02	22	1.20	7.3	0.06	5	<1.0	3.0
	Nov-06	8.00	1140	25	332	550	1.90	0.28	4	<0.1	<0.01	66	0.84	11.0	0.06	28	<1.0	<2
	Apr-07	8.30	819	18	250	390	1.00	0.06	2	<0.1	0.01	55	0.56	7.2	0.08	19	<1.0	3.0
	Dec-08	8.10	869	23	409	460	0.90	0.27	4	0.70	<0.01	34	0.04	5.0	0.07	13	<1.0	<2
	Apr-09	7.90	522	11	245	260	1.30	0.23	4	0.90	0.04	50	1.30	6.0	0.19	10	<1	<2
	Jun-09	7.70	315	4	128	140	0.90	0.13	2	0.50	0.03	42	1.00	5.0	0.12	5	2.0	3.0
	Oct-09	7.70	347	2	121	160	0.20	<0.05	<1	0.40	0.02	<10	0.57	3.0	0.06	5	<1	<2
	Dec-09	8.20	669	15	297	330	1.20	0.13	3	2.10	0.02	10	0.30	8.0	0.13	9	<1	<2
	Apr-10	8.00	891	32	308	420	1.50	<0.05	<1	<0.1	0.02	24	0.55	10.0	0.13	35	<1	3.0
	Jun-10	7.90	801	3	364	410	1.70	0.13	3	0.10	<0.01	<10	0.51	4.0	0.13	15	<1	4.0
	Sep-10	7.90	217	4	39	94	1.90	0.06	2	0.50	0.01	160	9.70	9.0	0.50	2	1.0	7.0
	Nov-10	8.25	683	18	302	360	1.10	0.06	2	0.70	0.02	<10	0.11	6.0	0.11	11	<1	2.0
	Mar-11	8.23	706	18	330	370	1.00	0.30	5	0.70	0.01	<10	<0.02	6.0	0.07	13	<1	<2
	Jun-11	8.30	619	8	309	320	0.80	<0.05	<1	0.20	0.02	35	0.17	6.0	0.07	12	<1	<2
	Sep-11	8.03	828	13	351	420	1.20	<0.05	<1	<0.1	<0.01	20	1.00	5.0	0.28	17	3.0	<2
	Nov-11	8.16	553	15	241	270	1.30	<0.05	<1	1.80	0.01	14	0.40	8.0	0.15	7	3.0	4.0
	Apr-12	8.27	670	9	300	340	0.80	<0.05	<1	0.61	<0.01	<10	0.15	4.0	0.64	10	<1	<2.0
	Nov-12	8.14	900	48	250	440	1.80	0.14	3	3.20	0.01	73	0.17	8.0	0.12	29	<1	<2.0
	Apr-13	8.27	760	21	360	390	0.98	0.13	4	0.70	<0.01	25	<0.02	6.0	0.03	13	<1	<2
	Jun-13	7.57	190	3	84	88	0.49	0.19	2	0.36	0.02	11	0.28	2.0	0.06	4	<1	2.0
	Sep-13	7.96	400	12	170	180	1.60	0.26	6	0.31	<0.01	140	4.30	7.0	0.25	14	<1	<2
	Apr-14	8.23	900	49	350	400	0.64	0.12	3	0.50	<0.01	26	0.14	9.0	<0.1	40	<1	<2
	Jun-14	7.76	400	28	140	150	1.20	0.40	4	0.51	0.05	20	0.92	4.0	0.40	26	1.7	4.0
	Sep-14	8.22	500	9	200	260	1.00	0.08	2	0.28	<0.01	<10	0.23	6.0	0.10	10	<1	<2
	Dec-14	7.78	* 3500	* 910	190	420	* 61	0.48	7	0.46	0.03	410	2.50	12.0		* 590	1.7	2.0
	Apr-15	8.13	870	37	380	450	0.59	0.08	1	0.28	<0.01	<10	0.04	7.0	0.04	19	<1	<2
	Jun-15	8.27	880	42	360	430	0.95	0.06	3	1.90	0.01	<10	0.07	6.0	0.09	31	<1	<2
	Nov-15	7.97	370	27	110	140	1.00	0.06	<1	0.29	<0.010	14	1.80	4.0	0.16	23	<1	<2
	Apr-16	8.13	690	32	280	300	0.50	0.12	2	0.67	0.02	25	0.56	7.0	0.07	25	<1	4.0
	Nov-16	8.08	280	17	89	97	0.35	<0.05	<1	0.86	<0.01	60	4.00	5.0	0.24	19	<1	<2
	Apr-17	8.33	750	21	350	370	0.62	<0.05	<1	0.85	0.06	19	0.44	10.0	0.05	20	<1	<2
	Jun-17	8.12	440	9	190	200	0.63	0.12	2	0.43	0.02	14	0.48	5.0	0.12	12	<1	<2
	Nov-17	8.41	570	18	220	270	0.66	<0.05	<1	0.47	0.01	38	0.20	7.0	0.10	11	<5	2.0
	Apr-18	8.33	760	34	330	350	0.86	0.07	2	1.57	<0.01	<10	0.05	6.0	0.04	16	<1	<2
	Apr-19	8.27	840	42	360	390	0.91	0.12	2	0.89	0.01	<10	0.06	7.0	0.03	22	<1	<2
	May-19	8.41	790	36	340	390	0.52	<0.050	<1	0.21	<0.010	36	0.51	6.0	0.08	24	<1	<2
	Nov-19	8.21	910	56	350	430	0.45	<0.050	<1	0.44	<0.010	360	0.31	8.0	0.06	32	<1	<2
	Mar-21	8.24	610	25	250	280	0.68	0.09	2	0.92	0.01	32	1.10	8.0	0.14	17	<1	2.0
	Jun-21	7.90	210	12	74	81	0.42	0.09	2	0.49	0.02	70	2.60	3.0	0.13	9	<1	3.0
	Sep-21	8.17	490	19	190	220	0.74	0.13	5	0.40	0.02	75	0.93	7.0	0.13	14	<1	<2
	Dec-21	8.24	850	29	400	420	0.38	0.06	1	0.33	<0.010	12	0.08	6.0	0.02	29	<1	<2
	Apr-22	8.34	820	30	370	410	0.31	<0.050	<1	0.20	<0.010	<10	<0.01	6.7	<0.01	30	<1	<2
	Jun-22	7.82	580	60	170	200	1.80	0.71	11	0.35	0.05	4700	<1	5.2	0.11	46	0.0	7.0

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
2) Blank indicates parameter not analysed.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW11	Apr-04	8.31	921	59	321	429	1.40	<0.05	<1	0.90	<0.1	135	3.50	6.9	0.06	34	<1.0	<3
	Dec-04	8.06	1090	120	218	432	1.10	0.21	3	0.60	<0.1	21	1.10	5.3		91	1.0	<2
	Apr-05	8.24	1250	151	238	457	0.70	0.05	2	0.30	<0.1	10	0.30	8.2	0.04	85	<1.0	<2
	Dec-05	8.23	872	28	373	470	0.90	<0.05	<1	0.70	0.030	9	0.50	6.6	0.05	20	<1.0	3.0
	Sep-06	8.20	905	49	304	360	1.00	0.06	3	<0.1	<0.01	160	2.90	6.2	0.23	58	<1.0	<2
	Apr-07	8.30	1250	140	297	460	0.70	0.07	2	0.30	<0.01	31	0.39	7.2	0.04	96	<1.0	<2
	Dec-08	8.20	926	35	379	430	0.70	0.12	2	0.80	0.010	21	0.09	6.0	0.06	25	<1.0	<2
	Apr-09	8.00	591	16	249	270	1.70	0.58	14	0.60	0.040	77	2.30	6.0	0.16	15	<1	<2
	Jun-09	8.30	1050	46	343	420	1.20	0.08	5	0.20	<0.01	110	3.70	7.0	0.15	56	<1	2.0
	Oct-09	8.20	955	39	298	420	0.20	<0.05	<3	<0.1	<0.01	35	0.96	5.0	0.06	45	<1	<2
	Dec-09	8.20	669	18	281	330	1.30	0.05	1	2.30	0.030	15	0.46	9.0	0.14	13	<1	<2
	Apr-10	8.00	822	74	196	330	4.50	0.28	6	2.30	0.420	390	4.70	18.0	0.59	36	<1	7.0
	Jun-10	8.40	1470	140	365	400	6.70	2.90	229	1.00	1.200	51	0.82	80.0	0.17	110	6.0	12.0
	Sep-10	7.90	531	34	103	200	2.50	0.33	11	1.20	0.050	56	1.20	15.0	0.27	21	2.0	6.0
	Nov-10	8.22	744	27	293	370	1.30	<0.05	<1	0.50	0.020	<10	0.34	10.0	0.12	20	<1	3.0
	Mar-11	8.25	694	19	315	360	0.80	0.12	2	0.70	0.030	12	0.03	6.0	0.07	14	<1	<2
	Jun-11	8.12	782	39	278	320	2.10	0.32	14	1.10	0.050	100	1.30	21.0	0.15	37	<1	<2
	Nov-11	8.16	495	12	210	230	1.40	0.06	1	1.80	0.020	10	0.49	8.0	0.16	7	2.0	3.0
	Apr-12	8.22	1200	84	310	460	0.75	<0.05	<1	0.88	0.020	200	1.20	18.0	0.62	84	<1	<2.0
	Apr-13	8.27	920	47	320	440	0.58	0.08	3	0.38	<0.01	110	0.71	9.0	0.06	37	<1	<2
	Apr-14	8.20	1600	150	360	580	0.49	0.08	2	0.16	<0.01	34	0.58	12.0	<0.1	110	<1	2.0
	Dec-14	8.09	1400	110	320	490	4.10	<0.05	<1	0.19	<0.01	740	11.00	10.0		99	2.6	<2
	Apr-15	8.23	1100	72	320	480	0.74	0.06	1	0.31	<0.01	90	2.6	10	0.10	45	<1	<2
	Jun-15	8.30	1300	100	350	500	0.91	0.09	6	0.25	<0.01	970	37.0	22	0.86	88	<1	<2
	Apr-17	8.29	1100	48	370	460	1.50	0.76	21	0.45	0.06	83	15	11	0.29	54	<1	<2
	Apr-18	8.32	830	40	330	360	0.54	<0.05	<1	1.52	<0.01	<10	0	6	0.05	25	<1	<2
	Apr-19	8.16	960	73	360	410	0.38	0.08	2	0.37	<0.010	160	4	8	0.09	41	<1	<2
	May-19	8.38	920	44	370	420	0.42	0.08	4	0.20	0.02	580	4	7	0.36	38	<1	<2
	Mar-21	8.28	600	31	230	260	0.63	0.06	2	0.88	0.01	42	1	8	0.15	20	<1	<2
	Apr-22	8.25	1000	58	410	460	0.30	<0.050	<1	<0.10	<0.010	150	<0.01	6	<0.01	48	<1	<2

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
2) Blank indicates parameter not analysed.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW12	Jul-85	8.07	928	132	68					0.55	0.050	35.4	0.96				1.4	1.2
	Oct-85	8.04	1560	207	119	643							<0.03				0.2	5.5
	Nov-85	7.88	781	57	177	317	1.35	<0.05	<1	1.50	0.130	66.9			0.50		8.2	2.0
	Dec-85	7.64	2750	418	481	927	9.60	7.10	38	<0.05	0.025				0.15		68.0	130.0
	Apr-86	8.16	2840		217	843						82.6					3.2	2.3
	Apr-86	8.34	1930	172	199	548	1.00	<0.05	<1	0.40	0.025	229.0			0.15		5.2	7.5
	May-86	8.36	2060	342	274	584	1.20	<0.05	<1	0.45	0.015	376.0			0.44		6.2	1.8
	Dec-86	7.98	1395	142	319	556	2.00	1.30	15	0.90	0.320				0.06		4.0	
	Apr-88	8.09	1270	154	274	584		0.21	5		0.020	46.0					4.8	1.0
	Nov-88	7.61		105	133	302	0.88	<0.01	<1	1.35	<0.02	96.5					7.9	11.0
	Mar-89	7.82	759	78	186	276	1.55	0.49	4	0.86	0.020	23.0	0.80		0.13	28	<2.0	2.3
	May-89	7.70	1330	192	300	397	1.27	0.22	2	0.26	0.020	69.0	2.62		0.48		3.0	5.6
	Apr-90	8.01	1040	128	308	488	1.88	0.64	12	0.40	0.020	22.8	0.70		0.10	51	1.3	0.3
	May-90	7.89	933	5	358	445	2.32	1.58	26	0.20	0.020	9.2	0.54		0.10	37	2.0	2.6
	Jul-90	7.75	634	69	186	211	4.70	0.61	12	0.30	0.070	556.0	13.50		2.73	47	16.0	32.0
	Apr-91	8.01	767	62	288	444	1.67	<0.05	<1	0.30	<0.02	69.6	2.65		0.29	23	<1.0	5.5
	May-92	8.14	1160	61	368	490	1.02	0.50	15	0.30	<0.01	52.0	0.36		0.11	41	<2.0	<0.7
	Jun-92	9.82	830	138	163	270	1.71	<0.05	<1	<0.1	<0.01	5.6	0.15		0.12	76	3.4	3.4
	Aug-92	8.93	547	48	155	190	1.19	<0.02	<1	<0.1	<0.01	20.3	<0.08		0.15	29	<2.0	2.8
	Oct-92	7.96	764	75	229	300	0.74	<0.02	<1	<0.1	<0.01	9.2	0.34		0.08	48	2.2	2.1
	Apr-93	8.21	918	59	356	420	1.04	0.44	13	0.66	0.010	25.6	0.26		0.09	48	<2.0	<0.3
	Apr-94	8.00	1160	96	358	490	0.53	0.09	2	<0.02	<0.01	12.4	0.22		0.09	72	<1.0	2.1
	May-96	8.07	1108	63	367	448	0.68	0.05	1	0.80	<0.20	4.9	0.18		0.02	45	<0.5	1.1
	Jul-96	7.58	1375	98	394	590	0.92	0.18	2	0.06	<0.20	33.5	0.98		0.20	11	<0.5	3.5
	Sep-96	7.40	1183	96	259	523	3.30	0.09	<1	<0.10	<0.20	819.0	5.20		<0.10	72	<0.5	11.7
	Nov-96	7.77	1449	121	406	592	0.74	0.03	<1	<0.10	<0.20	36.5	0.98		0.11	82	<1.0	1.4
	Dec-97	8.05	1005	68	372	553	0.94	0.08	1	1.00	<0.20	168.0	0.75		0.13	43	<1.0	1.3
	Jul-98	7.59	580	30	132	238	1.06	0.06	1	0.20	<0.20	71	6.06	6.1	0.27	29	<1.0	4.4
	Apr-99	8.15	940	85	307	435	1.76	0.28	9	1.50	<0.2	39	3.84	22.0	0.14	49	<1.0	<0.5
	Apr-00	8.07	1580	145	453	619	0.71	0.03	<1	0.50	<0.4	46	0.13	20.2	0.02	112	<1.0	2.0
	Jun-00	8.11	669	28	302	346	0.93	0.16	7	0.40	<0.2	121	9.60	17.0	0.17		<1.0	1.4
	Apr-01	7.49	1273	98	339	355	0.63	<0.03	<1	<0.2	<0.2	33	0.72	18.0	0.06	109	<1.0	3.0
	Apr-02	8.12	838	122	170	262	0.59	<0.03	<1	<0.2	<1.0	54	2.43	3.0	0.04	70	<1.0	<0.5
	Nov-03	8.24	991	117	237	375	1.44	0.55	24	4.70	<0.2	38	1.56	8.2	0.19	73	<1.0	0.7

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
2) Blank indicates parameter not analysed.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW12	Apr-04	8.26	1100	58	427	527	1.30	<0.05	<1	2.30	<0.1	1830	18.00	18.0	0.19	42	<1.0	<3
	Dec-04	7.98	880	92	147	342	6.30	<0.05	<1	2.30	<0.1	2720	69.00	16.0		56	<1.0	<2
	Apr-05	8.24	1180	94	367	530	0.60	<0.05	<1	0.60	<0.1	12	0.40	14.0	<0.02	66	<1.0	<2
	Dec-05	8.21	1060	41	426	520	1.70	0.36	7	1.80	0.08	33	0.72	22.0	0.05	46	<1.0	4.0
	Mar-06	8.20	1220	81	441	520	0.80	0.06	1	4.20	0.01	18	0.34		0.02	68	<1.0	<2
	Sep-06	7.90	1270	80	420	530	1.50	0.16	4	0.10	0.01	1300	2.40	14.0	0.34	59	<1.0	<2
	Nov-06	8.00	1220	82	463	510	0.80	0.12	2	1.70	<0.01	17	0.36	15.0	0.01	62	<1.0	<2
	Apr-07	8.20	1020	54	389	460	0.80	<0.05	<1	4.60	<0.01	83	0.26	16.0	0.01	52	<1.0	<2
	Apr-08	8.30	1070	58	404	450	1.00	<0.05	<1	1.90	0.02	40	0.19	14.0	0.03	45	<1.0	<2
	Oct-08	8.00	1390	120	333	560	2.00	0.52	11	0.40	0.19	220	0.62	15.0	0.10	78	1.0	3.0
	Dec-08	8.20	994	35	419	460	1.50	0.71	13	1.30	0.02	<10	0.06	13.0	0.05	27	<1.0	<2
	Apr-09	8.00	716	23	308	310	1.70	0.11	3	1.90	0.06	48	1.50	12.0	0.19	22	<1	<2
	Jun-09	8.00	767	51	184	250	3.90	* 1.5	* 56	0.80	0.14	30	0.75	12.0	0.14	42	<1	9.0
	Oct-09	8.30	937	51	289	410	0.60	0.11	5	0.70	0.03	20	1.20	14.0	0.09	39	<1	<2
	Dec-09	8.20	744	19	316	370	1.30	0.23	5	1.80	0.04	11	0.39	11.0	0.09	15	<1	<2
	Apr-10	8.20	1130	81	384	500	0.90	<0.05	<1	<0.1	<0.01	<10	0.22	11.0	0.02	66	<1	<2
	Jun-10	8.20	1100	68	392	450	1.30	0.12	7	0.30	0.05	10	0.95	10.0	0.11	65	<1	<2
	Sep-10	7.90	606	30	137	240	2.60	0.06	2	0.70	0.03	<10	0.34	11.0	0.26	28	<1	8.0
	Nov-10	8.26	789	28	298	360	1.20	<0.05	<1	1.70	0.03	14	0.30	13.0	0.09	22	2.0	<2
	Mar-11	8.23	844	24	367	420	1.40	0.59	15	1.90	0.03	<10	0.04	10.0	0.04	22	<1	<2
	Jun-11	8.17	915	32	407	430	3.00	0.13	9	0.90	0.02	28	1.10	12.0	0.19	36	<1	<2
	Nov-11	8.17	452	9	193	210	1.70	<0.05	<1	1.10	0.02	150	3.80	9.0	0.29	6	3.0	3.0
	Apr-12	7.99	1200	82	410	500	0.79	<0.05	<1	<0.10	<0.01	180	1.50	10.0	0.65	64	<1	3.0
	Apr-13	8.20	940	39	380	450	0.94	0.10	4	2.00	<0.01	120	0.33	13.0	0.04	33	<1	<2
	Apr-14	8.06	1100	64	400	470	2.50	0.08	2	0.39	<0.01	68	2.20	13.0	0.20	44	<1	3.0
	Dec-14	7.92	1100	97	340	470	* 35	0.11	<1	<0.1	<0.01	67	1.40	18.0		51	8.9	3.0
	Apr-15	8.06	910	55	320	420	0.64	0.09	2	<0.10	<0.01	10	0.57	6	0.14	44	<1	<2
	Jun-15	7.84	1000	47	450	480	1.40	0.06	1	<0.05	<0.05	95	4.00	6	0.63	51	<1	2.0
	Apr-16	7.77	1400	110	490	570	0.77	<0.05	1	<0.10	<0.01	87	1.40	5	0.17	81	<1	5.0
	Apr-17	8.21	920	24	380	480	0.70	<0.05	<1	1.76	0.02	14	0.13	13	0.03	31	<1	2.0
	Nov-17	8.04	1000	46	310	450	0.51	<0.05	<1	0.11	<0.01	240	0	7	0.04	32	<2	<2
	Apr-18	8.21	800	12	350	370	1.10	0.52	12	1.42	0.02	14	0.47	8	0.05	21	<1	<2
	Dec-18	8.14	1100	44	430	520	0.45	0.15	3	1.92	0.02	66	0.44	10	0.08	34	<1	<2
	Apr-19	7.96	940	37	390	450	0.56	0.19	3	1.20	0.04	45	0.87	8	0.04	31	<1	<2
	May-19	8.17	900	32	410	450	0.43	<0.050	<1	1.55	0.03	210	5.00	11	0.16	29	<1	<2
	Nov-19	8.25	1000	47	400	510	0.68	0.05	1	1.83	0.01	10	1.50	11	0.06	36	<1	<2
	Apr-20	8.17	1100	92	360	500	0.27	<0.050	<1	<0.10	<0.010	<10	0.08	9	0.04	63	<1	<2
	Jun-20	8.12	880	62	320	380	0.56	0.10	4	0.42	0.08	53	1.70	7	0.11	40	<1	2.0
	Dec-20	8.19	860	28	300	400	0.29	0.06	<1	1.55	<0.010	13	0.07	8	0.06	21	<1	<2
	Mar-21	8.20	570	19	240	270	0.69	0.12	3	1.31	0.03	56	1.30	8	0.11	12	<1	<2
	Sep-21	8.16	970	40	400	500	0.47	<0.050	<1	<0.10	<0.010	110	1.30	9	0.15	33	<1	<2
	Dec-21	8.16	1100	31	490	550	0.75	0.32	6	1.43	0.02	<10	0.13	8	0.02	28	<1	<2
	Apr-22	8.20	960	39	410	490	0.29	<0.050	<1	0.95	0.02	<10	<0.01	9	<0.01	34	<1	<2
	Dec-22	7.92	670	18	260	360	0.18	<0.050	<1	1.19	<0.010	<10	0.46	4	0.08	16	1.2	2.0

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
2) Blank indicates parameter not analysed.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW13	Nov-85	8.05	557	32	178	215	0.50	<0.05	<1	<0.05	0.02	28.6			0.16		0.2	0.7
	Apr-86	8.18	3820	487	314	841	0.20	<0.05	<1	0.05	0.01	53.7			<0.02		2.0	1.8
	May-86	8.18	4780	1101	330	1069	0.60	<0.05	<1	<0.05	0.01	103.0			0.08		6.2	0.5
	Aug-87	7.98	930	83	262	275	0.50	0.10	3	0.15	0.01				0.06		0.4	
	Dec-87	8.19	660	120	200	395	0.10	0.11	2	0.92	<0.02	43.0	1.12		<0.02		4.2	<1.0
	Apr-88	7.79	854	74	345	462	0.90	0.08	<1	0.15	0.02	8.0	0.32		0.08		0.5	1.0
	Nov-88	7.62	732	135	232	438	0.59	<0.01	<1	0.61	<0.02	62.0					7.8	2.0
	Mar-89	7.68	554	51	151	207	1.49	0.03	<1	0.43	<0.02	9.0	<0.41		0.19	32	<2.0	2.4
	Apr-90	8.15	796	109	216	355	0.44	0.05	1	0.20	0.02	7.6	0.16		0.08	46	1.0	0.3
	May-90	8.15	1260	9	336	540	0.71	0.05	1	0.20	0.02	46.8	0.48		0.17	77	2.0	1.1
	Apr-91	8.18	887	72	283	428	0.70	<0.05	<1	<0.10	<0.01	13.6	0.52		0.12	41	<1.0	0.7
	May-92	7.96	996	69	265	380	0.79	<0.05	<1	<0.10	<0.01	15.0	0.15		0.10	50	<2.0	<0.7
	Oct-92	7.80	1880	297	491	810	2.01	<0.02	<1	<0.10	<0.01	286.0	3.53		0.48	150	<2.0	2.0
	Apr-93	7.93	968	108	320	440	0.99	<0.01	<1	<0.02	<0.01	188.0	0.89		0.41	79	<2.0	<0.3
	Apr-94	7.81	1550	244	317	510	0.97	0.17	2	<0.02	<0.01	87.9	0.89		0.23	147	<1.0	2.1
	May-96	7.92	1056	80	295	434	0.74	0.04	<1	0.20	<0.20	33.1	0.22		0.06	60	<0.5	1.3
	Jul-96	7.36	1540	136	282	668	1.77	0.06	<1	0.05	<0.20	841	10.20		0.50	103	<0.5	7.0
	Nov-96	8.14	877	60	299	693	3.03	<0.02	<1	<0.10	<0.20	1060	3.17		0.47	77	<1.0	2.0
	Jul-98	7.99	2736	787	319	447	1.91	0.05	3	0.10	<0.20	232	4.22	4.0	0.33	408	<1.0	3.7
	Apr-99	8.03	593	38	181	259	0.85	<0.02	<1	<0.20	<0.20	73	2.98	4.0	0.13	35	<1.0	1.7
	Jun-00	8.15	604	38	241	280	0.80	0.06	3	0.30	<0.2	151	5.53	8.4	0.09		<1.0	1.9
	May-03	8.15	1161	129	297	430	1.71	0.03	<1	0.20	<0.2	466	19.50	11.0	0.40	84	<1.0	<0.5
	Nov-03	7.94	666	40	139	303	1.43	0.03	<1	6.10	<0.2	120	6.77	9.9	0.42	23	<1.0	0.9
	Apr-04	8.32	927	61	319	423	2.00	<0.05	<1	0.50	<0.1	800	11.00	6.9	0.11	44	<1.0	<3
	Dec-04	8.14	977	88	270	450	1.30	0.22	4	1.40	<0.1	68	1.60	5.5		40	<1.0	4.0
	Apr-05	8.23	1720	331	231	422	0.50	<0.05	<1	0.10	<0.1	5	0.30	6.1	0.02	220	<1.0	<2
	Jul-05	8.20	3480	828	292	704	0.70	<0.05	<1	<0.2	<0.3	23	0.66	10.0	<0.05	600	<1.0	<2
	Dec-05	8.17	949	55	331	430	1.00	<0.05	<1	0.30	0.01	190	1.50	6.6	0.08	43	<1.0	2.0
	Mar-06	8.20	1150	114	288	450	0.50	<0.05	<1	<0.1	<0.01	31	0.25		0.04	68	<1.0	<2
	Jun-06	8.00	3260	513	402	810	2.80	* 1.73	* 44	0.20	0.03	83	2.60	13.0	0.36	350	2.0	<2
	Sep-06	8.10	861	37	293	360	1.40	<0.05	<1	<0.1	<0.01	710	4.50	6.6	0.24	50	<1.0	<2
	Nov-06	8.20	1190	93	370	500	1.10	0.12	3	<0.1	<0.01	200	1.50	5.3	0.07	61	<1.0	<2
	Apr-07	8.20	1060	110	279	410	0.70	0.10	2	<0.1	<0.01	58	0.21	5.5	0.20	70	<1.0	<2
	Apr-08	8.20	1480	200	275	420	1.50	<0.05	<1	<0.1	<0.01	37	0.80	7.0	0.04	79	<1.0	<2
	Oct-08	8.20	1860	160	352	720	1.20	<0.05	<1	<0.1	<0.01	56	0.89	18.0	0.07	120	<1.0	<2
	Dec-08	8.20	1090	77	359	430	1.60	0.13	2	0.60	0.02	60	5.40	12.0	0.33	51	<1.0	<2
	Apr-09	7.20	250	7	114	110	1.70	0.06	<1	<0.1	0.02	58	4.70	3.0	0.35	6	<1	<2
	Dec-09	8.00	568	29	176	240	1.20	<0.05	<1	<0.1	<0.01	26	1.40	6.0	0.23	20	<1	<2
	Jun-10	8.00	684	71	200	210	1.30	0.06	2	0.10	0.01	100	2.30	6.0	0.13	65	<1	4.0
	Sep-10	7.90	749	120	75	210	1.00	0.11	4	0.20	0.03	29	0.79	6.0	0.09	47	<1	4.0
	Nov-10	8.14	732	39	233	320	1.60	<0.05	<1	0.70	0.02	33	1.40	10.0	0.16	28	5.0	<2
	Mar-11	8.07	648	35	224	290	0.90	0.12	2	0.70	0.03	62	0.22	6.0	0.06	29	<1	<2
	Jun-11	8.07	1050	64	439	270	1.50	0.06	3	0.90	<0.01	130	3.10	25.0	0.11	60	<1	<2
	Sep-11	8.13	552	42	121	190	0.40	<0.05	<1	0.40	0.02	<10	0.13	8.0	0.03	32	<1	<2
	Nov-11	8.14	396	8	168	190	1.20	<0.05	<1	0.90	0.02	26	1.30	8.0	0.20	6	3.0	3.0
	Apr-12	8.13	930	98	190	290	0.48	<0.05	<1	0.73	0.01	31	0.58	14.0	0.58	71	<1	<2.0
	Apr-13	8.24	1200	120	290	460	1.00	0.10	3	0.39	0.01	210	1.60	11.0	0.10	73	<1	<2
	Jun-13	7.86	970	110	180	300	1.00	0.12	3	0.57	<0.01	210	3.10	17.0	0.19	84	<1	2.0
	Sep-13	7.78	920	95	160	320	0.83	0.14	3	0.15	0.03	53	0.87	15.0	0.04	68	<1	2.0
	Dec-13	7.62	6900	2200	66	170	2.20	0.80	5	1.30	0.08	580	3.40	<10	0.17	1200	15.0	19.0

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
** - Indicates associated value is an estimated quantity.
2) Blank indicates parameter not analysed.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW13	Apr-14	7.89	2500	420	290	620	0.73	0.30	4	<0.1	0.036	19	0.54	20.0	<0.1	270	1.1	6.0
	Jun-14	7.85	1700	250	250	470	1.00	0.46	5	0.12	0.044	<10	0.41	25.0	<0.1	180	1.7	6.0
	Sep-14	7.90	1400	160	240	470	2.50	1.10	14	<0.1	<0.01	27	0.48	20.0	<0.1	120	3.5	33.0
	Dec-14	7.72	4700	1300	180	340	2.50	0.76	4	0.12	0.045	48	1.30	12.0		800	6.9	16.0
	Apr-15	8.00	2500	470	280	610	0.92	0.36	5	0.21	0.10	35	0.61	19	0.04	280	<1	4
	Jun-15	8.02	1900	330	250	440	1.60	0.39	13	0.17	0.12	<10	0.17	22	0.03	210	<1	4
	Sep-15	7.71	1300	150	250	450	1.20	0.56	13	<0.10	<0.01	<10	0.3	13	0.06	91	1.0	6
	Nov-15	7.95	2000	310	310	610	0.67	0.16	2	0.08	0.10	30	1.5	10	0.05	180	<1	<2
	Apr-16	7.90	1200	170	180	330	0.63	0.11	2	0.26	0.03	<10	0.44	8	0.03	110	<1	11
	Jun-16	7.93	790	83	190	250	0.73	0.40	11	<0.10	0.08	18	0.83	5	0.09	79	<1	<2.0
	Sep-16	7.98	600	57	150	220	0.24	<0.05	<1	<0.10	<0.01	<10	0.3	4	0.01	36	<1	<2.0
	Nov-16	7.93	1800	390	140	220	0.45	0.06	<1	0.28	0.02	54	3.4	5	0.09	250	<1	<2.0
	Apr-17	8.27	1100	99	300	350	0.81	<0.05	<1	0.13	<0.01	370	30.0	11	1.00	61	<2	<2
	Jun-17	8.01	1100	160	160	270	0.41	<0.05	<1	0.36	<0.01	150	4.6	9	0.25	120	<1	<2
	Sep-17	8.02	1000	130	240	330	0.38	<0.05	<1	<0.10	<0.01	140	0.5	6	0.10	64	<1	<2
	Nov-17	7.93	4100	990	300	560	0.43	0.14	2	<0.10	<0.01	390	1.6	11	0.16	610	<2	<2
	Apr-18	8.25	1200	150	280	330	0.45	0.07	2	0.62	<0.01	<10	0.1	7	0.04	97	<1	12
	Dec-18	7.96	2000	300	280	620	0.27	0.08	1	0.82	0.02	31	0.2	10	0.02	180	<1	<2
	Apr-19	8.29	740	31	300	320	0.19	0.06	1	0.36	<0.010	13	0.5	6	0.03	24	<1	<2
	May-19	8.24	1100	140	260	350	0.52	0.08	3	0.33	0.03	180	4.1	6	0.31	74	1.1	4
	Nov-19	8.01	1300	170	280	470	0.65	0.16	2	<0.10	<0.010	2100	52.0	12	2.50	110	<1	12
	Jun-20	7.72	1000	150	160	260	0.40	<0.050	<1	0.14	<0.010	27	0.7	5	0.26	97	<1	2
	Dec-20	8.01	11000	3300	140	380	0.33	0.21	3	0.29	0.03	29	0.4	9	0.07	2200	1.0	<2
	Mar-21	8.20	480	27	180	200	0.57	<0.050	<1	0.63	0.01	19	1.1	6	0.09	18	<1	2
	Jun-21	8.10	1300	210	160	310	0.28	<0.050	<1	<0.10	<0.010	220	6.8	7	0.24	130	<1	3
	Sep-21	8.04	1400	220	200	370	0.40	<0.050	<1	0.46	<0.010	70	2.1	9	0.08	150	<1	2
	Dec-21	8.18	1600	230	350	530	0.31	<0.050	<1	0.37	<0.010	13	0.3	8	0.05	140	<1	<2
	Apr-22	8.24	900	69	360	390	0.44	0.170	4	<0.10	<0.010	250	<0.01	4	<0.01	49	<1	<2
	Jun-22	7.73	3100	700	300	860	0.59	0.170	4	0.11	0.014	30	<1	6	0.13	390	<1	<2
	Dec-22	8.08	2200	380	290	660	0.20	<0.050	<1	<0.10	<0.010	20	0.9	11	0.05	240	<1	<2

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
** - Indicates associated value is an estimated quantity.
2) Blank indicates parameter not analysed.
3) Sample for December 2020 exhibits road salt influence. Chloride value is excluded from time-concentration graph.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW14	May-85	8.19	826	55	263	362	0.20	<0.05	<1	0.10	<0.005	0.0	0.04		0.02		1.0	0.4
	Jul-85	8.13	837	99	247	321		<0.05	<1	0.10	0.010	34.0	0.86				7.4	2.6
	Sep-85	7.62	6660	448	321	822	0.70	<0.05	<1	<0.05	<0.005	31.2	0.09		0.04		0.2	1.1
	Oct-85	8.07	3020	621	238	721	0.80	<0.05	<1	<0.05	0.01		0.05				2.4	4.6
	Nov-85	8.11	459	22	159	200	0.50	<0.05	<1	0.35	0.015	20.7			0.14		0.8	1.0
	Dec-85	7.96	750	51	247	338	0.30	<0.05	<1	0.30	0.015	11.1			0.02		1.0	0.7
	Apr-86	8.60	650	57	222	291	0.20	<0.05	<1	0.05	<0.005	36.3			0.04		0.2	0.1
	Apr-86	8.48	726	52	270	324	<0.20	<0.05	<1	0.05	0.01	30.2			<0.02		0.8	0.8
	May-86	8.46	771	51	295	369	0.40	<0.05	<1	<0.05	0.05	30.9			0.06		1.2	0.2
	Jul-86	8.29	861	74	303	399	0.60	<0.05	<1	0.10	0.03	113.0			0.14		0.6	2.2
	May-87	8.07	885	45	320	156	<0.05	0.05	1	0.05	<0.005		0.09		<0.010		<0.2	
	Aug-87	8.55	1620	382	121	487	0.25			0.24	<0.02	41.0	<0.4		<0.02		2.6	10.2
	Oct-87	7.97	1380	445	4120	774	0.06	<0.01	<1	0.77	<0.02	3.6	0.20		0.03			<1.0
	Dec-87	8.31	470	78	200	286	0.13	0.09	2	0.62	<0.02	31.0	1.60		<0.02		1.3	<1.0
	Apr-88	8.31	545	44	221	286	0.50	0.08	3	0.07	0.02	14.5	0.35		0.05		2.0	1.0
	Sep-88	7.70	1160	305	279		0.66	0.02	<1	0.28	<0.02	8.4	<0.05				2.3	3.0
	Nov-88	7.93	678	111	241	381	0.52	<0.01	<1	0.53	<0.02	44.7					6.8	2.0
	Mar-89	7.75	1438	354	181	345	1.52	0.27	2	0.76	0.05	165.7	4.13		0.30	206	3.0	2.0
	May-89	8.47	758	29	234	450	0.48	<0.01	<1	<0.19	<0.02	3.6	0.82		0.05		<2.0	0.3
	Jul-89	8.11	1770	298	257	561	0.60	0.40	17	0.25	0.03	12.8	<0.05		0.07	116	<2.0	0.3
	Sep-89	7.85	2130	431	278	433	0.86	0.07	1	0.20	<0.02	8.6	0.28		0.05	295	<2.0	1.4
	Apr-90	8.12	640	119	194	272	0.33	0.16	4	0.20	0.02	17.6	0.27		0.12	37	1.0	0.3
	May-90	8.38	675	47	238	304	0.35	0.05	2	0.20	0.02	11.6	<0.06		0.09	27	2.0	0.5
	Jul-90	8.52	939	94	299	375	0.32	0.05	5	0.20	0.02	15.6	0.24		0.05	65	2.0	0.5
	Apr-91	8.35	684	78	223	307	0.54	<0.05	<1	<0.10	<0.01	34.0	0.96		0.18	38	<1.0	<0.5
	Jun-91	8.43	1210	63	313	410	0.40	<0.05	<1	<0.1	0.01	7.6	<0.06		0.18	42	<2.0	1.0
	Oct-91	8.10	2190	338	316	640	0.54	<0.05	<1	<0.1	<0.01	8.0	0.19		0.33	220	4.8	<0.5
	May-96	8.33	768	68	234	299	0.39	0.03	1	0.10	<0.20	5.8	0.19		0.02	44	<0.5	0.9
	Jul-96	7.92	881	85	270	352	0.56	0.03	<1	0.45	<0.20	10.8	0.27		0.20	50	<0.5	1.6
	Sep-96	8.01	1018	96	308	464	0.29	<0.02	<1	<0.10	<0.20	4.4	<0.10		0.20	57	<0.5	1.5
	Nov-96	7.59	1402	130	361	416	0.21	<0.02	<1	<0.10	<0.20	4.0	0.14		<0.05	47	<1.0	1.2
	Jul-98	8.19	845	103	262	337	0.52	0.04	2	0.30	<0.20	19	0.42	5.2	0.10	55	<1.0	1.7
	Apr-99	8.17	1094	209	170	346	0.82	<0.02	<1	<0.20	<0.20	37	2.13	5.0	0.11	111	<1.0	1.6
	Apr-00	7.81	1520	135	450	615	0.71	0.05	<1	0.50	<0.4	29	0.65	19.2	0.02	103	<1.0	2.4
	Jun-00	8.10	509	52	174	203	0.62	0.06	2	0.40	<0.2	577	24.60	11.0	0.39		<1.0	2.0
	Apr-01	7.34	427	44	209	288	0.25	0.04	<1	<0.2	<0.2	5	0.12	4.0	0.02	59	<1.0	1.4
	Apr-01	7.34	427	44	209	288	0.25	0.04	<1	<0.2	<0.2	5	0.12	4.0	0.02	59	<1.0	1.4
	Apr-02	8.02	864	117	176	272	0.54	<0.03	<1	<0.2	<1.0	17	0.98	3.0	0.04	69	<1.0	0.8
	May-03	8.17	1003	124	225	338	1.55	0.12	3	3.90	<0.2	88	3.47	9.0	0.22	77	<1.0	2.0
	Nov-03	7.95	710	65	173	261	1.64	0.24	5	5.00	<0.2	215	9.44	10.5	0.54	43	<1.0	1.7

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
2) Blank indicates parameter not analysed.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW14	Apr-04	7.79	776	91	233	299	0.70	<0.05	<1	0.30	<0.1	32	1.00	3.1	<0.02	48	<1.0	<3
	Dec-04	8.17	1240	206	253	410	0.50	0.07	1	0.40	<0.1	5	0.02	5.3		120	<1.0	<2
	Apr-05	8.29	768	96	199	279	0.40	<0.05	<1	0.20	<0.1	6	0.20	3.1	0.03	60	<1.0	<2
	Dec-05	8.31	819	101	222	270	0.60	<0.05	<1	0.50	<0.01	7	0.74	4.7	0.07	64	<1.0	<2
	Mar-06	8.40	851	93	258	300	0.30	<0.05	<1	0.20	<0.01	4	0.13		0.02	62	<1.0	<2
	Jun-06	8.20	1160	128	354	430	0.80	0.08	4	<0.1	<0.01	1	0.15	5.4	0.04	79	<1.0	<2
	Sep-06	8.30	1080	160	271	290	0.90	<0.05	<1	0.30	0.01	12	0.86	5.5	0.07	110	<1.0	<2
	Nov-06	8.40	864	74	322	330	0.40	0.10	3	<0.1	<0.01	<1	0.12	5.1	0.04	51	<1.0	<2
	Apr-07	8.40	914	110	272	330	1.00	<0.05	<1	<0.1	<0.01	14	0.64	3.5	0.03	63	<1.0	<2
	Apr-08	8.40	708	73	211	250	0.30	<0.05	<1	<0.1	<0.01	10	0.11	3.0	0.02	48	<1.0	<2
	Jul-08	8.20	859	92	258	310	0.50	<0.05	<1	0.20	<0.01	38	0.38	5.0	<0.100	62	<1.0	<2
	Oct-08	8.40	1100	130	306	380	0.30	<0.05	<1	<0.1	<0.01	<10	0.09	4.0	0.03	79	<1.0	<2
	Dec-08	8.20	790	88	238	270	0.50	0.08	1	0.10	<0.01	14	0.45	4.0	0.07	51	<1.0	<2
	Apr-09	7.60	597	60	184	200	1.40	0.07	<1	0.20	<0.01	300	12.00	6.0	0.53	39	<1	<2
	Jun-09	8.20	935	110	266	310	0.70	0.08	4	0.20	<0.01	32	0.90	6.0	0.07	65	3.0	<2
	Oct-09	8.20	1110	150	259	320	0.30	<0.05	<3	<0.1	<0.01	12	0.54	6.0	0.06	100	<1	<2
	Dec-09	8.00	548	42	172	210	1.70	<0.05	<1	1.60	0.02	140	9.80	6.0	0.48	31	<1	<2
	Apr-10	8.40	883	90	279	350	0.50	<0.05	<1	<0.1	<0.01	<10	0.09	5.0	0.02	53	<1	<2
	Jun-10	8.30	779	72	254	290	0.60	0.09	7	0.20	<0.01	20	0.50	8.0	0.05	47	<1	<2
	Sep-10	7.90	526	82	84	140	1.00	<0.05	<1	0.40	0.02	84	2.70	7.0	0.16	48	<1	3
	Nov-10	8.14	545	45	166	190	2.00	<0.05	<1	0.50	<0.01	52	3.20	6.0	0.25	34	2.0	2
	Mar-11	8.25	628	72	174	220	1.00	0.09	3	0.20	0.01	59	2.90	4.0	0.11	44	<1	<2
	Jun-11	8.40	740	58	257	300	0.40	<0.05	<1	<0.1	<0.01	10	0.17	5.0	0.06	46	<1	<3
	Sep-11	8.27	851	110	176	240	0.40	<0.05	<1	0.20	<0.01	<10	<0.02	6.0	0.05	77	1.0	<2
	Nov-11	7.98	316	18	110	120	1.90	<0.05	<1	0.60	<0.01	820	19.00	8.0	0.80	13	2.0	<2
	Apr-12	8.37	940	110	270	350	0.43	<0.05	<1	<0.10	<0.010	<10	0.13	4.0	0.56	62	<1	<2
	Nov-12	8.16	1000	100	240	400	0.45	0.06	1	<0.1	<0.01	11	0.03	4.0	0.03	67	<1	<2
	Apr-13	8.53	770	82	220	300	0.47	<0.05	<1	<0.1	<0.01	15	0.10	4.0	0.02	53	<1	<2
	Jun-13	8.30	960	110	270	360	0.34	0.07	5	<0.1	<0.01	<10	0.19	5.0	0.04	69	<1	<2
	Dec-13	8.00	2400	540	260	410	0.52	0.15	2	0.33	0.016	<10	0.16	<10	0.08	350	5.1	3
	Apr-14	8.38	930	110	240	320	0.30	0.06	2	<0.1	<0.01	<10	0.20	4.0	<0.1	66	<1	<2
	Jun-14	8.24	1100	130	290	380	0.19	<0.05	<1	<0.1	<0.01	<10	0.09	6.0	<0.1	83	<1	<2
	Sep-14	8.29	1400	220	270	420	0.35	<0.05	<1	<0.1	<0.01	<10	0.11	7.0	<0.1	140	1.3	<2
	Dec-14	8.09	4100	1100	270	500	0.51	<0.05	<1	<0.1	<0.01	<10	0.08	9.0		620	2.1	3
	Apr-15	8.30	1000	130	220	340	0.34	<0.05	<1	<0.1	<0.01	<10	0.11	4	0.02	89	<1	<2
	Jun-15	8.39	1200	160	270	380	0.42	<0.05	<1	<0.1	<0.01	<10	0.21	5	0.05	100	<1	<2
	Nov-15	8.14	1800	300	280	440	0.28	<0.05	<1	<0.1	<0.01	64	0.61	7	0.05	200	<1	<2
	Apr-16	8.34	900	100	260	330	0.11	<0.05	<1	<0.10	<0.01	<10	0.05	4.0	0.01	62	<1	2.0
	Nov-16	8.17	1400	230	220	420	0.40	<0.05	<1	<0.10	<0.01	<10	0.09	9.0	0.17	140	<1	4.0
	Apr-17	8.36	800	93	220	270	0.30	<0.05	<1	0.18	<0.01	18	0.24	4.0	0.04	58	<1	<2
	Jun-17	8.24	1100	130	250	320	0.41	<0.05	<1	<0.10	<0.01	220	0.59	5.0	0.06	160	<1	<2
	Nov-17	8.10	1600	290	260	380	0.21	<0.05	<1	<0.10	<0.01	31	0.31	6	0.07	160	<5	<2
	Apr-18	8.23	630	65	180	210	0.22	<0.05	<1	0.40	<0.01	27	1.00	3.0	0.07	39	<1	<2
	Jun-18	8.34	950	110	270	300	0.25	<0.05	<1	0.18	<0.01	11	0.36	5.0	0.06	81	<1	<2
	Sep-18	8.19	1100	190	180	240	0.22	<0.05	<1	0.19	<0.01	11	0.62	5.0	0.07	130	0.001	<2
	Dec-18	8.28	940	120	240	300	0.19	<0.05	<1	0.34	<0.01	<10	0.10	4.0	0.03	73	<1	<2
	Apr-19	8.29	820	110	210	250	0.24	0.10	3	0.36	<0.010	22	2.00	4.0	0.04	61	<1	<2
	May-19	8.41	770	77	260	290	0.20	<0.050	<1	0.17	<0.010	16	0.59	4.0	0.05	50	<1	<2
	Nov-19	8.29	950	120	240	320	0.34	<0.050	<1	<0.10	<0.010	<10	0.27	5.0	0.07	76	<1	<2
	Apr-20	8.38	1000	120	290	400	0.14	<0.050	<1	<0.10	<0.010	<10	0.14	4.0	0.01	73	<1	<2
	Jun-20	8.11	740	87	200	250	0.37	<0.050	<1	0.19	<0.010	51	1.90	5.0	0.12	56	<1	2.0
	Dec-20	8.18	1100	160	190	260	0.20	<0.050	<1	0.54	<0.010	<10	0.36	4.0	0.09	110	<1	<2

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
2) Blank indicates parameter not analysed.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW14	Mar-21	8.13	570	76	130	170	0.37	0.06	1	0.96	<0.010	850	22.00	7.0	0.66	46	<1	2.0
	Jun-21	8.27	1200	220	210	280	0.37	<0.050	<1	<0.10	<0.010	31	1.70	6.0	0.12	140	<1	<2
	Sep-21	8.43	930	120	270	330	0.33	<0.050	<1	0.11	<0.010	<10	0.17	5.0	0.06	77	<1	<2
	Dec-21	8.29	760	67	270	310	0.18	<0.050	<1	0.17	<0.010	<10	0.19	4.0	0.05	42	<1	<2
	Apr-22	8.45	940	120	290	350	0.18	<0.050	<1	<0.10	<0.010	<10	<0.01	3.3	<0.01	65	<1	<2
	Jun-22	8.23	1100	130	320	420	0.25	<0.050	<1	<0.10	0.011	11	<1	4.6	0.14	80	<1	<2

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
2) Blank indicates parameter not analysed.

TABLE D-2
SURFACE WATER CHEMISTRY RESULTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

	DATE	pH	SPEC. COND.	CHLORIDE	ALKALINITY (as CaCO3)	HARDNESS (as CaCO3)	TKN	AMMONIA		NITRATE	NITRITE	SUSPENDED SOLIDS	IRON	POTASSIUM	PHOSPHORUS (Total)	SODIUM	PHENOLICS	BOD
								Total	Free									
		units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L
PWQO		6.5-8.5							20				0.300		0.030		1	
SW16	May-03	7.28	* 2497	211	* 1360	782	66.7	* 58.1	* 249	<0.2	<0.2	475	* 31.3	58.9	0.85	125	6.0	19.1
	Apr-04	8.29	703	19	321	377	1.10	0.22	7	0.20	<0.1	100	1.90	4.9	<0.02	12	<1.0	<3
	Dec-04	8.18	854	33	357	483	1.60	0.05	<1	2.20	<0.1	129	1.80	6.0		13	<1.0	7
	Dec-05	8.22	818	22	393	440	1.00	0.13	3	0.40	0.01	29	0.44	5.6	0.06	15	<1.0	3
	Dec-08	8.20	854	21	416	430	0.90	0.22	4	0.60	<0.01	24	0.25	5.0	0.07	11	<1.0	<2
	Apr-09	8.20	668	12	331	350	0.60	<0.05	<3	0.50	<0.01	32	0.29	4.0	0.05	9	<1	<2
	Dec-09	8.20	694	17	313	350	1.50	0.21	5	2.10	0.02	32	0.83	8.0	0.13	11	<1	<2
	Jun-10	8.00	597	5	278	310	1.30	0.27	10	0.70	0.02	33	0.52	3.0	0.12	8	<1	<2
	Nov-10	8.13	869	40	367	390	1.80	0.42	9	2.80	0.02	<10	0.10	14.0	0.08	29	<1	<2
	Mar-11	8.08	777	22	359	390	1.60	0.71	8	1.00	0.02	<10	0.25	9.0	0.07	15	<1	<2
	Jun-11	8.22	816	39	232	470	2.00	0.54	33	4.00	0.44	13	0.51	25.0	0.07	42	<1	3.0
	Nov-11	8.05	724	34	289	310	3.10	0.13	2	5.00	0.02	10	0.25	16.0	0.12	22	2.0	<2
	Apr-13	8.06	1200	47	510	560	3.70	2.80	50	3.40	0.07	590	1.10	22.0	0.05	37	<1	<2
	Apr-14	8.03	1100	38	490	540	1.70	1.20	23	0.51	0.03	<10	0.08	19.0	<0.1	26	<1	<2
	Apr-15	8.11	1200	57	450	610	2.10	1.00	17	0.43	0.02	<10	0.13	20.0	0.05	39	<1	<2
	Apr-16	8.06	1200	72	550	620	2.50	1.80	30	3.39	0.08	<10	0.12	23.0	0.04	46	<1	5.0
	Apr-17	8.17	980	30	450	430	3.50	2.80	60	0.80	0.07	10	0.12	24.0	0.05	32	<1	<2
	Apr-18	8.40	730	33	320	330	0.43	<0.05	<1	1.07	<0.01	<10	0.05	4.0	0.04	13	<1	<2
	Dec-18	8.12	930	76	350	440	0.27	<0.05	<1	0.21	<0.01	100	1.20	5.0	0.06	21	<1	<2
	Apr-19	7.81	1000	38	510	490	1.70	1.20	9	1.62	0.02	<10	0.05	17.0	0.04	29	<1	<2
	May-19	8.24	1000	32	510	510	1.40	0.80	29	0.40	0.15	42	1.10	17.0	0.09	30	<1	<2
	Nov-19	8.21	1200	66	480	590	1.10	<0.050	<1	2.51	<0.010	61	2.00	17.0	0.12	44	<1	<2
	Mar-21	8.28	580	23	240	260	0.61	<0.050	<1	0.74	0.01	22	0.66	7.0	0.12	16	<1	<2
	Sep-21	8.15	990	40	450	570	0.78	<0.050	<1	<0.10	<0.010	98	2.50	10.0	0.10	23	<1	<2
	Dec-21	8.25	830	27	400	410	0.26	<0.050	<1	0.34	<0.010	<10	0.18	5.0	0.02	28	<1	<2
	Apr-22	8.19	1100	43	520	560	0.90	0.34	7	<0.10	<0.010	10	<0.01	14.0	<0.01	31	<1	<2

NOTES: 1) nd - Indicates parameter concentration was below the Reporting Detection Limit.
* - Indicates associated value is suspected to be anomalous.
2) Blank indicates parameter not analysed.

APPENDIX

E CLIMATIC DATA

TABLE E-1
30 YEAR AVERAGE WATER BUDGET (1971-2000) - Royal Botanical Gardens
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONTH	MEAN TEMPERATURE (°C)	I	E (mm)	DAYLIGHT FACTOR	E ADJ. (mm)	TOTAL PRECIPITATION (mm)	SURPLUS (mm)	DEFICIT (mm)
January	-5.0	0.0	0.0	0.8	0.0	59.5	59.5	0.0
February	-4.4	0.0	0.0	0.8	0.0	55.0	55.0	0.0
March	0.5	0.0	1.5	1.0	1.5	75.7	74.2	0.0
April	6.9	1.6	29.2	1.1	32.7	73.5	40.8	0.0
May	13.3	4.4	61.6	1.3	78.3	81.8	3.5	0.0
June	18.8	7.4	91.4	1.3	116.9	71.6	0.0	45.3
July	22.0	9.4	109.2	1.3	142.0	74.9	0.0	67.1
August	20.9	8.7	103.1	1.2	123.7	84.6	0.0	39.1
September	16.4	6.0	78.2	1.0	81.3	84.9	3.6	0.0
October	10.0	2.8	44.6	1.0	42.3	72.5	30.2	0.0
November	4.2	0.8	16.6	0.8	13.5	81.5	68.0	0.0
December	-1.6	0.0	0.0	0.8	0.0	77.1	77.1	0.0
TOTAL	**8.5**	**41.1**			**632.2**	**892.6**	**411.9**	**151.5**
						632.2		
				Water Surplus		**260.4**	**mm**	

NOTES: 1) I = Heat Index
E = Evapotranspiration
2) Water budget based on Thornthwaite Method.
3) (°C) - Represents calculated mean of daily temperatures for the month.
4) Data from the Royal Botanical Gardens located at latitude 43°17'N, longitude 79°53'W.
Normal values based on data averages from 1971 to 2000.

TABLE E-2
30 YEAR AVERAGE WATER BUDGET (1971-2000) - Millgrove
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONTH	MEAN TEMPERATURE (°C)	I	E (mm)	DAYLIGHT FACTOR	E ADJ. (mm)	TOTAL PRECIPITATION (mm)	SURPLUS (mm)	DEFICIT (mm)
January	-6.0	0.0	0.0	0.8	0.0	71.3	71.3	0.0
February	-5.3	0.0	0.0	0.8	0.0	62.2	62.2	0.0
March	-0.3	0.0	0.0	1.0	0.0	75.2	75.2	0.0
April	6.4	1.5	28.8	1.1	32.3	79.4	47.1	0.0
May	13.0	4.2	62.3	1.3	79.1	87.1	8.0	0.0
June	18.0	6.9	88.7	1.3	113.5	89.7	0.0	23.8
July	20.6	8.5	102.7	1.3	133.5	83.4	0.0	50.1
August	19.8	8.0	98.3	1.2	118.0	83.1	0.0	34.9
September	15.6	5.6	75.9	1.0	78.9	96.5	17.6	0.0
October	9.2	2.5	42.8	1.0	40.6	78.9	38.3	0.0
November	3.2	0.5	13.6	0.8	11.0	87.0	76.0	0.0
December	-2.6	0.0	0.0	0.8	0.0	79.2	79.2	0.0
TOTAL	**7.6**	**37.7**			**606.9**	**973.0**	**474.9**	**108.8**
						606.9		
				Water Surplus		**366.1**	**mm**	

NOTES: 1) I = Heat Index
E = Evapotranspiration
2) Water budget based on Thornthwaite Method.
3) (°C) - Represents calculated mean of daily temperatures for the month.
4) Data from the Millgrove Climatological Station located at latitude 43°19'N, longitude 79°58'W.
Normal values based on data averages from 1971 to 2000.

TABLE E-3
30 YEAR AVERAGE WATER BUDGET (1981-2010) - Hamilton Airport
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONTH	MEAN TEMPERATURE (°C)	I	E (mm)	DAYLIGHT FACTOR	E ADJ. (mm)	TOTAL PRECIPITATION (mm)	SURPLUS (mm)	DEFICIT (mm)
January	-5.5	0.0	0.0	0.8	0.0	64.0	64.0	0.0
February	-4.6	0.0	0.0	0.8	0.0	57.8	57.8	0.0
March	-0.1	0.0	0.0	1.0	0.0	68.4	68.4	0.0
April	6.7	1.6	29.8	1.1	33.4	79.1	45.7	0.0
May	12.8	4.1	60.7	1.3	77.1	79.4	2.3	0.0
June	18.3	7.1	89.9	1.3	115.1	84.9	0.0	30.2
July	20.9	8.7	104.0	1.3	135.2	100.7	0.0	34.5
August	20.0	8.1	99.1	1.2	118.9	79.2	0.0	39.7
September	15.8	5.7	76.5	1.0	79.6	81.9	2.3	0.0
October	9.3	2.6	42.8	1.0	40.6	77.4	36.8	0.0
November	3.7	0.6	15.5	0.8	12.6	84.3	71.7	0.0
December	-2.3	0.0	0.0	0.8	0.0	73.0	73.0	0.0
TOTAL	**7.9**	**38.4**			**612.5**	**930.1**	**422.0**	**104.4**
						612.5		
				Water Surplus		**317.6**	**mm**	

NOTES: 1) I = Heat Index
E = Evapotranspiration
2) Water budget based on Thornthwaite Method.
3) (°C) - Represents calculated mean of daily temperatures for the month.
4) Data from Hamilton Airport located at latitude 43°10'N, longitude 79°56'W.
Normal values based on data averages from 1971 to 2000.

TABLE E-4
HISTORICAL WATER BUDGETS SUMMARY
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

YEAR	MEAN TEMPERATURE (°C)	I	E ADJ. (mm)	TOTAL PRECIPITATION (mm)	SURPLUS (mm)	DEFICIT (mm)	WATER SURPLUS (mm)
1987	8.5	40.5	634.7	1057.2	507.1	84.5	422.5
1988	7.9	39.8	622.6	902.4	471.6	191.8	279.8
1989	7.1	37.6	603.5	884.3	449.8	169.0	280.8
1990	8.4	37.7	611.2	1097.7	614.3	127.8	486.5
1991	8.4	40.8	634.5	984.7	495.7	145.6	350.2
1992	6.6	30.7	559.4	1213.3	706.9	53.0	653.9
1993	6.9	35.4	589.0	941.9	504.7	151.8	352.9
1994	7.2	38.5	614.5	1026.8	534.1	121.8	412.3
1995	7.7	39.6	615.6	1080.2	662.3	197.7	464.6
1996	7.1	36.8	591.4	1260.7	751.4	82.1	669.3
1997	7.2	34.3	577.9	976.9	518.9	120.0	399.0
1998	9.6	42.5	648.1	836.5	414.9	226.5	188.4
1999	9.0	43.2	648.6	857.5	414.7	205.8	208.9
2000	7.9	38.8	624.6	1041.7	507.0	89.9	417.1
2001	8.9	41.7	638.0	886.5	449.3	200.8	248.5
2002	8.9	41.4	628.9	858.8	451.3	221.4	229.9
2003	7.3	37.7	602.7	1016.0	584.6	171.3	413.3
2004	7.8	38.5	617.0	942.0	469.8	144.8	325.0
2005	8.7	44.6	653.2	900.3	421.7	174.6	247.1
2006	9.7	42.0	647.9	1046.9	547.0	148.0	399.0
2007	8.7	43.0	642.3	716.2	375.6	301.7	73.9
2008	8.2	38.8	615.1	1013.5	456.7	58.3	398.4
2009	7.9	37.4	609.2	865.7	382.6	126.1	256.5
2010	9.3	44.7	668.1	914.9	372.8	125.9	246.8
2011	8.9	43.5	648.9	899.8	515.6	264.7	250.9
2012	8.2	45.9	678.1	586.3	228.9	320.7	-91.8
2013	8.3	39.2	618.1	832.3	396.7	182.4	214.2
2014	7.1	39.2	618.1	739.7	396.7	182.4	121.6
2015	8.5	43.7	651.3	698.0	271.9	225.2	46.7

NOTES: 1) I = Heat Index
E = Evapotranspiration
2) Water budget summary based on Thornthwaite Method applied to monthly average/totals for each year.
3) (°C) - Represents calculated mean of daily temperatures for the month.
4) 1987 - 2004 data from the Millgrove Climatological Station located at latitude 43°19'N, longitude 79°58'W. longitude 79°54'W
5) 2005 - 2018 data from the Royal Botanical Gardens Climatological Station located at latitude 43°17'N, longitude 79°54'W.
6) 2019 to present data from Hamilton Airport located at latitude 43°10'N, longitude 79°56'W.

TABLE E-4
HISTORICAL WATER BUDGETS SUMMARY
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

YEAR	MEAN TEMPERATURE (°C)	I	E ADJ. (mm)	TOTAL PRECIPITATION (mm)	SURPLUS (mm)	DEFICIT (mm)	WATER SURPLUS (mm)
2016	9.9	45.8	665.4	716.6	371.4	320.2	51.2
2017	9.6	42.7	642.5	1045.4	589.1	186.2	402.9
2018	9.0	41.6	629.0	797.0	422.9	254.9	168.0
2019	7.5	38.2	601.5	1087.0	574.1	88.6	485.5
2020	8.9	40.9	631.4	797.1	457.6	291.9	165.7
2021	9.1	43.0	649.0	937.8	450.0	161.2	288.8
2022	8.2	40.8	631.8	679.6	291.2	243.4	47.8

NOTES: 1) I = Heat Index
E = Evapotranspiration
2) Water budget summary based on Thornthwaite Method applied to monthly average/totals for each year.
3) (°C) - Represents calculated mean of daily temperatures for the month.
4) 1987 - 2004 data from the Millgrove Climatological Station located at latitude 43°19'N, longitude 79°58'W. longitude 79°54'W
5) 2005 - 2018 data from the Royal Botanical Gardens Climatological Station located at latitude 43°17'N, longitude 79°54'W.
6) 2019 to present data from Hamilton Airport located at latitude 43°10'N, longitude 79°56'W.

TABLE E-5
2022 WATER BUDGET
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONTH	MEAN TEMPERATURE (°C)	I	E (mm)	DAYLIGHT FACTOR	E ADJ. (mm)	TOTAL PRECIPITATION (mm)	SURPLUS (mm)	DEFICIT (mm)
January	-8.6	0.0	0.0	0.8	0.0	37.3	37.3	0.0
February	-4.9	0.0	0.0	0.8	0.0	87.1	87.1	0.0
March	0.9	0.1	3.0	1.0	3.0	60.4	57.4	0.0
April	5.9	1.3	24.7	1.1	27.7	47.8	20.1	0.0
May	15.2	5.3	71.7	1.3	91.0	50.8	0.0	40.2
June	18.4	7.1	89.1	1.3	114.0	76.6	0.0	37.4
July	21.0	8.7	103.8	1.3	134.9	56.9	0.0	78.0
August	21.2	8.9	105.0	1.2	126.0	72.1	0.0	53.9
September	16.2	5.9	77.5	1.0	80.6	47.2	0.0	33.4
October	9.4	2.6	41.6	1.0	39.5	39.0	0.0	0.5
November	4.6	0.9	18.6	0.8	15.1	39.7	24.6	0.0
December	-0.7	0.0	0.0	0.8	0.0	64.7	64.7	0.0
TOTAL	**8.2**	**40.8**			**631.8**	**679.6**	**291.2**	**243.4**
						631.8		
				Water Surplus		**47.8**	**mm**	

NOTES: 1) I = Heat Index
E = Evapotranspiration
2) Water budget based on Thornthwaite Method.
3) (°C) - Represents calculated mean of daily temperatures for the month.
4) Data from Hamilton Airport located at latitude 43°10'N, longitude 79°56'W.

APPENDIX

F COMBUSTIBLE GAS

TABLE F-1
COMBUSTIBLE GAS MEASUREMENTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR LOCATION	Jan 97	Mar 98	Feb 99	Jan 00	Dec 00	Dec 01	Dec 02	Dec 03	Feb 04	Mar 04	Apr 04	Dec 04	Dec 05	Feb 06	Sep 07	Mar 08	Sep 09	Jan 10	Sep 10
MH 23	0.5	1.0	1.0	3.8	1.0	1.3	1.0	1.0	1.0	1.2	1.4	1.3	1.1	1.0	28.5	26.4		1.2	4.4
22-III	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24-III	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25-I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28-I	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29-I	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-I	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31-I	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32-III	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36-I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37-I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38-I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0			
39-I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GP1	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GP2	-	-	-	-	-	-	-	0.0	0.2	0.4	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
GP3	-	-	-	-	-	-	-	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GP4	-	-	-	-	-	-	-	0.0	0.2	0.1	0.1	0.3	0.2	0.0	5	3.2	0.0	0.0	0.0
GP5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0

MONITOR LOCATION	Jan 11	Sep 11	Feb 12	Sep 12	Feb 13	Sep 13	Feb 14	Sep 14	Feb 15	Sep 15	Sep 16	Dec 16	Feb 17	Sep 17	Jan 18	Jan 19	Sep 19	Feb 20	Sep 20
MH 23	0.0	0.5	0.1	0.1	0.2	0.0	0.8	2.0	0.1	0.4	18.0	0.2	0.0	0.0	0.2	0.3	6	1.0	1.2
22-III	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24-III	0.0	0.0	0.0	74.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25-I	-	-	-	-	6.0	74.0	0.0	59.5	0.0	18.5	0.0	0.0	1.0	12	0.0	0.0	32	0.0	61
28-I	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29-I	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-I	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3		0.0	0.8	0.0	0.3	0.1	0.0	0.0	0.0
31-I	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0
32-III	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36-I	-	-	59.5	72	-	73	68.5	67.5	47	51	69	71	60	25	45	-	57	55	61
37-I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	50	50	55
38-I				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39-I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	56	59
GP1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GP2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0
GP3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GP4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GP5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NOTES: 1) "-" - Indicates monitor was not installed at the time of monitoring.
Blank indicates that no measurement was obtained from existing monitor.
2) Combustible gas values presented as % gas by volume in air.

TABLE F-1
COMBUSTIBLE GAS MEASUREMENTS
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR LOCATION	Feb 21	Sept 21	Feb 22	Sept 22
MH 23	1.0	0.0	0.0	0.0
22-III	0.0	0.0	0.0	0.0
24-III	0.0	0.0	0.0	0.0
25-I	0.0	0.0	0.0	25
28-I	0.0	0.0	0.0	0.0
29-I	0.0	0.0	0.0	0.0
30-I	0.0	0.0	0.0	0.0
31-I	0.0	0.0	0.0	0.0
32-III	0.0	0.0	0.0	0.0
36-I	55	25	36	55
37-I	50	25	40	50
38-I	0.0	0.0	0.0	0.0
39-I	56	32	38	60
GP1	0.0	0.0	0.0	0.0
GP2	2.3	0.0	1.0	0.1
GP3	0.0	0.0	0.0	0.0
GP4	0.0	0.0	0.0	0.1
GP5	0.0	0.2	0.0	0.1

NOTES: 1) "-" - Indicates monitor was not installed at the time of monitoring.
Blank indicates that no measurement was obtained from existing monitor.
2) Combustible gas values presented as % gas by volume in air.

TABLE F-2
COMBUSTIBLE GAS MEASUREMENTS - Meridian Brick Property
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	RELATIVE DEPTH	Feb-00	Apr-00	Aug-00	Oct-00	Feb-01	May-01	Aug-01	Nov-01	Feb-02	May-02	Aug-02	Nov-02
MW 5	Deep	0	0	0	0	530	0	0	0	0	0	0	0
MW 6A	Deep	0	**46,640**	530	0	1,590	530	0	0	0	0	0	0
MW 6B	Shallow	**80,000**	**130,000**	**420,000**	**280,000**	**260,000**	**160,000**	**220,000**	**110,000**	**120,000**	**250,000**	**51,940**	4,770
MW 7A	Deep	1,590	**40,000**	265	0	1,060	1,060	0	0	8,320	1,060	0	0
MW 7B	Shallow	**60,000**	**60,000**	0	0	**240,000**	9,540	0	**37,100**	**290,000**	**11,130**	0	**120,000**
MW 8A	Deep	**360,000**	**480,000**	**400,000**	**420,000**	**300,000**	**380,000**	**240,000**	**260,000**	**80,000**	4,770	4,770	5,830
MW 8B	Shallow	**480,000**	**590,000**	**440,000**	**600,000**	**280,000**	**380,000**	**520,000**	**680,000**	**490,000**	**160,000**	**360,000**	**740,000**
MW 9	Shallow	4,770	**580,000**	**100,000**	**180,000**	1,060	6,360	**40,000**	**200,000**	**340,000**	**220,000**	**50,000**	**150,000**
MW 10A	Deep	0	0	0	0	0	1,060	0	0	0	0	0	0
MW 10B	Shallow	0	1,060	1,060	0	530	1,060	0	0	1,060	0	0	0
MW 11	Shallow	4,240	**28,620**	3,180	0	4,240	0	0	0	0	530	1,060	3,180
MW 12A	Deep	0	0	0	0	0	0	0	0	0	0	0	0
MW 12B	Shallow	0	0	0	0	0	0	0	0	0	530	0	0
GP 99-03	Shallow	0 (Feb 28)	0	0	0	0	0	0	0	0	0	0	0
GP 00-1	Shallow	0 (Feb 28)	0	0	0	0	0	0	0	1,060	0	0	530
GP 00-2	Shallow	6360 (Feb 28)	0	0	0	0	0	0	0	530	0	0	0
GP 00-3	Shallow	n.a.	530	n.m.	0	2,120	2,650	0	9,540	4,240	530	5,830	7,950
GP 00-04	Shallow	n.a.	530	0	0	2,120	0	0	0	0	0	0	0
GP 00-05	Shallow	n.a.	1,060	0	530	0	0	0	0	0	0	0	0
GP 00-06	Shallow	n.a.	1,590	0	530	2,120	1,060	530	0	0	0	0	0
GP 00-07	Shallow	n.a.	1,060	0	1,060	1,060	0	0	0	0	0	0	3,180
GP 00-08	Shallow	n.a.	530	0	n.m.	0	1,060	0	0	0	0	0	0
GP 00-09	Shallow	n.a.	1,060	0	795	0	0	0	0	0	0	0	0
GP 00-10	Shallow	n.m.	0	0	0	1,060	1,060	0	0	0	0	0	0
GP 08-1	Shallow	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

1) Combustible gas results in parts per million (ppm).
2) Criteria based on Procedure D-4-1:"Guideline for Assessing Methane Hazards from Landfill Sites" (November 1997)
3) Development of any structure on a landfill should not be approved unless it can be demonstrate that methane will not be present in concentrations in excess of 20 % of the LEL.
4) Methane mixed at 5 % to 15 % with air forms an explosive mixture. The lower explosive limit (LEL) of Methane is 5.3 % (by volume) 5.3 % Methane (by volume) = 53,000 ppm Methane, and 20% of the LEL = 10,600 ppm.
5) Data presented in this table were provided by Golder Associates.

Criteria = 10,600 parts per million
28620 = Bolded values exceed the given criteria.

n.a. - not available (installed April 2000)
n.m. - not measured

Instrument Used Landtec Gem 2000 Landfill Gas Monitor used for measurements

TABLE F-2
COMBUSTIBLE GAS MEASUREMENTS - Meridian Brick Property
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	RELATIVE DEPTH	Feb-03	Apr-03	Aug-03	Oct-03	Feb-04	May-04	Aug-04	Nov-04	May-05	Aug-05	Nov-05
MW 5	Deep	0	0	0	0	0	0	0	0	0	0	0
MW 6A	Deep	0	530	0	0	0	0	0	0	**13,780**	0	0
MW 6B	Shallow	**190,000**	**80,000**	**80,000**	**40,280**	**340,000**	**1,000,000**	6,890	**36,040**	**540,000**	**660,000**	**220,000**
MW 7A	Deep	1,060	7,950	1,060	0	**27,560**	1,060	0	0	5,830	0	0
MW 7B	Shallow	**200,000**	**50,000**	**13,780**	**35,510**	**360,000**	**24,910**	0	**29,680**	**270,000**	0	**210,000**
MW 8A	Deep	**420,000**	**150,000**	**23,850**	**870,000**	**53,000**	3,710	3,180	**580,000**	**28,090**	7,420	3,180
MW 8B	Shallow	**560,000**	**600,000**	**280,000**	**440,000**	**240,000**	**820,000**	**110,000**	**24,380**	**300,000**	**53,000**	**18,020**
MW 9	Shallow	**430,000**	**270,000**	**100,000**	**140,000**	2,650	**1,000,000**	**180,000**	**260,000**	**600,000**	**280,000**	**470,000**
MW 10A	Deep	0	0	0	0	0	0	0	0	0	0	0
MW 10B	Shallow	0	0	0	0	0	0	1,060	**34,450**	0	0	2,650
MW 11	Shallow	10,600	6,890	0	0	**13,250**	0	0	0	4,240	530	0
MW 12A	Deep	0	0	0	0	0	0	0	0	0	0	0
MW 12B	Shallow	0	0	0	0	0	0	0	0	0	0	0
GP 99-03	Shallow	0	0	0	0	0	530	0	0	0	0	0
GP 00-1	Shallow	530	0	0	0	0	0	0	0	0	0	0
GP 00-2	Shallow	530	0	0	0	0	0	0	0	0	0	0
GP 00-3	Shallow	5,300	530	0	0	1,060	0	0	530	0	0	0
GP 00-04	Shallow	0	0	0	0	0	0	0	0	0	0	0
GP 00-05	Shallow	0	0	0	0	0	0	0	0	0	0	0
GP 00-06	Shallow	0	0	0	0	0	0	0	0	0	0	0
GP 00-07	Shallow	0	0	0	0	0	0	0	0	0	0	0
GP 00-08	Shallow	0	0	0	0	0	0	0	0	0	0	0
GP 00-09	Shallow	0	0	0	0	0	0	0	0	0	0	0
GP 00-10	Shallow	0	0	0	0	0	0	0	0	0	0	0
GP 08-1	Shallow	-	-	-	-	-	-	-	-	-	-	-

Notes:

1) Combustible gas results in parts per million (ppm).
2) Criteria based on Procedure D-4-1:"Guideline for Assessing Methane Hazards from Landfill Sites" (November 1997)
3) Development of any structure on a landfill should not be approved unless it can be demonstrate that methane will not be present in concentrations in excess of 20 % of the LEL.
4) Methane mixed at 5 % to 15 % with air forms an explosive mixture. The lower explosive limit (LEL) of Methane is 5.3 % (by volume)
   5.3 % Methane (by volume) = 53,000 ppm Methane, and 20% of the LEL = 10,600 ppm.
5) Data presented in this table were provided by Golder Associates.

Criteria = 10,600 parts per million
28620 = Bolded values exceed the given criteria.

n.a. - not available (installed April 2000)
n.m. - not measured

Instrument Used Landtec Gem 2000 Landfill Gas Monitor used for measurements

TABLE F-2
COMBUSTIBLE GAS MEASUREMENTS - Meridian Brick Property
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	RELATIVE DEPTH	Feb-06	May-06	Aug-06	Nov-06	Feb-07	Apr-07	Aug-07	Nov-07	Feb-08	Apr-08	Aug-08	Nov-08
MW 5	Deep	0	0	0	0	0	0	0	0	0	0	0	0
MW 6A	Deep	2,650	0	0	0	530	0	0	n.m.	**40,280**	5,830	0	0
MW 6B	Shallow	**270,000**	**150,000**	**50,000**	**200,000**	**53,000**	**300,000**	**310,000**	**170,000**	**420,000**	**640,000**	**330,000**	**336,000**
MW 7A	Deep	5,830	530	0	0	2,120	0	0	n.m.	**22,790**	5,300	530	0
MW 7B	Shallow	**80,000**	0	0	0	**170,000**	0	0	**50,000**	**250,000**	**>53,000**	530	0
MW 8A	Deep	7,420	2,650	0	2,120	**32,860**	**40,280**	9,540	4,770	530	2,650	2,120	**35,000**
MW 8B	Shallow	**53,000**	**23,850**	0	0	**33,920**	**53,000**	**31,800**	0	**480,000**	**130,000**	**390,000**	**155,000**
MW 9	Shallow	**200,000**	**400,000**	**400,000**	0	**53,000**	**30,210**	**16,430**	2,120	**210,000**	**200,000**	**470,000**	0
MW 10A	Deep	0	0	0	0	0	0	0	n.m.	**11,130**	0	0	0
MW 10B	Shallow	530	**24,380**	530	**53,000**	**80,000**	**53,000**	0	0	3,180	**39,750**	**53,000**	**81,000**
MW 11	Shallow	3,180	2,120	0	2,120	2,120	**71,060**	0	n.m.	4,240	4,770	0	0
MW 12A	Deep	0	0	0	0	0	0	0	n.m.	0	0	0	0
MW 12B	Shallow	0	0	0	0	0	0	0	0	0	0	0	0
GP 99-03	Shallow	0	0	0	0	7,280	0	0	0	n.m.	n.m.	n.m.	0
GP 00-1	Shallow	0	0	0	0	0	0	0	0	0	0	0	0
GP 00-2	Shallow	0	0	0	0	0	0	0	0	0	0	0	0
GP 00-3	Shallow	0	0	0	0	0	0	0	0	0	0	0	0
GP 00-04	Shallow	0	0	0	0	0 (Mar 22/07)	0	0	0	0	0	0	0
GP 00-05	Shallow	0	0	0	0	0 (Mar 22/07)	0	0	0	n.m.	0	0	0
GP 00-06	Shallow	0	0	0	0	0 (Mar 22/07)	0	0	0	n.m.	0	0	0
GP 00-07	Shallow	0	0	0	0	0	0	0	0	n.m.	0	0	0
GP 00-08	Shallow	0	0	0	0	0 (Mar 22/07)	0	0	0	0	0	0	0
GP 00-09	Shallow	0	0	0	0	0 (Mar 22/07)	0	0	0	0	0	0	0
GP 00-10	Shallow	0	0	0	0	0	0	0	0	0	0	0	0
GP 08-1	Shallow	-	-	-	-	-	-	-	-	n.a.	n.a.	2650 (Sep 4)	n.m.

Notes:

1) Combustible gas results in parts per million (ppm).
2) Criteria based on Procedure D-4-1:"Guideline for Assessing Methane Hazards from Landfill Sites" (November 1997)
3) Development of any structure on a landfill should not be approved unless it can be demonstrate that methane will not be present in concentrations in excess of 20 % of the LEL.
4) Methane mixed at 5 % to 15 % with air forms an explosive mixture. The lower explosive limit (LEL) of Methane is 5.3 % (by volume) 5.3 % Methane (by volume) = 53,000 ppm Methane, and 20% of the LEL = 10,600 ppm.
5) Data presented in this table were provided by Golder Associates.

Criteria = 10,600 parts per million
28620 = Bolded values exceed the given criteria.

n.a. - not available (installed April 2000)
n.m. - not measured

Instrument Used Landtec Gem 2000 Landfill Gas Monitor used for measurements

TABLE F-2
COMBUSTIBLE GAS MEASUREMENTS - Meridian Brick Property
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	RELATIVE DEPTH	Feb-09	Apr-09	Jul-09	Oct-09	Feb-10	Aug-10	Nov-10	Feb-11	May-11	Jul-11	Oct-11
MW 5	Deep	0	0	0	0	0	0	1,060	1,000	0	0	0
MW 6A	Deep	0	**501,000**	0	0	9,000	0	nm	**25,000**	3,000	**20,000**	0
MW 6B	Shallow	2,000	0	**258,000**	**343,000**	**407,000**	**980,000**	**168,000**	**247,000**	**308,000**	**180,000**	**146,000**
MW 7A	Deep	8,000	0	0	0	0	**19,000**	1,000	**25,000**	2,000	0	1,000
MW 7B	Shallow	8,000	0	0	**93,000**	**165,000**	**104,000**	**234,000**	**247,000**	**30,000**	**105,000**	**74,000**
MW 8A	Deep	**18,000**	2,650	7,000	5,830	1,000	10,000	**96,000**	**17,000**	**15,000**	**17,000**	**21,000**
MW 8B	Shallow	**567,000**	**40,000**	**54,000**	**203,000**	**157,000**	**35,000**	**261,000**	**36,000**	**68,000**	**102,200**	**141,000**
MW 9	Shallow	**19,000**	**135,000**	**105,000**	**569,000**	**21,000**	**291,000**	**417,000**	3,000	**122,000**	**107,000**	**492,000**
MW 10A	Deep	1,060	0	0	0	0	0	0	2,000	0	**180,000**	0
MW 10B	Shallow	**188,000**	**408,000**	**80,000**	**211,000**	**428,000**	**374,000**	**210,000**	**356,000**	**30,000**	**138,000**	**0**
MW 11	Shallow	8,000	1,590	0	0	1,000	0	1,060	2,000	0	100	0
MW 12A	Deep	1,000	0	0	0	0	0	530	1,000	0	1,000	0
MW 12B	Shallow	1,000	0	0	0	0	0	530	0	0	0	0
GP 99-03	Shallow	n.m.	n.m.	n.m.	n.m.	0	0	530				
GP 00-1	Shallow	0	0	30	0	0	0	0	2,000	0	2,000	0
GP 00-2	Shallow	1,000	0	0	0	0	0	0	1,000	0	1,000	0
GP 00-3	Shallow	1,000	0	20	0	0	0	0	0	0	0	0
GP 00-04	Shallow	0	0	0	0	0	0	0	0	0	0	0
GP 00-05	Shallow	0	0	0	0	0	0	0	0	0	0	0
GP 00-06	Shallow	0	0	0	0	0	0	0	0	0	3,000	0
GP 00-07	Shallow	0	0	0	0	0	0	0	0	0	0	0
GP 00-08	Shallow	0	0	0	0	0	0	0	0	0	0	0
GP 00-09	Shallow	0	0	0	0	0	0	0	0	0	0	0
GP 00-10	Shallow	0	0	0	0	0	0	0	0	0	2,000	0
GP 08-1	Shallow	1,000	0	530	530	0	0	530	0	0	0	0

Notes:

1) Combustible gas results in parts per million (ppm).
2) Criteria based on Procedure D-4-1:"Guideline for Assessing Methane Hazards from Landfill Sites" (November 1997)
3) Development of any structure on a landfill should not be approved unless it can be demonstrate that methane will not be present in concentrations in excess of 20 % of the LEL.
4) Methane mixed at 5 % to 15 % with air forms an explosive mixture. The lower explosive limit (LEL) of Methane is 5.3 % (by volume)
   5.3 % Methane (by volume) = 53,000 ppm Methane, and 20% of the LEL = 10,600 ppm.
5) Data presented in this table were provided by Golder Associates.

Criteria = 10,600 parts per million
28620 = Bolded values exceed the given criteria.

n.a. - not available (installed April 2000)
n.m. - not measured

Instrument Used Landtec Gem 2000 Landfill Gas Monitor used for measurements

TABLE F-2
COMBUSTIBLE GAS MEASUREMENTS - Meridian Brick Property
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	RELATIVE DEPTH	Feb-12	May-12	Jul-12	Oct-12	Feb-13	May-13	Jul-13	Oct-13	Feb-14	May-14	Aug-14	Nov-14
MW 5	Deep	0	0	0	0	0	530	0	0	0	0	0	0
MW 6A	Deep	3,000	**30,000**	**0**	3,000	25,000	**4,000**	**141,000**	0	**20,000**	1,590	3,000	1,000
MW 6B	Shallow	**313,000**	**494,000**	**106,000**	**223,000**	**398,000**	**627,000**	**364,000**	**216,000**	**215,000**	**618,000**	**305,000**	**374,000**
MW 7A	Deep	10,000	2,000	0	0	2,650	530	0	0	**27,000**	2,650	2,000	0
MW 7B	Shallow	**293,000**	1,000	4,000	**112,000**	**26,000**	5,000	0	**12,720**	**274,000**	1,060	2,000	**204,000**
MW 8A	Deep	1,000	4,000	2,000	5,000	6,360	8,000	7,000	0	**27,000**	2,120	4,000	0
MW 8B	Shallow	**201,000**	**222,000**	**51,000**	**239,000**	**617,000**	**93,000**	**17,000**	**56,000**	**17,000**	0	2,000	**0**
MW 9	Shallow	**15,000**	**58,000**	**79,000**	**208,000**	**171,000**	**14,000**	**71,000**	**281,000**	0	**78,000**	**34,000**	**299,000**
MW 10A	Deep	1,000	0	0	0	0	0	0	0	0	0	2,000	0
MW 10B	Shallow	**130,000**	**268,000**	**417,000**	**100,000**	**4,240**	**254,000**	**224,000**	**0**	**56,000**	**164,000**	2,000	**0**
MW 11	Shallow	4,000	1,000	0	0	3,710	530	0	0	6,360	530	2,000	0
MW 12A	Deep	0	1,000	0	0	0	0	0	0	0	0	0	0
MW 12B	Shallow	1,000	0	0	0	0	0	0	0	0	0	0	0
GP 99-03	Shallow	nm	nm	nm	nm	nm	nm	nm	nm	0	0	0	
GP 00-1	Shallow	0	0	0	0	0	0	0	0	0	0	2,000	0
GP 00-2	Shallow	0	0	0	0	0	0	0	0	0	0	2,000	0
GP 00-3	Shallow	0	0	0	0	0	0	0	0	0	0	1,000	0
GP 00-04	Shallow	0	0	0	0	0	0	0	0	0	0	200	0
GP 00-05	Shallow	0	0	0	0	0	0	0	0	0	0	2,000	0
GP 00-06	Shallow	0	0	3,000	0	0	0	0	0	0	0	2,000	0
GP 00-07	Shallow	0	0	0	0	0	0	0	0	0	0	0	0
GP 00-08	Shallow	0	0	0	0	0	0	0	0	0	0	0	0
GP 00-09	Shallow	0	0	0	0	0	0	0	0	0	0	0	0
GP 00-10	Shallow	0	0	2,000	0	0	0	0	0	0	0	0	0
GP 08-1	Shallow	0	0	0	0	0	0	0	0	0	0	2,000	0

Notes:

1) Combustible gas results in parts per million (ppm).
2) Criteria based on Procedure D-4-1:"Guideline for Assessing Methane Hazards from Landfill Sites" (November 1997)
3) Development of any structure on a landfill should not be approved unless it can be demonstrate that methane will not be present in concentrations in excess of 20 % of the LEL.
4) Methane mixed at 5 % to 15 % with air forms an explosive mixture. The lower explosive limit (LEL) of Methane is 5.3 % (by volume) 5.3 % Methane (by volume) = 53,000 ppm Methane, and 20% of the LEL = 10,600 ppm.
5) Data presented in this table were provided by Golder Associates.

Criteria = 10,600 parts per million
28620 = Bolded values exceed the given criteria.

n.a. - not available (installed April 2000)
n.m. - not measured

Instrument Used Landtec Gem 2000 Landfill Gas Monitor used for measurements

TABLE F-2
COMBUSTIBLE GAS MEASUREMENTS - Meridian Brick Property
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	RELATIVE DEPTH	Mar-15	May-15	Oct-15	Feb-16	Apr-16	Nov-16	Mar-17	Jun-17	Nov-17	Feb-18	May-18	Nov-18
MW 5	Deep	0	0	0	0	0	0	4,120	2,060	0	0	2,590	0
MW 6A	Deep	**160,000**	**13,250**	**35,020**	**24,720**	**100,500**	**24,720**	9,240	4,120	**60,159**	**13,890**	2,590	**10,830**
MW 6B	Shallow	0	**240,000**	**188,000**	**303,160**	**566,500**	**230,500**	**431,510**	**622,750**	**659,200**	**376,040**	**644,380**	**444,680**
MW 7A	Deep	0	0	0	0	0	0	7,770	2,060	0	**57,680**	**20,600**	0
MW 7B	Shallow	**145,000**	**398,000**	**80,000**	**167,320**	**129,500**	**38,610**	7,710	2,060	**85,000**	**100,440**	**79,340**	**186,880**
MW 8A	Deep	**870,000**	1,590	**180,600**	4,650	0	0	5,650	2,060	0	0	2,060	530
MW 8B	Shallow	0	0	0	2,060	0	0	6,180	2,060	0	0	2,060	530
MW 9	Shallow	**128,000**	**60,000**	**128,000**	**0**	**55,620**	**114,500**	**87,560**	**23,190**	**1,000,000**	**12,360**	**52,890**	**73,630**
MW 10A	Deep	0	0	0	0	0	0	5,650	2,060	**360,000**	**105,470**	**52,910**	**18,540**
MW 10B	Shallow	0	**174,000**	0	0	**89,500**	0	**30,370**	**30,960**	0	**70,040**	**109,700**	0
MW 11	Shallow	**45,040**	0	0	2,060	2,060	0	5,650	2,060	10,053	0	530	0
MW 12A	Deep	0	0	0	0	0	0	4,120	2,060	0	0	0	2,060
MW 12B	Shallow	0	0	0	0	0	0	4,120	2,060	0	0	0	530
GP 99-03	Shallow				0	0	n.m.				0		**30,053**
GP 00-1	Shallow	0	0	0	0	0	0	5,120	2,060	0	0	0	2,590
GP 00-2	Shallow	0	0	0	0	0	0	5,650	2,060	0	0	530	4,120
GP 00-3	Shallow	530	0	0	0	0	0	5,650	2,060	0	0	2,060	0
GP 00-04	Shallow	0	0	0	0	0	0	n.m.	2,060	0	n.m.	n.m.	n.m.
GP 00-05	Shallow	0	0	0	0	0	0	n.m.	2,060	0	0	2,590	530
GP 00-06	Shallow	0	0	0	0	0	0	n.m.	2,060	0	0	2,060	530
GP 00-07	Shallow	0	0	0	0	0	0	3,590	2,060	10,053	0	4,120	0
GP 00-08	Shallow	0	0	0	0	0	0	3,590	2,060	n.m.	0	2,060	2,060
GP 00-09	Shallow	0	0	0	0	0	0	4,120	2,060	0	n.m.	n.m.	n.m.
GP 00-10	Shallow	0	0	0	0	1,530	0	4,120	2,060	0	0	1,530	0
GP 08-1	Shallow	0	0	0	0	0	0	5,650	2,060	10,053	0	0	530

Notes:

1) Combustible gas results in parts per million (ppm).
2) Criteria based on Procedure D-4-1:"Guideline for Assessing Methane Hazards from Landfill Sites" (November 1997)
3) Development of any structure on a landfill should not be approved unless it can be demonstrate that methane will not be present in concentrations in excess of 20 % of the LEL.
4) Methane mixed at 5 % to 15 % with air forms an explosive mixture. The lower explosive limit (LEL) of Methane is 5.3 % (by volume) 5.3 % Methane (by volume) = 53,000 ppm Methane, and 20% of the LEL = 10,600 ppm.
5) Data presented in this table were provided by Golder Associates.

Criteria = 10,600 parts per million

28620 = Bolded values exceed the given criteria.

n.a. - not available (installed April 2000)
n.m. - not measured

Instrument Used Landtec Gem 2000 Landfill Gas Monitor

TABLE F-2
COMBUSTIBLE GAS MEASUREMENTS - Meridian Brick Property
CLOSED BURLINGTON NORTH SERVICE ROAD LANDFILL SITE - 2022 MONITORING PROGRAM

MONITOR	RELATIVE DEPTH	Feb-19	Apr-19	Nov/Dec 19	Mar-20	Jun-20	Nov-20	Mar-21	May-21	Nov-21	Mar-22	May-22	Nov-22
MW 5	Deep	120,000	120,000	0	0	0	0	0	0	4,003	0	0	0
MW 6A	Deep	90,000	70,000	**0**	530	1,530	**530**	4,002	1	1,001	0	0	1,001
MW 6B	Shallow	**680,000**	**660,000**	**1,000,000**	**619,000**	**255,000**	**220,000**	**393,040**	**494,980**	**452,450**	**385,040**	**327,980**	**341,450**
MW 7A	Deep	**200,000**	**950,000**	0	**33,900**	**0**	0	9,009	5,005	95,090	32,960	0	**1,001**
MW 7B	Shallow	**480,000**	**730,000**	**1,000,000**	**214,000**	**2,590**	**251,000**	**513,850**	**150,016**	**401,910**	**29,370**	**0**	**4,042**
MW 8A	Deep	0	170,000	0	0	1,530	0	0	1	3,042	11,600	0	0
MW 8B	Shallow	0	150,000	0	0	0	0	0	0	0	0	0	0
MW 9	Shallow	**20,000**	**740,000**	**1,000,000**	**130,000**	**122,000**	**55,620**	**119,450**	**155,690**	**47,380**	**113,450**	**187,690**	**122,380**
MW 10A	Deep	**990,000**	**180,000**	**30,000**	**0**	**0**	**0**	1,001	0	5,005	1,001	1,001	0
MW 10B	Shallow	**680,000**	**220,000**	0	**0**	**0**	0	**98,140**	2,002	268,850	92,140	113,000	**0**
MW 11	Shallow	20,000	0	0	0	0	0	3,000	1,001	3,003	0	0	0
MW 12A	Deep	0	0	0	4,650	0	0	0	0	4,001	0	0	2,000
MW 12B	Shallow	0	0	0	0	0	0	4,004	4,000	0	0	0	0
GP 99-03	Shallow			0			0						
GP 00-1	Shallow	0	0	0	0	0	0	0	0	0	0	0	0
GP 00-2	Shallow	0	0	0	0	0	0	0	0	0	0	0	0
GP 00-3	Shallow	0	0	0	0	0	0	0	0	0	0	0	0
GP 00-04	Shallow	0	0	0	n.m.	n.m.	n.m.	n.m	n.m	n.m	NM	NM	NM
GP 00-05	Shallow	0	0	0	0	0	0	0	0	0	0	0	0
GP 00-06	Shallow	0	0	0	0	0	0	0	0	0	0	0	0
GP 00-07	Shallow	0	0	0	n.m.	n.m.	n.m.	n.m	n.m	n.m	NM	NM	NM
GP 00-08	Shallow	0	n.m.	0	n.m.	n.m.	n.m.	0	0	0	0	0	0
GP 00-09	Shallow	0	n.m.	0	n.m.	n.m.	n.m.	n.m	n.m	n.m	NM	NM	NM
GP 00-10	Shallow	0	0	0	0	0	0	0	0	0	0	0	0
GP 08-1	Shallow	0	0	0	0	0	0	0	0	0	0	0	0

Notes:

1) Combustible gas results in parts per million (ppm).
2) Criteria based on Procedure D-4-1:"Guideline for Assessing Methane Hazards from Landfill Sites" (November 1997)
3) Development of any structure on a landfill should not be approved unless it can be demonstrate that methane will not be present in concentrations in excess of 20 % of the LEL.
4) Methane mixed at 5 % to 15 % with air forms an explosive mixture. The lower explosive limit (LEL) of Methane is 5.3 % (by volume) 5.3 % Methane (by volume) = 53,000 ppm Methane, and 20% of the LEL = 10,600 ppm.
5) Data presented in this table were provided by Golder Associates.

Criteria = 10,600 parts per million
28620 = Bolded values exceed the given criteria.

n.a. - not available (installed April 2000)
n.m. - not measured

Instrument Used Landtec Gem 2000 Landfill Gas Monitor used for measurements

APPENDIX

G MECP CHECKLIST

Appendix D-Monitoring and Screening Checklist
General Information and Instructions

General Information: The checklist is to be completed, and submitted with the Monitoring Report.
Instructions: A complete checklist consists of:
(a) a completed and signed checklist, including any additional pages of information which can be attached as needed to provide further details where indicated.
(b) completed contact information for the Competent Environmental Practitioner (CEP)
(c) self-declaration that CEP(s) meet(s) the qualifications as set out below and in Section 1.2 of the Technical Guidance Document.

Definition of Groundwater CEP:
For groundwater, the CEP must have expertise in hydrogeology and meet one of the following:
(a) the person holds a licence, limited licence or temporary licence under the *Professional Engineers Act*; or
(b) the person holds a certificate of registration under the *Professional Geoscientists Act, 2000* and is a practicing member, temporary, member or limited member of the Association of Professional Geoscientists of Ontario. O. Reg. 66/08, s. 2..
Definition of Surface water CEP:
A CEP for surface water assessments is a scientist, professional engineer or professional geoscientist as described in (a) and (b) above with demonstrated experience and post-secondary education, either a diploma or degree, in hydrology, aquatic ecology, limnology, aquatic biology, physical geography with specialization in surface water, and/or water resource management.

The type of scientific work that a CEP performs must be consistent with that person's education and experience. If an individual has appropriate training and credentials in both groundwater and surface water and is responsible for both areas of expertise, the CEP may then complete and validate both sections of the checklist.

Monitoring Report and Site Information	
Waste Disposal Site Name	Burlington North Service Road Landfill Site
Location (e.g. street address, lot, concession)	Part of Lot 4, Concession 2
GPS Location (taken within the property boundary at front gate/ front entry)	593234, 4797245 Zone 17, NAD 83
Municipality	City of Burlington
Client and/or Site Owner	Regional Municipality of Halton
Monitoring Period (Year)	2022
This Monitoring Report is being submitted under the following:	
Certificate of Approval No.:	A210102
Director's Order No.:	
Provincial Officer's Order No.:	
Other:	

Report Submission Frequency	◉ **Annual** ◯ **Other**	
The site is:	◯ **Active** ◯ **Inactive** ◉ **Closed**	
If closed, specify C of A, control or authorizing document closure date:		N/A
Has the nature of the operations at the site changed during this monitoring period?	◯ **Yes** ◉ **No**	
If yes, provide details:		
Have any measurements been taken since the last reporting period that indicate landfill gas volumes have exceeded the MOE limits for subsurface or adjacent buildings? (i. e. exceeded the LEL for methane)	◯ Yes ◉ No	

Groundwater WDS Verification:

Based on all available information about the site and site knowledge, it is my opinion that:

Sampling and Monitoring Program Status:

1) The monitoring program continues to effectively characterize site conditions and any groundwater discharges from the site. All monitoring wells are confirmed to be in good condition and are secure:	◉ **Yes** ○ **No**	
2) All groundwater, leachate and WDS gas sampling and monitoring for the monitoring period being reported on was successfully completed as required by Certificate(s) of Approval or other relevant authorizing/control document(s):	◉ **Yes** ○ **No** ○ **Not Applicable**	If no, list exceptions below or attach information.

Groundwater Sampling Location	**Description/Explanation for change (change in name or location, additions, deletions)**	**Date**

3) a) Some or all groundwater, leachate and WDS gas sampling and monitoring requirements have been established or defined outside of a ministry C of A, authorizing, or control document.	◯ **Yes** ◉ **No** ◯ **Not Applicable**	
b) If yes, the sampling and monitoring identified under 3(a) for the monitoring period being reported on was successfully completed in accordance with established protocols, frequencies, locations, and parameters developed as per the Technical Guidance Document:	◯ **Yes** ◯ **No** ◯ **Not Applicable**	If no, list exceptions below or attach additional information.

Groundwater Sampling Location	**Description/Explanation for change (change in name or location, additions, deletions)**	**Date**

4) All field work for groundwater investigations was done in accordance with standard operating procedures as established/outlined per the Technical Guidance Document (including internal/external QA/QC requirements) (Note: A SOP can be from a published source, developed internally by the site owner's consultant, or adopted by the consultant from another organization):	◉ **Yes** ◯ **No**	

Sampling and Monitoring Program Results/WDS Conditions and Assessment:

5) The site has an adequate buffer, Contaminant Attenuation Zone (CAZ) and/or contingency plan in place. Design and operational measures, including the size and configuration of any CAZ, are adequate to prevent potential human health impacts and impairment of the environment.	◉ Yes ○ No		
6) The site meets compliance and assessment criteria.	◉ Yes ○ No		
7) The site continues to perform as anticipated. There have been no unusual trends/ changes in measured leachate and groundwater levels or concentrations.	◉ Yes ○ No		
1) Is one or more of the following risk reduction practices in place at the site: ***(a)*** **There is minimal reliance on natural attenuation of leachate due to the presence of an effective waste liner and active leachate collection/treatment; or** ***(b)*** **There is a predictive monitoring program in-place (modeled indicator concentrations projected over time for key locations); or** ***(c)*** **The site meets the following two conditions (typically achieved after 15 years or longer of site operation):** ***i.*** **The site has developed stable leachate mound(s) and stable leachate plume geometry/concentrations; and** ***ii.*** **Seasonal and annual water levels and water quality fluctuations are well understood.**	◉ Yes ○ No	**Note which practice(s):**	☒ (a) ☐ (b) ☒ (c)
9) Have trigger values for contingency plans or site remedial actions been exceeded (where they exist):	○ Yes ○ No ◉ Not Applicable		

Groundwater CEP Declaration:

I am a licensed professional Engineer or a registered professional geoscientist in Ontario with expertise in hydrogeology, as defined in Appendix D under Instructions. Where additional expertise was needed to evaluate the site monitoring data, I have relied on individuals who I believe to be experts in the relevant discipline, who have co-signed the compliance monitoring report or monitoring program status report, and who have provided evidence to me of their credentials.

I have examined the applicable Certificate of Approval and any other environmental authorizing or control documents that apply to the site. I have read and followed the Monitoring and Reporting for Waste Disposal Sites Groundwater and Surface Water Technical Guidance Document (MOE, 2010, or as amended), and associated monitoring and sampling guidance documents, as amended from time to time. I have reviewed all of the data collected for the above-referenced site for the monitoring period(s) identified in this checklist. Except as otherwise agreed with the ministry for certain parameters, all of the analytical work has been undertaken by a laboratory which is accredited for the parameters analysed to *ISO/IEC 17025:2005 (E)- General requirements for the competence of testing and calibration laboratories,* or as amended from time to time by the ministry.

If any exceptions or potential concerns have been noted in the questions in the checklist attached to this declaration, it is my opinion that these exceptions and concerns are minor in nature and will be rectified for the next monitoring/reporting period. Where this is not the case, the circumstances concerning the exception or potential concern and my client's proposed action have been documented in writing to the Ministry of the Environment District Manager in a letter from me dated:

Recommendations:

Based on my technical review of the monitoring results for the waste disposal site:

◉ **No changes to the monitoring program are recommended**	
○ **The following change(s) to the monitoring program is/are recommended:**	
◉ **No Changes to site design and operation are recommended**	
○ **The following change(s) to the site design and operation is/ are recommended:**	

Name:	Leigh Davis, P.Eng.		
Seal:			
Signature:	Leigh Davis	**Date:**	30/03/2023
CEP Contact Information:			
Company:	WSP Canada Inc.		
Address:	55 King Street, Suite 700, St. Catharines, ON L2R 3H5		
Telephone No.:	(289) 267-0818	Fax No. :	(905) 687-1773
E-mail Address:	leigh.davis@wsp.com		
Co-signers for additional expertise provided:			
Signature:		**Date:**	Select Date
Signature:		**Date:**	Select Date

Surface Water WDS Verification:

Provide the name of surface water body/bodies potentially receiving the WDS effluent and the approximate distance to the waterbody (including the nearest surface water body/bodies to the site):

Name (s)	Falcon Creek, Indian Creek tributaries
Distance(s)	On, and adjacent to, the site

Based on all available information and site knowledge, it is my opinion that:

Sampling and Monitoring Program Status:

1) The current surface water monitoring program continues to effectively characterize the surface water conditions, and includes data that relates upstream/background and downstream receiving water conditions:	◉ Yes ○ No	
2) All surface water sampling for the monitoring period being reported was successfully completed in accordance with the Certificate(s) of Approval or relevant authorizing/control document(s) (if applicable):	◉ Yes ○ No ○ **Not applicable (No C of A, authorizing / control document applies)**	If no, specify below or provide details in an attachment.

Surface Water Sampling Location	Description/Explanation for change (change in name or location, additions, deletions)	Date

3) a) Some or all surface water sampling and monitoring program requirements for the monitoring period have been established outside of a ministry C of A or authorizing/control document.	◯ **Yes** ◉ **No** ◯ **Not Applicable**	
b) If yes, all surface water sampling and monitoring identified under 3 (a) was successfully completed in accordance with the established program from the site, including sampling protocols, frequencies, locations and parameters) as developed per the Technical Guidance Document:	◯ **Yes** ◯ **No** ◯ **Not Applicable**	If no, specify below or provide details in an attachment.

Surface Water Sampling Location	**Description/Explanation for change (change in name or location, additions, deletions)**	**Date**

4) All field work for surface water investigations was done in accordance with standard operating procedures, including internal/external QA/QC requirements, as established/ outlined as per the Technical Guidance Document, MOE 2010, or as amended. (Note: A SOP can be from a published source, developed internally by the site owner's consultant, or adopted by the consultant from another organization):	◉ **Yes** ◯ **No**	

Sampling and Monitoring Program Results/WDS Conditions and Assessment:

5) The receiving water body meets surface water-related compliance criteria and assessment criteria: i.e., there are no exceedances of criteria, based on MOE legislation, regulations, Water Management Policies, Guidelines and Provincial Water Quality Objectives and other assessment criteria (e.g., CWQGs, APVs), as noted in Table A or Table B in the Technical Guidance Document (Section 4.6):	◯ **Yes** ◉ **No**

If no, list parameters that exceed criteria outlined above and the amount/percentage of the exceedance as per the table below or provide details in an attachment:

Parameter	Compliance or Assessment Criteria or Background	Amount by which Compliance or Assessment Criteria or Background Exceeded
e.g. Nickel	e.g. C of A limit, PWQO, background	e.g. X% above PWQO
Outlined in Section 3.4.3 of report.	Outlined in Section 3.4.3 of report.	Outlined in Section 3.4.3 of report.
6) In my opinion, any exceedances listed in Question 5 are the result of non-WDS related influences (such as background, road salting, sampling site conditions)?	◉ **Yes** ◯ **No**	Outlined in section 3.3.4 and 3.4.3 of report. Majority of exceedances are related to naturally poor water quality of shale and upstream sources.

7) All monitoring program surface water parameter concentrations fall within a stable or decreasing trend. The site is not characterized by historical ranges of concentrations above assessment and compliance criteria.	◉ **Yes** ◯ **No**	
8) For the monitoring program parameters, does the water quality in the groundwater zones adjacent to surface water receivers exceed assessment or compliance criteria (e.g. , PWQOs, CWQGs, or toxicity values for aquatic biota (APVs)):	◉ Yes ◯ No ◯ Not Known ◯ Not Applicable	Outlined in section 3.3.4 of report. No remediation is required. Elevated concentrations within groundwater zones is generally naturally occurring.
9) Have trigger values for contingency plans or site remedial actions been exceeded (where they exist):	◯ **Yes** ◯ **No** ◉ **Not Applicable**	

Surface Water CEP Declaration:

I, the undersigned hereby declare that I am a Competent Environmental Practitioner as defined in Appendix D under Instructions, holding the necessary level of experience and education to design surface water monitoring and sampling programs, conduct appropriate surface water investigations and interpret the related data as it pertains to the site for this monitoring period.

I have examined the applicable Certificate of Approval and any other environmental authorizing or control documents that apply to the site. I have read and followed the Monitoring and Reporting for Waste Disposal Sites Groundwater and Surface Water Technical Guidance Document (MOE, 2010, or as amended) and associated monitoring and sampling guidance documents, as amended from time to time. I have reviewed all of the data collected for the above-referenced site for the monitoring period(s) identified in this checklist. Except as otherwise agreed with the ministry for certain parameters, all of the analytical work has been undertaken by a laboratory which is accredited for the parameters analysed to *ISO/IEC 17025:2005 (E)- General requirements for the competence of testing and calibration laboratories,* or as amended from time to time by the ministry.

If any exceptions or potential concerns have been noted in the questions in the checklist attached to this declaration, it is my opinion that these exceptions and concerns are minor in nature or will be rectified for future monitoring events. Where this is not the case, the circumstances concerning the exception or potential concern and my client's proposed action have been documented in writing to the Ministry of the Environment District Manager in a letter from me dated:

Recommendations:

Based on my technical review of the monitoring results for the waste disposal site:

◉ **No Changes to the monitoring program are recommended** ○ **The following change(s) to the monitoring program is/are recommended:**	
◉ **No changes to the site design and operation are recommended** ○ **The following change(s) to the site design and operation is/are recommended:**	

CEP Signature	
Relevant Discipline	Engineer
Date:	2023-03-30
CEP Contact Information:	Leigh Davis, P.Eng.
Company:	WSP Canada Inc.
Address:	55 King Street, Suite 700, St. Catharines, ON L2R 3H5
Telephone No.:	289-267-0818
Fax No. :	905-687-1771
E-mail Address:	leigh.davis@wsp.com
Save As	**Print Form**