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Mr. Joshua Vaccaro
New York State Department of Environmental Conservation
700 Division Street
Buffalo, NY 14209

2025 Periodic Review Report
Cascades Containerboard Packaging Inc. - Frontier Site (formerly Norampac)
NYSDEC Site Number 932110

Dear Mr. Vaccaro:

Pursuant to the Site Management Plan - Frontier Chemical Site, Niagara Falls, New York (SMP) dated April 23, 2014 by GHD (formerly Conestoga-Rovers & Associates [CRA]), this correspondence provides the 2025 Periodic Review Report (PRR) for the Cascades Containerboard Packaging Inc. (Cascades) Facility (Former Frontier Chemical Site) located in Niagara Falls, New York (Site Number 932110). This PRR and Institutional Controls/Engineering Controls (IC/EC) Certification presents the field activities and monitoring results for the annual monitoring period of November 18, 2024 through November 18, 2025.

1. Introduction

The Frontier Chemical Royal Avenue Site Potentially Responsible Party (PRP) Group (the Frontier Group) entered into an Order on Consent (Index #89-0571-00-01, executed on August 15, 2008) with the New York State Department of Environmental Conservation (NYSDEC) to perform additional Site characterization and remediation of the conditions at the Cascades site (Site). The Site was previously referred to as the Norampac Facility in the 2015 PRR and has been referred to as the Cascades Containerboard Packaging Inc. – Frontier Site since 2016. The Frontier Group consisted of the Site owner and numerous parties who performed the additional investigations and completed the remediation of the Site in accordance with the approved Remedial Design Report (CRA-February 2013). The Site is now owned and maintained by Cascades. The Site is a 9-acre property located in an industrialized area of Niagara Falls, New York.

Following completion of the additional Site characterization, the Frontier Group worked with the NYSDEC to develop and implement the various components of the Site remedy. The overburden and shallow bedrock groundwater remedy was implemented as specified in the 2006 Record of Decision (ROD). The deep bedrock groundwater, designated as OU2, was investigated, and a remedial action consisting of monitored natural attenuation was determined to be the appropriate remedy and set forth in the OU2 ROD (March 2011). For the source area soil, a remedy consisting of excavation and ex situ thermal treatment was selected and implemented as the appropriate remedy.

After completion of the remedial work described in the Remedial Design Report, the Remedial Action Objectives were met although some minimal residual contamination remains in place at subsurface locations on the Site, which is hereafter referred to as "residual material." A SMP was prepared to manage the residual material at the Site until the Environmental Easement is removed in accordance with ECL Article 71, Title 36.

This 2025 PRR presents the measures taken in 2025 to evaluate the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site and to assess the conditions of the asphalt/concrete and soil cover system at the Site.

2. Site Overview and Surface Cover Description

The Cascades Facility is located in an industrial area of the City of Niagara Falls, County of Niagara, New York, and is identified as Block 1 and Lot 6 on the Niagara County Tax Map (160.09). The Site is an approximately 9-acre area parcel bordered to the north and northwest by Cascades, to the west by the Greenpac Mill, LLC, to the south by Royal Avenue (beyond which is an industrial site, Praxair Inc.), and to the east by 47th Street (beyond which is an industrial site, ReWorld Niagara).

After Site remediation activities were completed in early 2014, the SMP provided a series of ECs and ICs. The ROD requires that the Site surface either be covered with the existing asphalt or concrete surface or 1 foot of clean fill material. At the completion of excavation activities associated with the source area soil remediation that was completed in 2014, the cover system was made compliant with the ROD. The existing undisturbed asphalt and concrete-covered areas were allowed to remain "as is." All previously existing soil cover areas and the area disturbed due to the excavation of the source area soil were covered with clean fill material. Recycled concrete and hard demolition material from the Site remediation project were also used as part of the 1 foot of clean surface material that was placed over all previously existing and post-excavation soil cover areas. The recycled concrete/demolition material was crushed to 2-inch-minus prior to placement and compacted in place. The remainder of the 1 foot of clean cover was completed using imported crushed stone from a quarry.

Adherence to these ICs on the Site is required by the Environmental Easement and is being implemented under the SMP. The ICs that are implemented are as follows:

– Compliance with the Environmental Easement and the SMP by the Grantor (Site owner) and the Grantor's successors and assigns (Cascades).
– All ECs must be operated and maintained as specified in the SMP.
– All ECs on the Controlled Property must be inspected at a frequency and in the manner defined in the SMP.
– Groundwater and other environmental or public health monitoring must be performed as defined in the SMP.
– Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in the manner defined in the SMP.

ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The Site has a series of ICs in the form of Site restrictions. Adherence to these ICs is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

– The industrial zoned property may only be used for industrial use provided that the long-term ECs and ICs included in the SMP are employed.
– The property may not be used for a higher level of use, such as unrestricted, restricted residential, or commercial use without additional evaluation (including possible additional remediation) and amendment of the Environmental Easement, as approved by the NYSDEC.
– All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP.

- The use of the groundwater underlying the property as a source of potable or process water is prohibited without treatment rendering it safe for the intended use as determined by the NYSDEC, New York State Department of Health (NYSDOH), or Niagara County Health Department.
- The potential for vapor intrusion must be evaluated for any building developed on the Site in the future, and any potential impacts that are identified must be monitored or managed through implementation of appropriate vapor mitigation measures.
- Vegetable gardens and farming on the property are prohibited.
- The Site owner will submit to NYSDEC a written statement that certifies, under penalty of perjury, that:
    - Controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC.
    - Nothing has occurred that impairs the ability of the controls to protect public health and the environment or that constitutes a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

2.1 2020 Site Construction

During the 2020 reporting period, the site cover at the former Frontier site was changed from an asphalt/concrete cover system to solely a concrete cover system. The Environmental Service Group (ESG), under the administration of GreenPac Mill LLC (Greenpac), installed an 8-inch thick reinforced concrete pad over the majority of the former Frontier Site, including the areas of excavation during the 2013/2014 Site remediation activities. The concrete pad was installed for the purpose of staging cardboard and other packing materials on the former Frontier Site. A soil berm (comprised of on-Site soils) was constructed along the south perimeter of the Site. The western side of the Site retained a grass cover, with a settling pond constructed south of the GreenPac Mill.

3. Evaluate Remedy Performance, Effectiveness, and Protectiveness

In accordance with the SMP, annual inspections are made of the asphalt/concrete cover system, soil cover system, and monitoring wells at the Site. The 2025 annual inspection was conducted on October 6, 2025. A copy of the annual inspection report is presented in Attachment A.

The 2025 Site Inspection indicated no issues with site deterioration, obstruction, potholes, or drainage issues, erosion, animal burrows, or damage to the perimeter fence. The Site Inspection did note that monitoring well BH87-28 had damage to the top of well riser and metal casing and needed repair, and MW88-13A was missing a lid from the well casing (a J-plug was in place). Repairs to BH87-28 will be made during the 2026 reporting period.

4. Monitoring Plan Compliance

Commencing in November 2010, groundwater samples have been collected on a semi-annual basis from eight on-Site wells in the A-Zone and B-Zone of the bedrock formation at the Site, in accordance with the monitoring plan provided in the SMP. The results of the semi-annual groundwater monitoring were used to calculate the volume of groundwater and the chemical loading associated with the groundwater that discharges into the Falls Street Tunnel and the 47th Street Tunnel, which are located immediately adjacent to the Cascades Site. Semi-Annual Groundwater Discharge Reports are submitted to the Niagara Falls Water Board (NFWB). In addition to the semi-annual groundwater sampling, annual groundwater samples were collected from three on-Site deep groundwater monitoring wells (C-Zone). As stated in the SMP, the annual sampling of the deep groundwater monitoring wells would continue for a period of 5 years, starting in 2014 and continuing until 2018.

Thereafter, a determination would be made as to the need for and frequency of future sampling. Based on the results of the 2025 annual sampling, it was determined that the annual sampling of the C-Zone wells would continue in 2026.

4.1 Semi-Annual Groundwater Sampling

Semi-annual groundwater sampling was performed on April 8-9, 2025, and October 8-13, 2025. The eight wells were sampled for Site-Specific Parameter List (SSPL) volatile organic compounds (VOCs), Target Analyte List (TAL) metals, and total phenols and in accordance with Environmental Protection Act (EPA) Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures. The calculated groundwater volumes and chemical loadings were presented in the Semi-Annual Groundwater Discharge Reports submitted to the NFWB on May 27, 2025, and November 21, 2025. For both Semi-Annual Groundwater Discharge Reports, the calculated groundwater volumes and chemical loadings were compared to the discharge limitations and monitoring requirements presented in the NFWB Significant Industrial User (SIU) Permit #78, which was issued by the NFWB to Cascades Containerboard Packaging, Inc. - Frontier Site, effective on October 3, 2025. There were no exceedances of the discharge limitations and monitoring requirements in either the May or the November reports.

The May 2025 and November 2025 Semi-Annual Groundwater Discharge Reports are both presented in Attachment B.

In accordance with the current schedule, semi-annual sampling events will occur in April and October 2026. Semi-annual groundwater discharge reports will be submitted to the NFWB in May and November 2026.

4.1.1 Total Concentration Trends – Semi-Annual Groundwater Sampling

Based on a previous request by the NYSDEC, GHD generated trend plots of SSPL VOCs concentrations for the eight monitoring wells that are sampled on a semi-annual basis for the Semi-Annual Groundwater Discharge Reports (as described in Section 4.1). These monitoring wells include four A-Zone wells (BH87-3A, MW01-9A, MW88-13A, and BH87-28) and four B-Zone wells (MW-13, BH87-3B, MW-9, and MW-12). The trend plots were developed for each of these wells as part of the 2020 through 2024 PRRs for the site. The trend plots have been updated to include groundwater sample data collected in April 2025 and October 2025.

The following figures present the concentration trends for the eight monitoring wells:

- ***Figure 1 - BH87-28:*** Figure 1 shows that the October 2025 sample at BH87-28 exhibited a decrease in total SSPL VOC concentration after two straight increases in October 2024 and April 2025. The results have consistently remained below a spike of 3,147 µg/L in October 2014.The most recent sampling event (October 2025) at BH87-28 had a total SSPL VOC concentration of 1,607 µg/L.
- ***Figure 2 - BH87-3A:*** Figure 2 shows that both the April 2025 and October 2025 samples at BH87-3A exhibited a decrease in total SSPL VOC concentration from the October 2024 sampling event. Figure 2 also shows the total SSPL VOC concentrations at BH87-3A have typically varied between the April and October sampling events on a year-by-year basis, with the samples collected in October tending to have higher concentrations than samples collected in April or May. However, the October 2025 sample result had a lower total SSPL VOC concentration than in April 2025. The most recent sampling event (October 2025) at BH87-3A had a total SSPL VOC concentration of 464 µg/L.
- ***Figure 3 - BH87-3B:*** Figure 3 shows that the total SSPL VOC concentrations at BH87-3B slightly increased during the April 2025 sampling event and then decreased in the October 2025 sampling event. The total SSPL VOC results since October 2020 continue to be well below a spike from the October 2019 sampling event and have continued to decrease from the April 2023 and April 2024 sampling events. The most recent sampling event (October 2025) at BH87-3B had a total SSPL VOC concentration of 443 µg/L, which is a reduction from the April 2025 total SSPL VOC result of 922 ug/L.

- ***Figure 4 - MW01-9A:*** Figure 4 shows that the total SSPL VOC concentrations at MW01-9A have decreased steadily since a spike of 28,420 µg/L in April 2017. The total SSPL VOC results from MW01-9A had a slight increase for the April 2025 sampling event and then a slight decrease for the October 2025 sampling event. The most recent sampling event (October 2025) at MW01-9A had a total SSPL VOC concentration of 630 µg/L.
- ***Figure 5 - MW-9:*** Figure 5 shows that the total SSPL VOC concentrations at MW-9 tend to fluctuate between the April and October sampling events, with the April results being lower than the October results. This fluctuation was observed from 2021 through 2024 and continued in 2025. The results have consistently remained below a spike of 14,170 µg/L in April 2019. The most recent sampling event (October 2025) at MW-9 had a total SSPL VOC concentration of 1,370 µg/L.
- ***Figure 6 - MW-12:*** Figure 6 shows that there were zero total SSPL VOC detections at MW-12 for both the April and October 2025 sampling events, which was also observed in the October 2024 sampling event. This was also observed during previous sampling events in 2016 - 2018, as well as May 2020, April 2021, April 2022, and both April and October 2023. The sample results have consistently remained below a spike of 508 µg/L in October 2014. The most recent sampling event (October 2025) at MW-12 had a total SSPL VOC concentration of 0.0 µg/L.
- ***Figure 7 - MW-13:*** Figure 7 shows that the total SSPL VOC concentrations at MW-13 have significantly decreased after a spike in total SSPL VOC concentrations in October 2021. The total SSPL VOC concentrations decreased for two straight sampling events (October 2024 and April 2025) before slightly increasing in October 2025. The most recent sampling event (October 2025) at MW-13 had a total SSPL VOC concentration of 202 µg/L.
- ***Figure 8 - MW88-13A:*** Figure 8 shows that the total SSPL VOC concentrations at MW88-13A decreased during the April 2025 sampling event before increasing during the October 2025 sampling event. The most recent sampling event (October 2025) at MW88-13A had a total SSPL VOC concentration of 9,160 µg/L.

A review of Figures 1 through 8 shows that all eight wells that are sampled as part of the semi-annual sampling program have exhibited a decreasing concentration trend in total SSPL VOC concentrations since the semi-annual monitoring program began in April 2014.

4.1.2 Loading to the Sanitary Sewer System

As discussed in Section 4.1, semi-annual discharge reports were submitted to the NFWB in May and November 2025. The discharge reports are included in Attachment B. Table 4 of the November 2025 Semi-Annual Discharge Report lists the total chemical flux from all the A-Zone and B-Zone wells along Royal Avenue and 47th Street in order to determine the chemical loading (with regard to VOCs) to the tunnel sewer system. Based on the calculated loadings from the Royal Avenue West Side Mass Flux (A-Zone), the Royal Avenue East Side Mass Flux (A-Zone), the 47th Street Mass Flux (A-Zone), and the 47th Street Mass Flux (B-Zone), the daily total chemical flux (VOCs) to the tunnel sewer system for the November 2025 reporting period was 0.0314 pounds/day. Table 4 of the May 2025 discharge report lists a daily total chemical flux of 0.0232 pounds/day from all the A-Zone and B-Zone wells along Royal Avenue and 47th Street. The following table provides the average daily flow and total daily chemical loading (VOCs) to the tunnel sewer system from the A-Zone and B-Zone wells going back to 2014.

Reporting Period	Calculated Daily Flow (gal/day)	Total Chemical Loading (VOCs) from A-Zone and B-Zone Wells (pounds/day)
November 2025	1,603	0.0314
May 2025	1,651	0.0232
November 2024	1,288	0.0269
May 2024	1,925	0.0052
November 2023	1,265	0.0144
May 2023	1,964	0.0263
November 2022	1,503	0.0281
May 2022	1,912	0.0361
November 2021	1,994	0.0450

Reporting Period	Calculated Daily Flow (gal/day)	Total Chemical Loading (VOCs) from A-Zone and B-Zone Wells (pounds/day)
May 2021	1,415	0.0191
November 2020	1,591	0.0396
June 2020	2,419	0.0731
November 2019	2,330	0.1111
May 2019	2,131	0.0847
November 2018	1,882	0.0758
May 2018	2,414	0.0948
November 2017	2,019	0.1142
May 2017	2,435	0.1874
November 2016	1,809	0.0741
May 2016	3,457	0.2798
November 2015	2,097	0.1273
May 2015	2,395	0.1396
November 2014	3,220	0.0902
May 2014	3,077	0.1463

4.2 Annual Groundwater Sampling

Annual sampling of three C-Zone wells (MW1-C-08, MW2-C-08, and MW3-C-08) was conducted on October 8-9, 2025. The C-Zone wells were sampled in order to assess the bedrock groundwater quality over time. The wells were sampled for VOCs in accordance with EPA Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures. Table 1 presents the 2025 analytical results for the groundwater samples from the three C-Zone wells.

The C-Zone wells had previously been sampled in December 2008 and March-April 2009, as described in the Remedial Pre-Investigation Design Report (CRA, September 2010), as well as in October 2014-2024. Table 2 shows the 2025 analytical results for the three C-Zone wells as compared to the results from the 2008, 2009, and 2014-2024 samples, as well as the New York State Technical and Operational Guidance Series (NYS TOGs) guidance values and standards. A discussion of the sample results for the three wells is presented below.

– ***MW1-C-08*** - As seen in Table 2, the 2025 sample from MW1-C-08 had no detectable VOC results. This is the same result as was observed in 2022, 2023, and 2024.
– ***MW2-C-08*** - The 2025 sample results from MW2-C-08 exceeded the NYS TOGS standards for 1,3-dichlorobenzene, 1,4-dichlorobenzene, 2-chlorotouene, and chlorobenzene. The total VOC results in the 2024 sample at MW2-C-08 were 376 µg/L, which is a decrease from the 2024 total VOC results at MW2-C-08 (388 µg/L).
– ***MW3-C-08*** - The 2025 sample results for MW3-C-08 exceeded the NYS TOGs standards for 1,4-dichlorobenzene, and chlorobenzene. The total VOC results for the 2025 sample at MW3-C-08 was 28.4 µg/L, which is a decrease from the 2024 total VOC results at MW3-C-08 (38.2 µg/L).

The laboratory analytical results for the annual C-Zone groundwater sampling are presented in Attachment C.

The next annual sampling event, as well as the annual inspection, will occur in October 2026, followed by the preparation and submission of the 2026 PRR.

4.2.1 Total Concentration Trends - Annual Groundwater Sampling

GHD compared the 2025 total VOC concentrations from the three C-Zone wells (MW1-C-08, MW2-C-08, and MW3-C-08) to the historical total VOC concentrations at those wells. Figure 9 shows the total VOC concentration trends at MW1-C-08 since measurements began in December 2008. Figure 10 shows the total VOC concentration trends at MW2-C-08 since 2008, and Figure 11 shows the same for MW3-C-08.

Figure 9 shows that total VOC concentrations at MW1-C-08 have remained below 6 µg/L since the 2013/2014 source area soil remediation activities were completed, with no detectable VOC concentrations in 2025 for a fourth consecutive year. Figure 10 shows that total VOC concentrations at MW2-C-08 decreased for two consecutive years, with a total VOC concentration at MW2-C-08 of 376 µg/L in 2025. Figure 11 shows that total VOC concentrations at MW3-C-08 have decreased for the fourth consecutive year, with a total VOC concentration at MW3-C-08 of 28.4 µg/L (continuing a downward trend after a spike in VOC concentrations in 2018).

4.3 Vertical Gradients

Groundwater elevations were collected from wells in the C-Zone (MW1-C-08, MW2-C-08, and MW3-C-08) during the October 2025 semi-annual and annual groundwater sampling activities. The groundwater elevations were compared to the groundwater contours in the B-Zone (that were generated using groundwater elevations from B-Zone wells during the October 2025 sampling activities) at the same locations of the C-Zone wells. The nearest groundwater contour in the B-Zone was used to compare the groundwater elevation at each C-Zone well. The following table shows the groundwater elevations, which are measured in feet above mean sea level (ft. AMSL), in the B-Zone and C-Zone at the locations of MW1-C-08, MW2-C-08, and MW3-C-08 in October 2025.

Zone	MW-1	MW-2	MW-3
B	546 ft. AMSL	554 ft. AMSL	554 ft. AMSL
C	557.51 ft. AMSL	557.34 ft. AMSL	558.35 ft. AMSL

The upward gradient between the C-Zone and B-Zone was confirmed by the groundwater elevations collected from the C-Zone wells and the B-Zone groundwater contours in October 2025.

4.4 PFC and 1,4-Dioxane Sampling

The annual groundwater sampling program has included sampling and analysis for perfluorinated chemicals (PFCs) and 1,4-dioxane since 2018, as part of a statewide evaluation of PFCs and their occurrence in water supplies. A total of five groundwater samples have been collected and analyzed for PFCs and 1,4-dioxane since 2018. The samples have been analyzed for per- and polyfluoroalkyl substances (PFAS), with the laboratory analyzing for 21 individual PFCs, including perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) via EPA Method 537. From 2018 to 2019, the following 5 wells were sampled as part of the PFC and 1,4-dioxane evaluation: MW-12, MW88-13A, MW01-9A, MW-9, and MW-13. Based on discussions with the NYSDEC in August 2020, MW-12 (located in the southeast corner of the Site) was replaced by BH87-28 (also located in the southeast corner of the Site) for the PFC and 1,4-dioxane sampling.

The annual sampling for PFCs and 1,4-dioxane was continued in 2025, and the sampling was conducted as part of the October 2025 sampling event. The locations of the five wells are presented in Figure 12 (A-Zone) and Figure 13 (B-Zone). The results of the October 2025 PFC and 1,4-dioxane sampling are included in Table 3. The results of the October 2025 samples are presented along with the results of the 2018 - 2024 samples in Table 4 in order to compare the results of the sampling events over the past 7 years. The laboratory analytical results for the PFC and 1,4-dioxane sampling are presented in Attachment C.

Table 5 shows the total PFC detections at each well for the 2018 - 2025 sampling events. Total PFC detections for the October 2025 sampling event declined at each of the five wells from the October 2024 sampling event. MW-13 and MW-9 each had total PFC detections below 1,000 ng/L. All total PFC results continued to be below the levels detected in the initial sampling event in January 2018.

In evaluating the October 2025 sampling event, the results of two individual PFCs were evaluated: PFOA and PFOS. The October 2025 PFOA and PFOS results were compared to the January and September 2018 results, as well as the October 2019 - 2024 sampling events. New York State has established maximum contaminant levels (MCLs) for drinking water of 10 part per trillion (ppt) for PFOA and 10 ppt for PFOS. The United States Environmental Protection Agency (USEPA) currently has interim screening levels for groundwater at contaminated sites of 40 ppt for both PFOA and PFOS. The PFOA and PFOS results from the January and September 2018 sampling events, as well as the October 2019 - 2025 sampling events were compared to the new MCLs for drinking water, despite the fact that the Site groundwater is not used for drinking water.

4.4.1 PFOA Analysis

Table 6 shows the PFOA detections at each well for the January and September 2018 sampling events, as well as the October 2019 – October 2025 sampling events. For the PFOA analysis, the October 2025 results were equal to or lower than the October 2024 results at BH87-28, MW-13, and MW88-13A. MW01-9A and MW-9 had slight increases in PFOA results during the 2025 sampling.

The October 2025 PFOA results at each of the five wells were above the New York State MCLs for drinking water. However, the October 2025 PFOA results at MW-9 and MW-13 were below the USEPA interim screening level for groundwater at contaminated sites of 40 ppt. The October 2025 PFOA results at four of the five wells were lower than the initial sampling event in January 2018, with the exception of MW88-13A.

4.4.2 PFOS Analysis

Table 7 shows the PFOS detections at each well for the January and September 2018 sampling events, as well as the October 2019 – October 2025 sampling events. For the PFOS analysis, the October 2025 results were lower than the October 2023 results at four of the five wells: MW01-9A, BH87-28, MW-13, and MW88-13A. MW-9 had a slight increase in PFOS results during the 2025 sampling.

The October 2025 PFOS results were below the New York State MCLs for drinking water at MW01-9A, MW-9, and MW-12. The October 2025 PFOS results were above the MCLs at MW-13 and MW88-13A. The October 2025 PFOS results were below the USEPA interim screening level for groundwater at contaminated sites of 40 ppt at each of the five wells that were sampled. The October 2025 PFOS results at each of the five wells were also lower than the initial sampling event in January 2018.

4.4.3 1,4-dioxane Analysis

1,4-dioxane has been analyzed at various site wells on an annual basis since 2018. Table 8 shows the 1,4-dioxane detections at each well for the September 2018 and October 2019 – October 2025 sampling events. New York State has recently announced MCLs for drinking water of 1 ppb for 1,4-dioxane.

The October 2025 sampling results for 1,4-dioxane were above the NYS MCL of 1 µg/L at four of the five wells, with the exception of MW-13. The October 2025 results for 1,4-dioxane exhibited a reduction from the October 2024 results at MW-13, with slight increases observed at MW01-9A, MW-9, BH87-28, and MW-13.

4.5 Additional Groundwater Sampling

In the NYSDEC's Acceptance letter for the 2019 PRR (dated February 11, 2020), the NYSDEC requested that one round of comprehensive sampling be completed for the wells along 47th Street that are not currently monitored under the SMP. Based on an email discussion with the NYSDEC dated September 22, 2020, it was decided that monitoring wells MW88-8A, MW88-8B, and MW88-12A would be added to the October 2020 sampling event. The locations of these three wells are presented in Figures 12 (A-Zone) and 13 (B-Zone). While these wells are not located along the eastern perimeter of the Site, they are located in the eastern portion of the Site. The three wells were analyzed for all contaminants of concern listed on the revised Table 4.2 of the SMP (SSPL VOCs, SSPL Metals, and total phenol), as well as chloropicrin. The results of the October 2020 sampling were presented in the 2020 PRR, which was submitted to the NYSDEC on December 18, 2020. The three additional wells were also sampled as part of the 2021 - 2024 sampling programs, and the results were presented in the 2021 - 2024 PRRs. Chloropicrin was removed from the sampling program after the 2022 sampling event.

Table 9 presents the results of the October 2025 additional sampling at MW88-8A, MW88-8B, and MW-12A. Table 10 presents the results of the October 2025 additional sampling along with the results of the 2020 – 2024 additional sampling for comparison. MW88-8A had a decrease in total SSPL VOC detections, with a 2025 result of 243,000 µg/L (as compared to a total SSPL VOC result of 263,000 µg/L in 2024). The B-Zone well at the same location (MW88-8B) had a slight increase in total SSPL VOC detections, with a 2025 result of 1,579 µg/L (as compared to a total SSPL VOC result of 1,094 ug/L in 2024). MW88-12A also had an increase in total SSPL VOC detections for the in 2025 (513 µg/L) after two straight years of decreasing total SSPL VOC detections (124.4 µg/L in 2023 and 33 µg/L in 2024. For all three additional wells, the 2025 total SSPL VOC results remained significantly lower than the initial sampling in 2020 (as shown in Table 10).

The sample collected from the nearest hydraulically downgradient well in the A-Zone from MW88-8A and MW88-12A was collected from BH87-28 as part of the October 2025 semi-annual sampling. For the October 2025 sampling, BH87-28 had a total SSPL VOC result of 1,607 µg/L.

The laboratory analytical results for the additional requested sampling, as well as the PFC and 1,4-dioxane sampling and the annual C-Zone groundwater sampling, are presented in Attachment C. A Data Verification Report is presented in Appendix D. The QA/QC measurements examined for the data were within method-specified or laboratory-derived limits. No data were rejected as a result of the data validation.

5. Overall Conclusions and Recommendations

All of the required work was completed and is reported herein. The remedy has effectively isolated and secured the residual material, and there is no risk to human health or the environment. It is noted that there are a few chemicals present in the C-Zone groundwater that exceed the NYS TOGS standards. However, there is an upward gradient from the C-Zone into the B-Zone that should protect the C-Zone from impact associated with any of the residual materials left in the Site soils. It is recommended that the annual groundwater monitoring of the C-Zone wells continue for an additional year as described in the SMP in order to track the current condition. An evaluation of the continued need for sampling of the C-Zone wells will be made after the 2026 sampling event. The sampling of the three additional wells (MW88-8A, MW88-8B, and MW88-12A) indicated elevated SSPL VOC detections; however, downgradient wells did not indicate similar SSPL VOC impacts. Semi-annual groundwater monitoring and annual inspections will also continue as described in the SMP.

As required, a completed copy of the Site Management PRR Notice - Institutional and Engineering Controls Certificate Form is included as Attachment E.

Should there be any questions, please do not hesitate to contact myself at 716-205-1975 or Jennifer Booker of Greenpac Mill at jennifer_booker@greenpacmill.com**.**

Regards,



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Attachments: Figure 1 – Total SSPL VOC Concentration Trend, BH87-28 (2014-2025)
Figure 2 – Total SSPL VOC Concentration Trend, BH87-3A (2014-2025)
Figure 3 – Total SSPL VOC Concentration Trend, BH87-3B (2014-2025)
Figure 4 – Total SSPL VOC Concentration Trend, MW01-9A (2014-2025)
Figure 5 – Total SSPL VOC Concentration Trend, MW-9 (2014-2025)
Figure 6 – Total SSPL VOC Concentration Trend, MW-12 (2014-2025)
Figure 7 – Total SSPL VOC Concentration Trend, MW-13 (2014-2025)
Figure 8 – Total SSPL VOC Concentration Trend, MW-88-13A (2014-2025)
Figure 9 – Total VOC Concentration Trend, MW1-C-08 (2014-2025)
Figure 10 – Total VOC Concentration Trend, MW2-C-08 (2014-2025)
Figure 11 – Total VOC Concentration Trend, MW3-C-08 (2014-2025)

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Attachment A – 2025 Site Inspection
Attachment B – May and December 2025 Semi-Annual Discharge Reports
Attachment C – Laboratory Reports
Attachment D – Data Validation Report
Attachment E – Institutional and Engineering Controls Certificate Form

Copy to: Glenn May, NYSDEC
Jennifer Booker, Greenpac Mill
Craig Eddy, Greenpac Mill
Richard Snyder, GHD

Figures

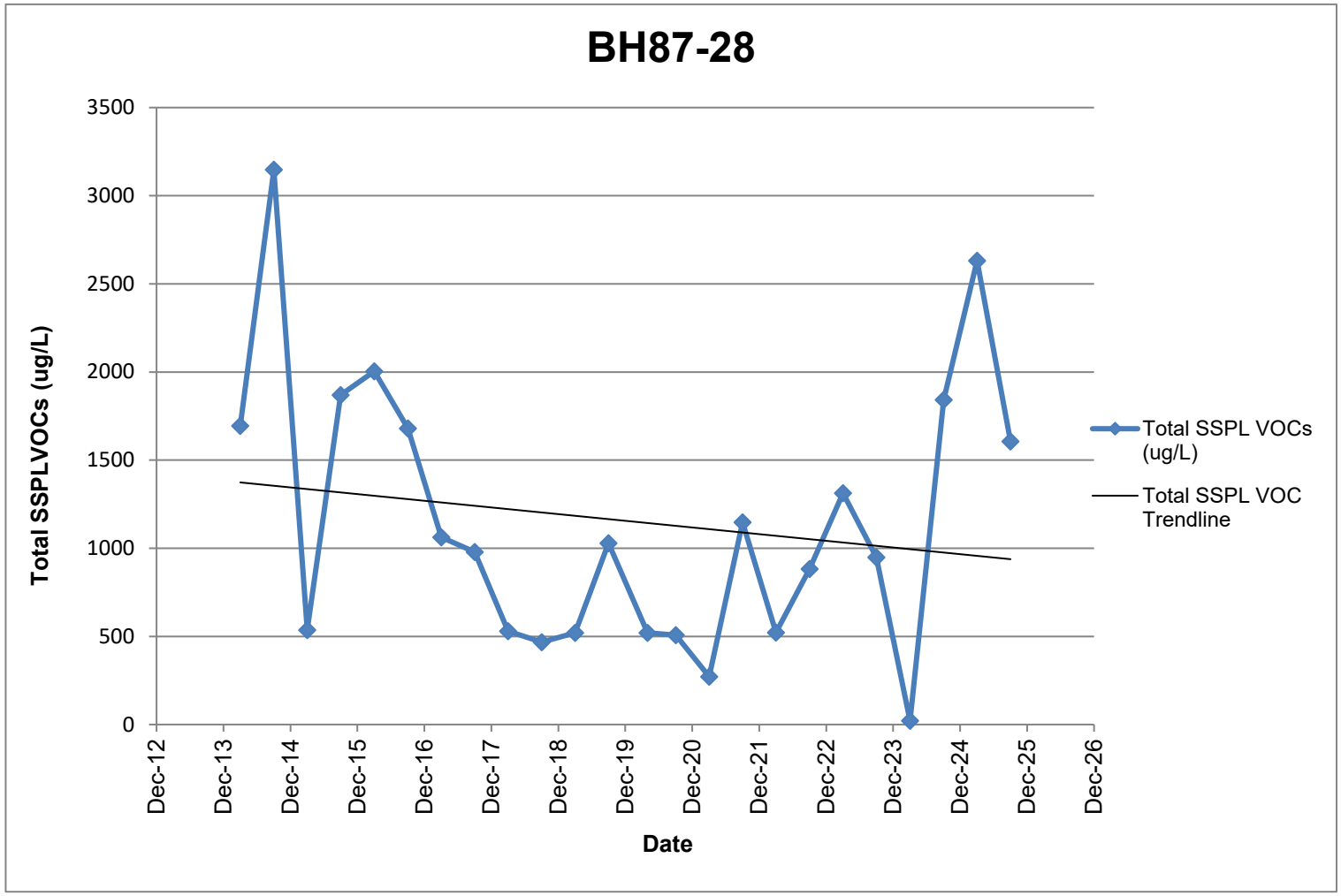


figure 1
Total SSPL VOC Concentration Trend, BH87-28 (2014 - 2025)
Cascades Containerboard Packaging Site
2025 Periodic Review Report
GHD

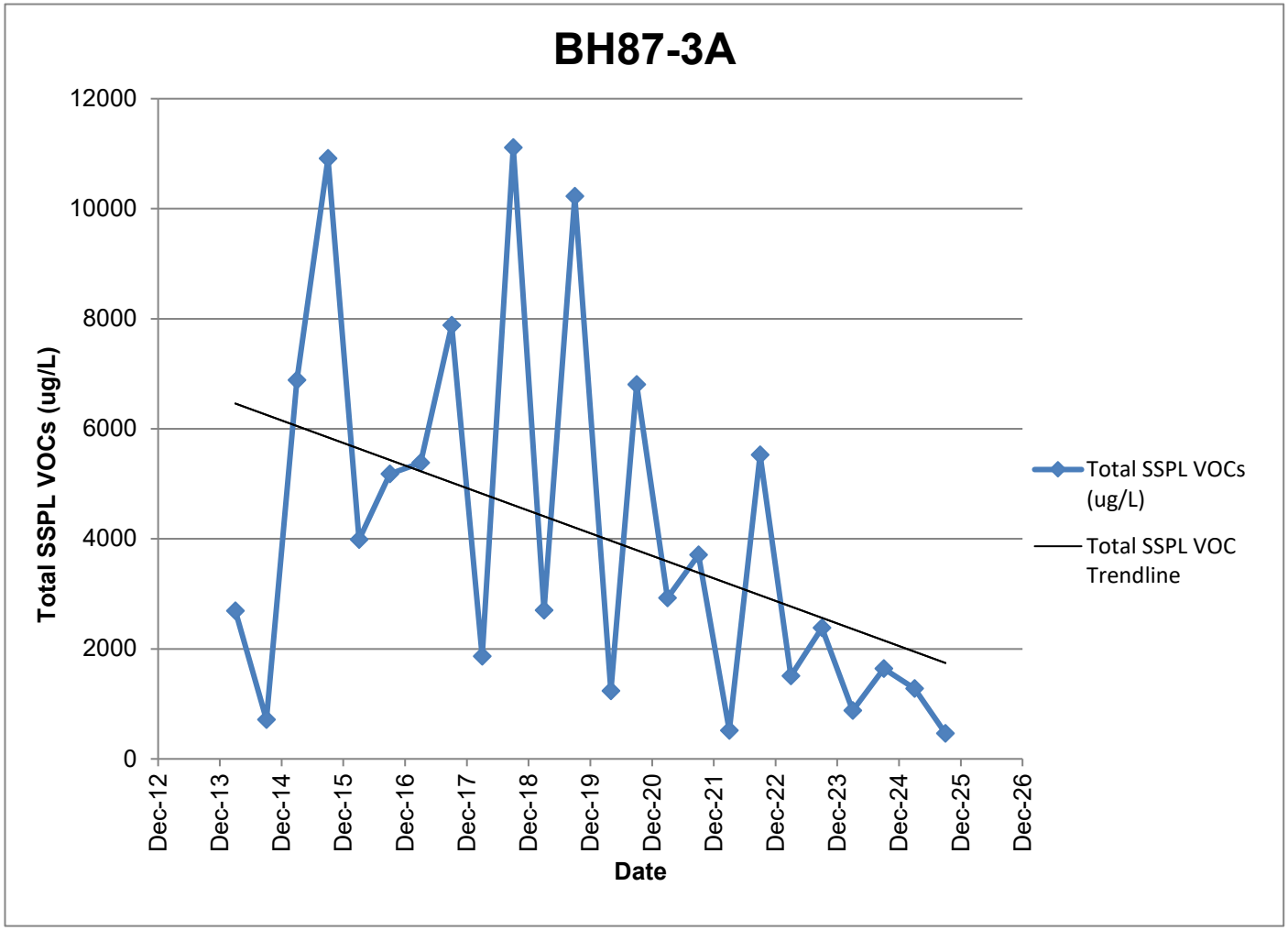


figure 2
Total SSPL VOC Concentration Trend, BH87-3A (2014 - 2025)
Cascades Containerboard Packaging Site
2025 Periodic Review Report
GHD

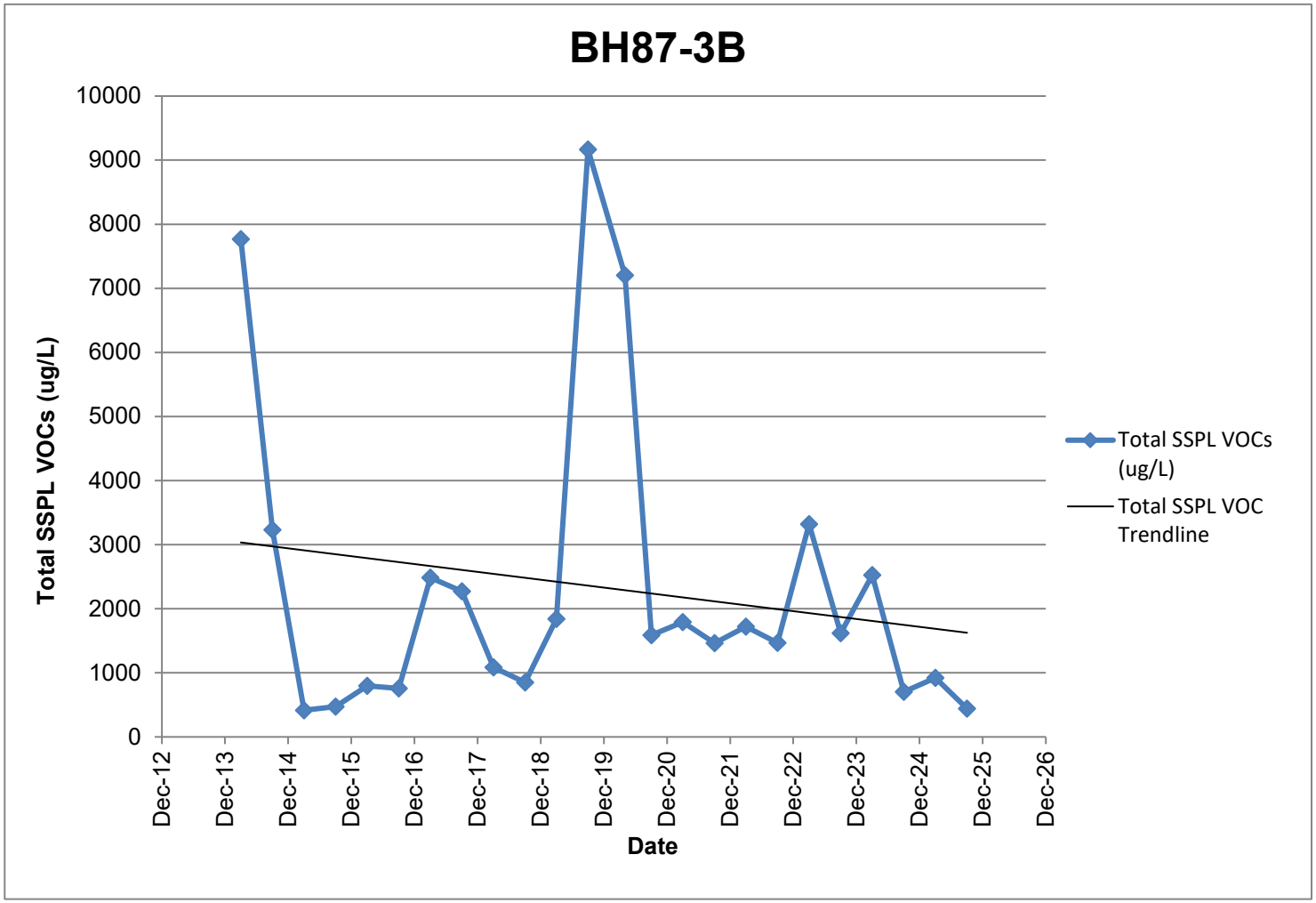


figure 3
Total SSPL VOC Concentration Trend, BH87-3B (2014 - 2025)
Cascades Containerboard Packaging Site
2025 Periodic Review Report
GHD

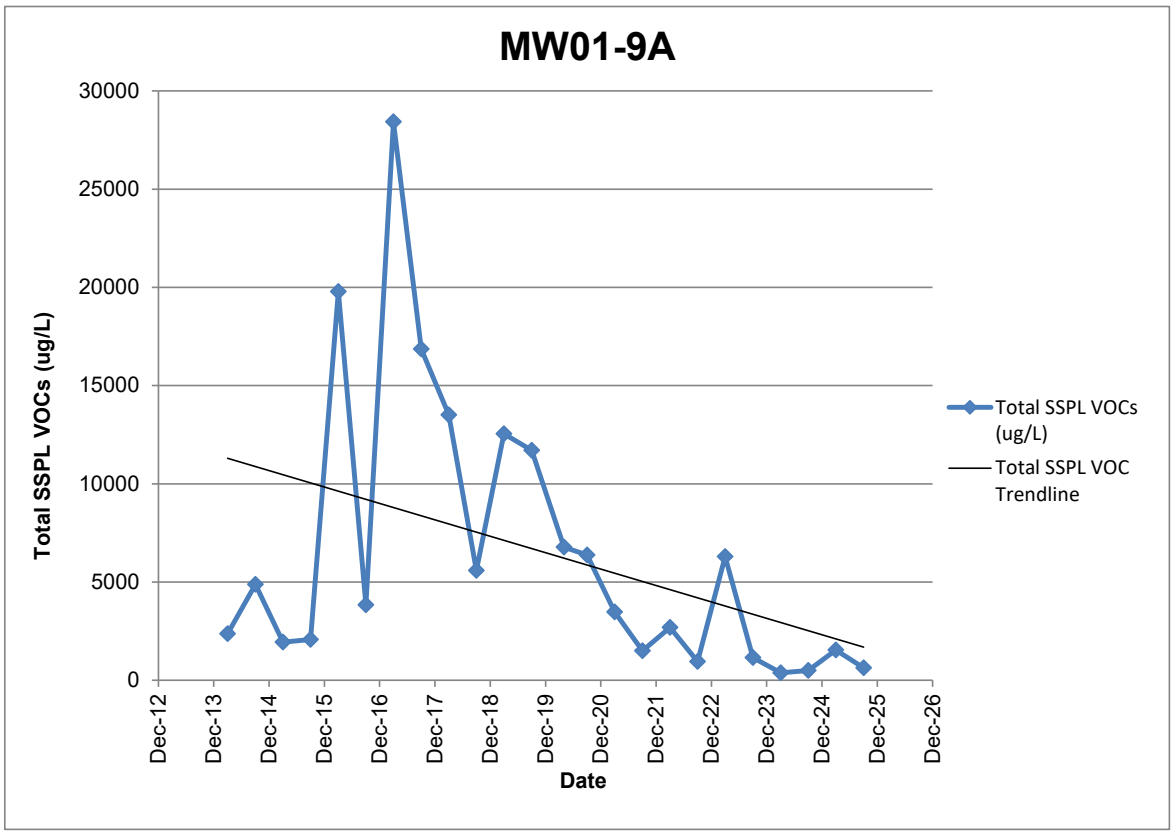


figure 4
Total SSPL VOC Concentration Trend, MW01-9A (2014 - 2025)
Cascades Containerboard Packaging Site
2025 Periodic Review Report
GHD

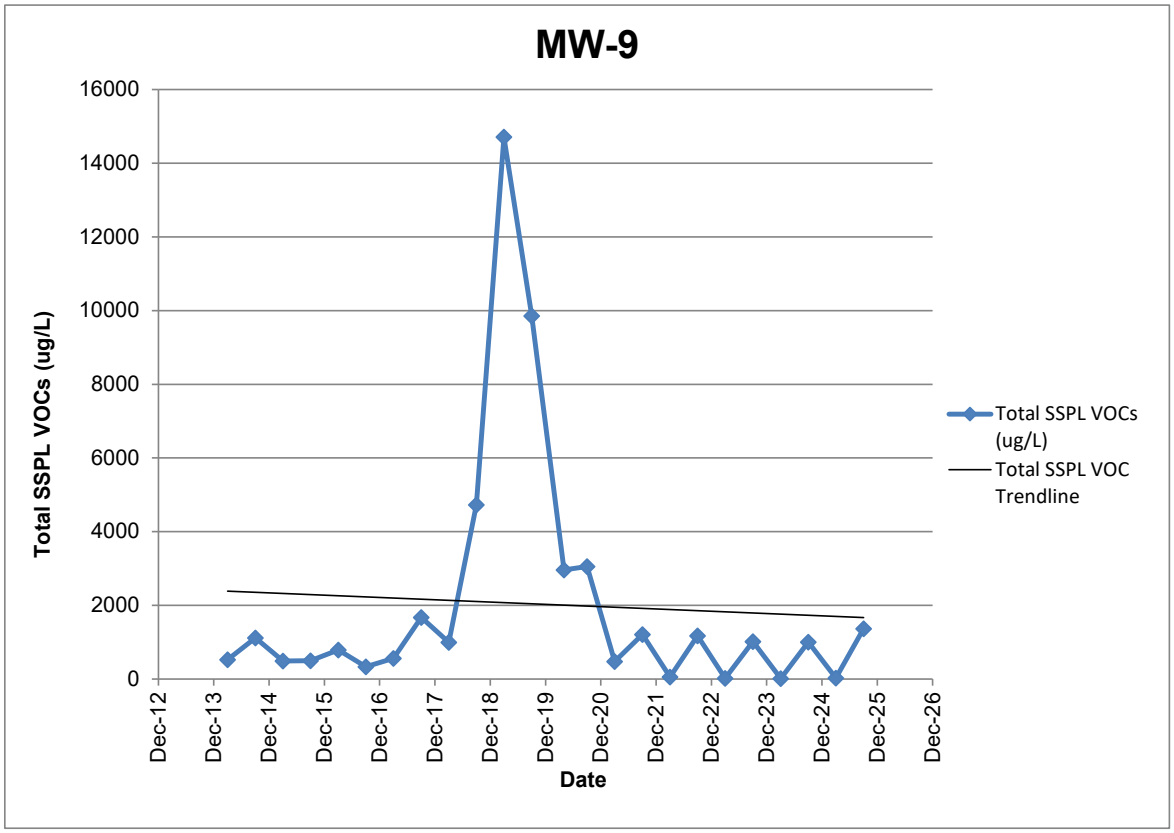


figure 5
Total SSPL VOC Concentration Trend, MW-9 (2014 - 2025)
Cascades Containerboard Packaging Site
2025 Periodic Review Report
GHD

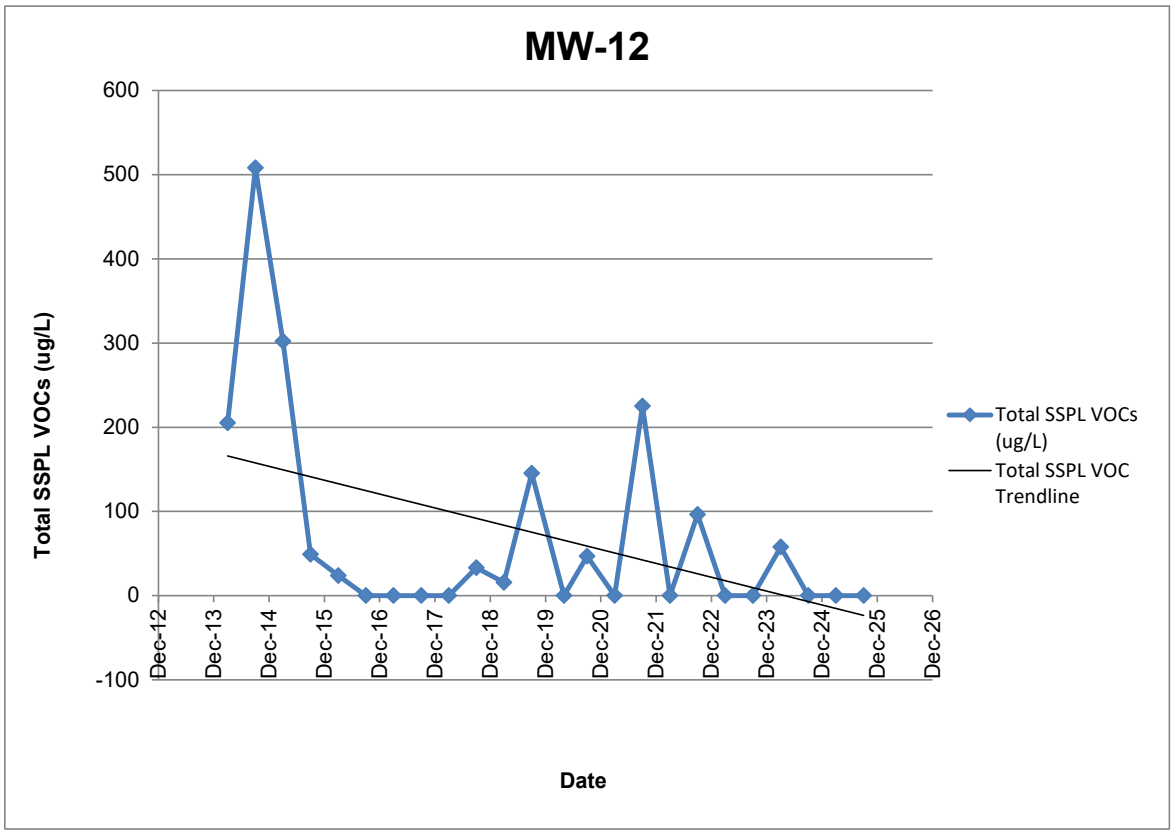


figure 6
Total SSPL VOC Concentration Trend, MW-12 (2014 - 2025)
Cascades Containerboard Packaging Site
2025 Periodic Review Report
GHD

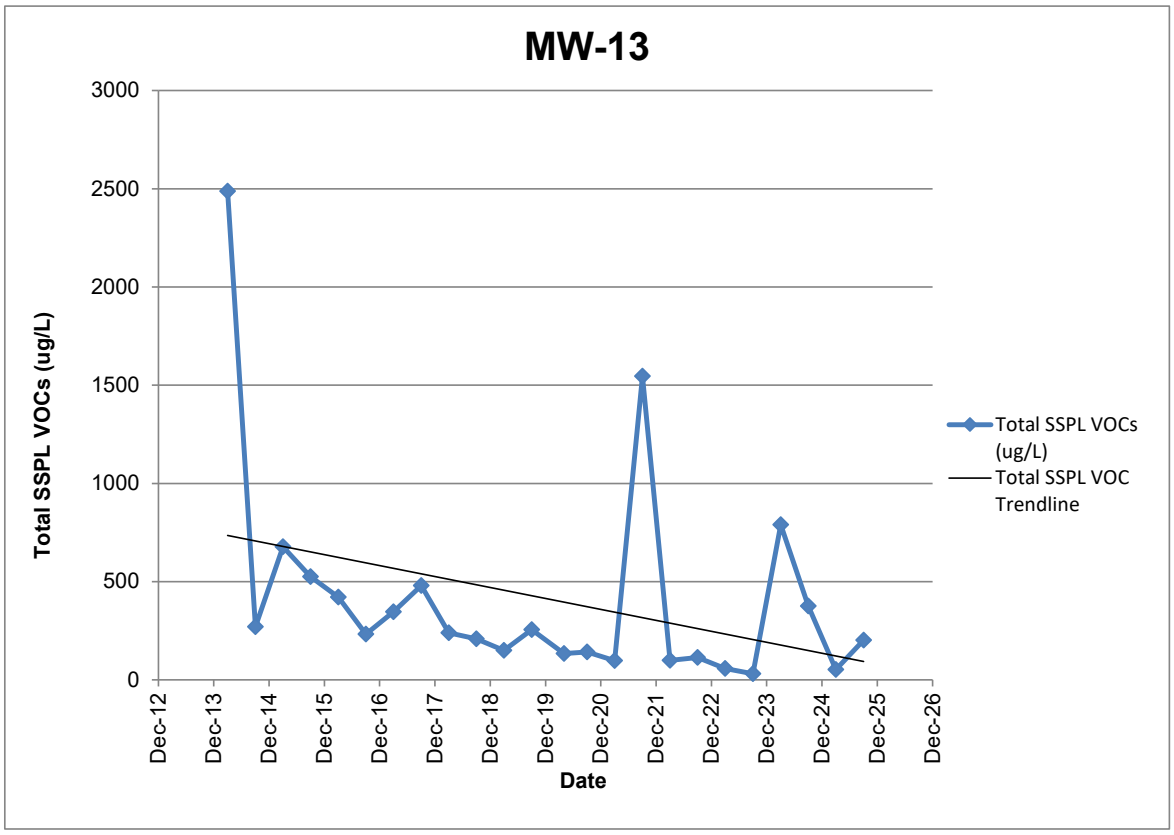


figure 7
Total SSPL VOC Concentration Trend, MW-13 (2014 - 2025)
Cascades Containerboard Packaging Site
2025 Periodic Review Report
GHD

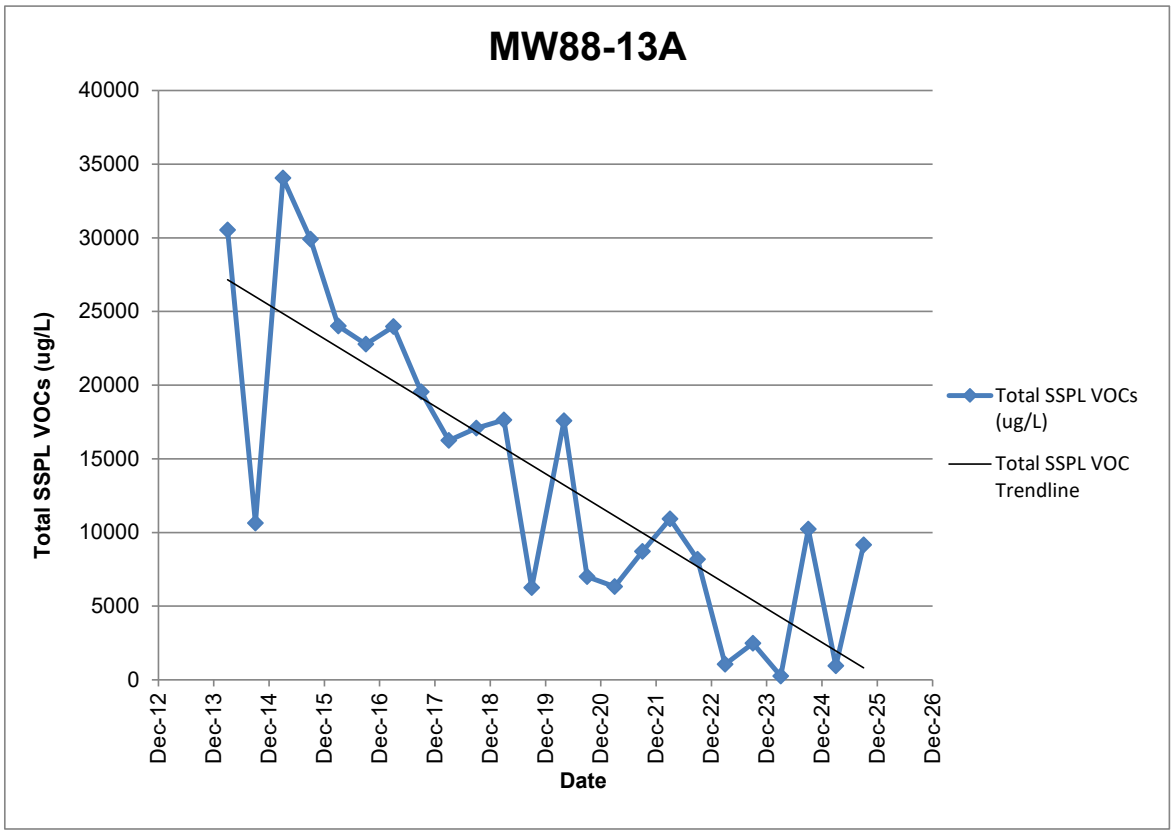


figure 8
Total SSPL VOC Concentration Trend, MW88-13A (2014 - 2025)
Cascades Containerboard Packaging Site
2025 Periodic Review Report
GHD

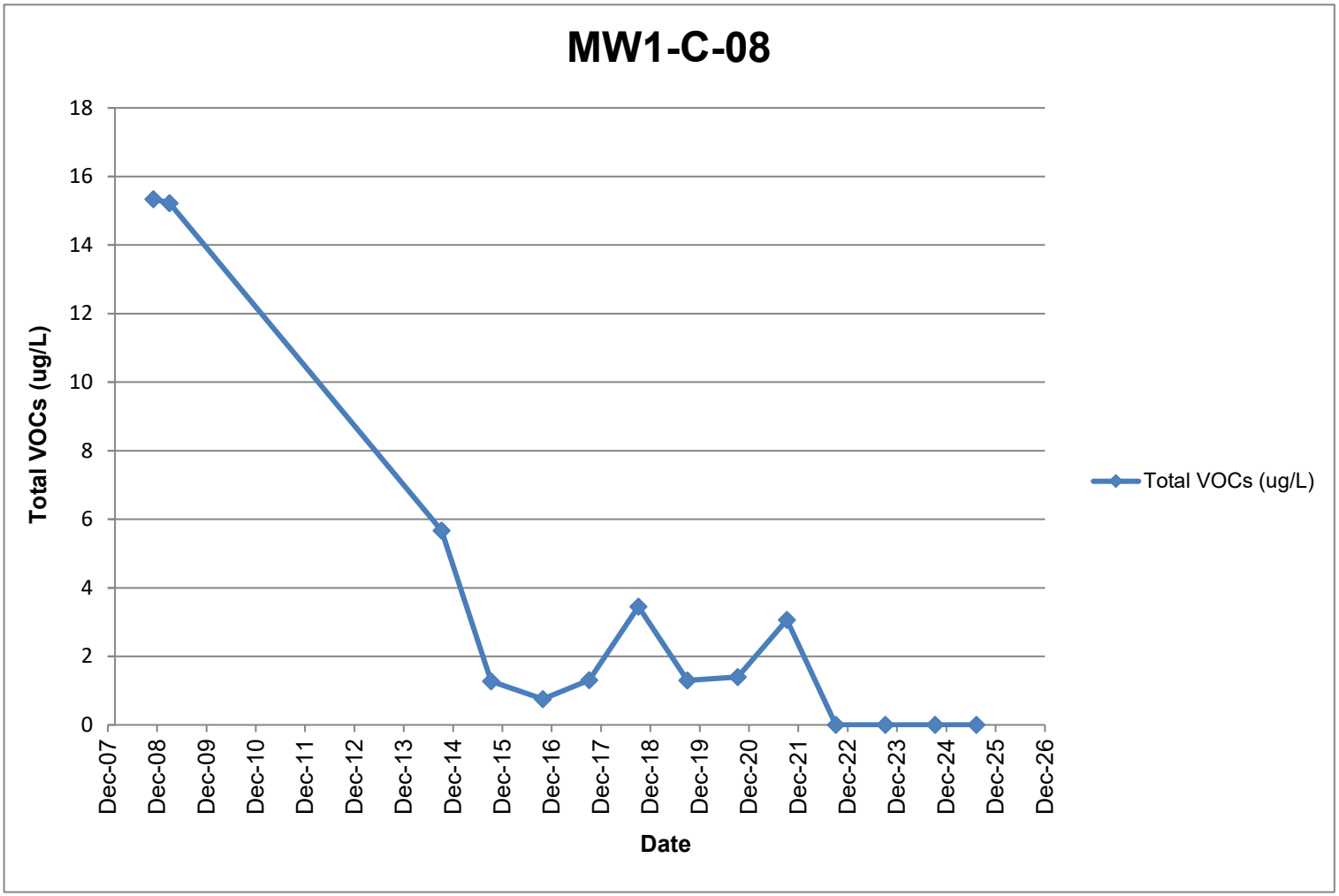


figure 9
Total VOC Concentration Trend, MW1-C-08 (2008 - 2025)
Cascades Containerboard Packaging Site
2025 Periodic Review Report
GHD

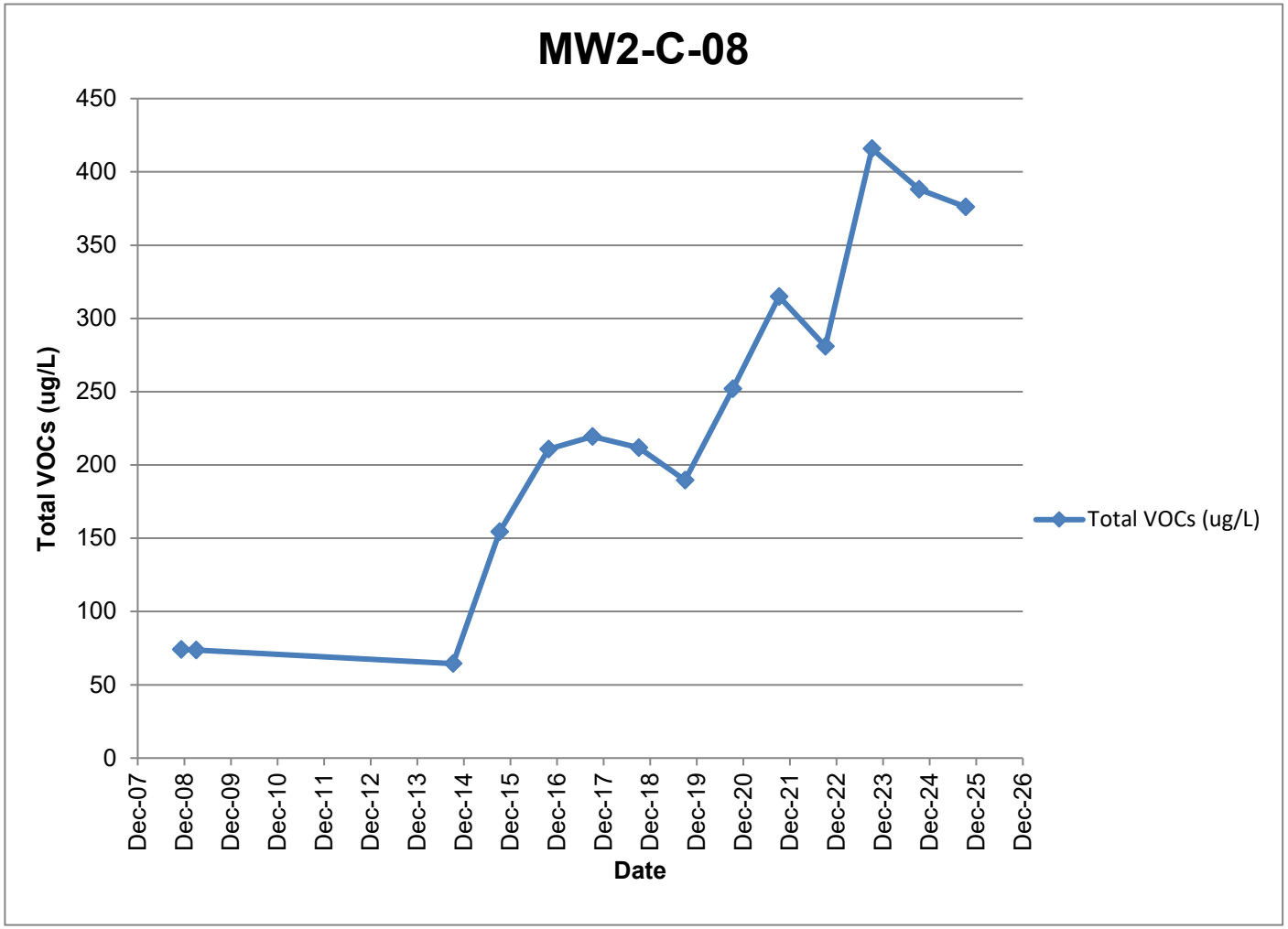


figure 10
Total VOC Concentration Trend, MW2-C-08 (2008 - 2025)
Cascades Containerboard Packaging Site
2025 Periodic Review Report
GHD

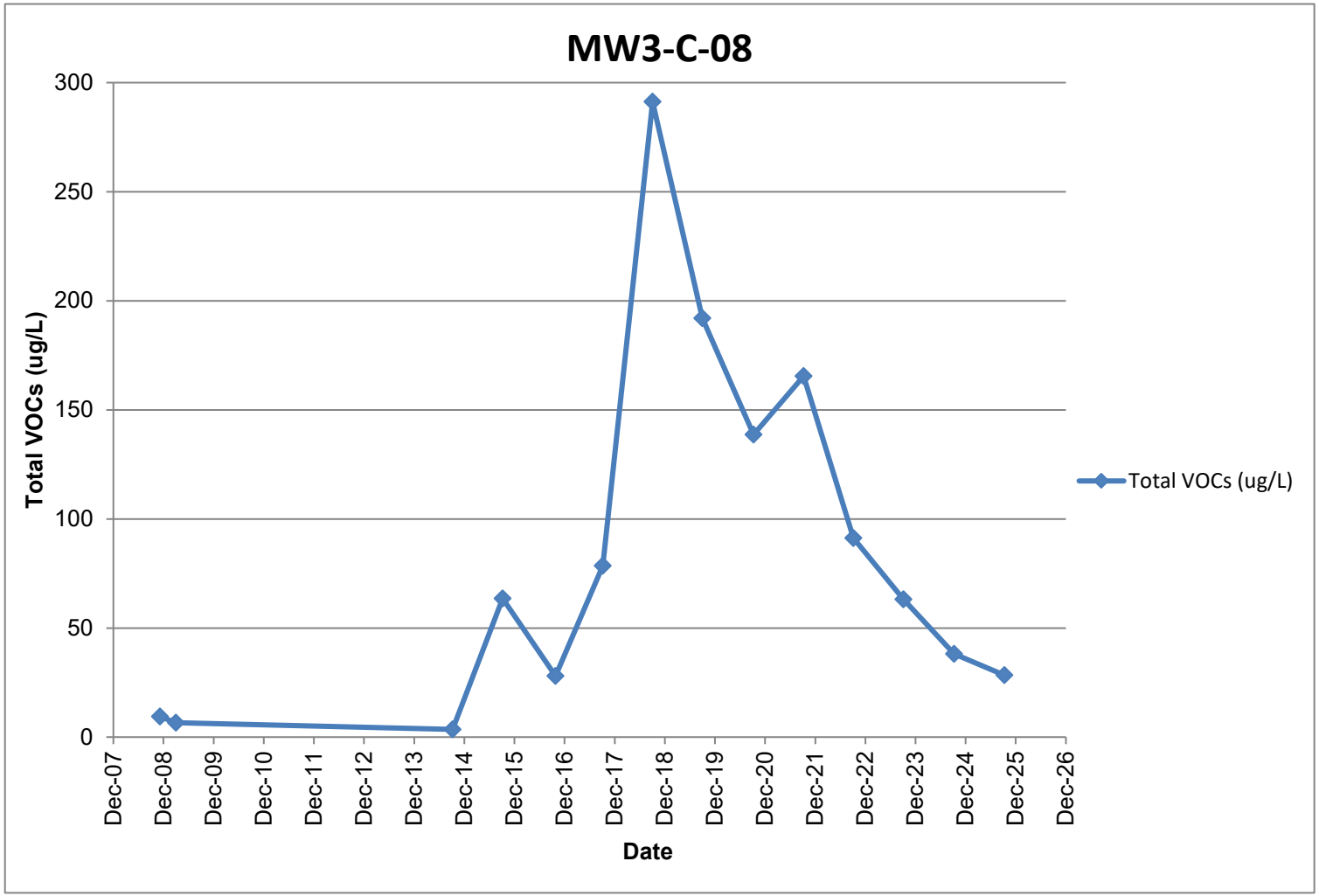


figure 11
Total VOC Concentration Trend, MW3-C-08 (2008 - 2025)
Cascades Containerboard Packaging Site
2025 Periodic Review Report
GHD

REPUTED OWNER
NIAGARA JUNCTION RAILWAY COMPANY

REPUTED OWNER
FRANK'S VACUUM TRUCK SERVICE
L–2362, P–255

REPUTED OWNER
5335 RIVER ROAD, INC.
L–3118, P–293

REPUTED OWNER
ELKEM METALS COMPANY

ROYAL AVENUE

47th STREET

47TH STREET TUNNEL

MW-14
MW88-4A
MW88-1A
MW90-1A
MW-17
MW88-14A
MW88-8A
MW88-10A
MW88-12A
MW-15
BH87-2A
MW88-7A
MW88-2A
BH87-5C
MW88-3A
MW-2
MW88-9A
MW01-9A
MW88-6A
BH87-3A
MW88-13A
BH87-28

CHAIN LINK FENCE
CONCRETE PAD
DEMOLITION DEBRIS
PAVED
GRAVEL
BLOCK BLDG.
FENCE
5' WIDE SIDEWALK
SAND STONE CURB
7' x 6' FALLS ST. SEWER TUNNEL (UNLINED)
SOUTHSIDE INTERCEPTOR SEWER TUNNEL (72-INCH DIAMETER)
RUINS
GATE
CONC. APRON
HYD.
490.42'

LEGEND

- MW88-12A — A-ZONE MONITORING WELL LOCATION
- MW88-2A — WELL DECOMMISSIONED DURING 2013 SOIL REMEDIATION
- 2024 PFC SAMPLING LOCATION
- 2024 ADDITIONAL SAMPLING LOCATION

0 50 100 ft
1" = 100 ft

N

GHD

CASCADES CONTAINERBOARD PACKAGING
NIAGARA FALLS DIVISION
NIAGARA FALLS, NEW YORK

2025 PFC AND ADDITIONAL SAMPLING LOCATIONS - ZONE A

Project No. 12595539
Date December 2025

FIGURE 12

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Plot Date: 09 December 2025 7:14 AM

REPUTED OWNER
NIAGARA JUNCTION RAILWAY COMPANY

REPUTED OWNER
FRANK'S VACUUM TRUCK SERVICE
L–2362, P–255

REPUTED OWNER
5335 RIVER ROAD, INC.
L–3118, P–293

REPUTED OWNER
ELKEM METALS COMPANY

ROYAL AVENUE

47th STREET

47TH STREET TUNNEL

MW88-1B
MW90-1B
MW88-4B
MW-13
MW88-14B
MW88-8B
MW88-10B
MW88-12B
BH87-2B
MW88-2B
MW88-7BR
MW88-3B
MW88-9B
MW88-5B
MW88-6B
MW-9
BH87-3B
MW-11
MW-12

CHAIN LINK FENCE
CONCRETE PAD
DEMOLITION DEBRIS
PAVED
GRAVEL
BLOCK BLDG.
FENCE
RUINS
5' WIDE SIDEWALK
SAND STONE CURB
7' x 6' FALLS ST. SEWER TUNNEL (UNLINED)
SOUTHSIDE INTERCEPTOR SEWER TUNNEL (72-INCH DIAMETER)
DIVERSION/ REGULATOR WEIR
GATE
CONC. APRON
HYD.
490.42'

ELEC MH 16 RM 570.71
SAN MH 10 RM 570.36
RCVR 11 RM 569.65
ELEC MH 14 RM 570.36
MH 12 RM 570.13
RCVR 13 RM 569.78
ELEC MH 15 RM 570.22
SAN MH 5 RM 571.00
MH 7 RM 570.53
MH 6 RM 570.84
SAN MH 8 RM 571.36
SAN MH 9 RM 571.52
ELEC MH 18 RM 570.14
RCVR 19 RM 569.45
ELEC MH 17 RM 570.37
SAN MH 4 RM 570.01
RCVR 3 RM 569.66
ELEC MH 2 RM 570.51
(TWO RIM SHOT ON COVER)
SAN MH 20 RM 570.56
SAN MH 21 RM 571.34
SAN MH 1 RM 570.66
MH 23 RM 570.01
ELEC MH 22 RM 570.08
ELEC MH 28 RM 570.88
SAN MH 29 RM 570.92
MH 31 RM 570.90
RCVR 33 RM 570.81
SAN MH 34 RM 571.32
MH 24 RM 571.31
MH 24 RM 571.06
ELEC. MH 26 RM 571.01
ELEC. MH 27 RM 571.01
RCVR 32 RM 570.88
SAN MH 30 RM 571.02

LEGEND

- MW88-12B — A-ZONE MONITORING WELL LOCATION
- MW88-2B — WELL DECOMMISSIONED DURING 2013 SOIL REMEDIATION
- 2024 PFC SAMPLING LOCATION
- 2024 ADDITIONAL SAMPLING LOCATION

0 50 100 ft
1" = 100 ft

N

GHD

CASCADES CONTAINERBOARD PACKAGING
NIAGARA FALLS DIVISION
NIAGARA FALLS, NEW YORK

2025 PFC AND ADDITIONAL SAMPLING LOCATIONS - ZONE B

Project No. **12595539**
Date **December 2025**

FIGURE 13

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Plot Date: 09 December 2025 7:14 AM

Tables

Table 1

2025 Analytical Results Summary - VOCs
C-Zone Groundwater Sampling
Cascades Containerboard Packaging Site
Niagara Falls, New York
October 2025

Location ID:		**MW1-C-08**	**MW2-C-08**	**MW3-C-08**
Sample Name:		**WG-12595539-100825-GH-002**	**WG-12595539-100925-GH-012**	**WG-12595539-100825-DB-003**
Sample Date:		**8/10/2025**	**9/10/2025**	**8/10/2025**
Parameters	**Unit**			
Volatile Organic Compounds				
1,1,1-Trichloroethane	µg/L	5.0 U	20 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	20 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	20 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	20 U	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	20 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	5.0 U	20 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5.0 U	20 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	5.0 U	20 U	5.0 U
1,2-Dichlorobenzene	µg/L	5.0 U	20 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	20 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	20 U	5.0 U
1,3-Dichlorobenzene	µg/L	5.0 U	49	5.0 U
1,4-Dichlorobenzene	µg/L	5.0 U	100	19
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	25 U	100 U	25 U
2-Chlorotoluene	µg/L	5.0 U	57	5.0 U
2-Hexanone	µg/L	25 U	100 U	25 U
3-Chlorotoluene	µg/L	5.0 U	20 U	5.0 U
4-Chlorotoluene	µg/L	5.0 U	20 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	25 U	100 U	25 U
Acetone	µg/L	25 U	130 U	25 U
Benzene	µg/L	5.0 U	20 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	20 U	5.0 U
Bromoform	µg/L	5.0 U	20 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	20 U	5.0 U
Carbon disulfide	µg/L	5.0 U	20 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	20 U	5.0 U
Chlorobenzene	µg/L	5.0 U	170	9.4
Chloroethane	µg/L	5.0 U	20 U	5.0 U
Chloroform (Trichloromethane)	µg/L	5.0 U	20 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	20 U	5.0 U
cis-1,2-Dichloroethene	µg/L	5.0 U	20 U	5.0 U
cis-1,3-Dichloropropene	µg/L	5.0 U	20 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	20 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	5.0 U	20 U	5.0 U
Ethylbenzene	µg/L	5.0 U	20 U	5.0 U
Isopropyl benzene	µg/L	5.0 U	20 U	5.0 U
Methyl tert butyl ether (MTBE)	µg/L	5.0 U	20 U	5.0 U
Methylene chloride	µg/L	5.0 U	20 U	5.0 U
Styrene	µg/L	5.0 U	20 U	5.0 U
Tetrachloroethene	µg/L	5.0 U	20 U	5.0 U
Toluene	µg/L	5.0 U	20 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	20 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	20 U	5.0 U
Trichloroethene	µg/L	5.0 U	20 U	5.0 U
Trichlorofluoromethane (CFC-11)	µg/L	5.0 U	20 U	5.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	5.0 U	20 U	5.0 U
Vinyl chloride	µg/L	5.0 U	20 U	5.0 U
Xylenes (total)	µg/L	10 U	40 U	10 U

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

Parameter	Units	New York State TOGs Guidance Value	New York State TOGs Standard	Location ID: MW1-C-08 / Sample Name: GW-47392-120308-JJW-001 / Sample Date: 12/03/2008	Location ID: MW1-C-08 / Sample Name: GW-47392-033109-JJW-014 / Sample Date: 03/31/2009	Location ID: MW1-C-08 / Sample Name: GW-47392-033109-JJW-015 / Sample Date: 03/31/2009 Duplicate	Location ID: MW1-C-08 / Sample Name: WG-47392-100714-DJT-010 / Sample Date: 10/07/2014
Volatile Organic Compounds (VOCs)							
1,1,1-Trichloroethane	µg/L	NC	5	1.0 U	1.0 U	1.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	NC	5	1.0 U	1.0 U	1.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	NC	1	1.0 U	1.0 U	1.0 U	5.0 U
1,1-Dichloroethane	µg/L	NC	5	1.0 U	1.0 U	1.0 U	0.77J
1,1-Dichloroethene	µg/L	NC	5	1.0 U	1.0 U	1.0 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	NC	5	1.0 U	1.0 U	1.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NC	0.04	1.0 U	1.0 U	1.0 U	--
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	NC	0.0006	1.0 U	1.0 U	1.0 U	--
1,2-Dichlorobenzene	µg/L	NC	3	1.0 U	1.0 U	1.0 U	5.0 U
1,2-Dichloroethane	µg/L	NC	0.6	1.0 U	1.0 U	1.0 U	5.0 U
1,2-Dichloroethene (total)	µg/L	NC	NC	-	-	-	--
1,2-Dichloropropane	µg/L	NC	1	1.0 U	1.0 U	1.0 U	5.0 U
1,3-Dichlorobenzene	µg/L	NC	3	1.0 U	1.0 U	1.0 U	5.0 U
1,4-Dichlorobenzene	µg/L	NC	3	1.0 U	1.0 U	1.0 U	5.0 U
2-Butanone (Methyl Ethyl Ketone)	µg/L	50	NC	5.0 U	5.0 U	5.0 U	--
2-Chlorotoluene	ug/L	NC	5	1.0 U	1.0 U	1.0 U	--
2-Chloroethyl vinyl ether	µg/L	NC	NC	--	--	--	25 U
2-Hexanone	µg/L	50	NC	5.0 U	5.0 U	5.0 U	--
3-Chlorotoluene	µg/L	NC	5	1.0 U	1.0 U	1.0 U	--
4-Chlorotoluene	µg/L	NC	5	1.0 U	1.0 U	1.0 U	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	NC	NC	5.0 U	5.0 U	5.0 U	--
Acetone	µg/L	50	NC	5.0 U	5.0 U	5.0 U	25 U
Acrolein	µg/L	NC	5	--	--	--	100 U
Acrylonitrile	µg/L	NC	5	--	--	--	50 U
Benzene	µg/L	NC	1	0.84 J	3.1	2.6	1.6 J
Bromodichloromethane	µg/L	50	NC	1.0 U	1.0 U	1.0 U	5.0 U
Bromoform	µg/L	50	NC	1.0 U	1.0 U	1.0 U	5.0 U
Bromomethane (Methyl Bromide)	µg/L	NC	5	1.0 U	1.0 U	1.0 U	5.0 U
Carbon disulfide	µg/L	60	NC	1.0 U	1.0 U	1.0 U	--
Carbon tetrachloride	µg/L	NC	5	1.0 U	1.0 U	1.0 U	5.0 U
Chlorobenzene	µg/L	NC	5	1.0 U	1.0 U	1.0 U	5.0 U
Chloroethane	µg/L	NC	5	1.0 U	1.0 U	1.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	NC	7	10	1.0 U	0.65 J	5.0 U
Chloromethane (Methyl Chloride)	µg/L	NC	5	1.0 U	1.0 UJ	1.0 UJ	5.0 U
cis-1,2-Dichloroethene	µg/L	NC	5	1.0 U	1.6	1.2	0.84 J

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	**MW1-C-08**	**MW1-C-08**	**MW1-C-08**	**MW1-C-08**
			Sample Name:	**GW-47392-120308-JJW-001**	**GW-47392-033109-JJW-014**	**GW-47392-033109-JJW-015**	**WG-47392-100714-DJT-010**
			Sample Date:	**12/03/2008**	**03/31/2009**	**03/31/2009 Duplicate**	**10/07/2014**
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**				
Volatile Organic Compounds (VOCs)							
cis-1,3-Dichloropropene	µg/L	NC	NC	1.0 U	1.0 U	1.0 U	5.0 U
Cyclohexane	µg/L	NC	NC	1.1	1.0 U	1.0 U	--
Dibromochloromethane	µg/L	50	NC	1.0 U	1.0 U	1.0 U	5.0 U
Dibromodifluoromethane	µg/L	NC	NC	--	1.0 U	1.0 U	--
Dichlorodifluoromethane (CFC-12)	µg/L	NC	5	1.0 U	--	--	--
Ethylbenzene	µg/L	NC	5	1.0 U	1.0 U	1.0 U	5.0 U
Isopropylbenzene	µg/L	NC	5	1.0 U	1.0 U	1.0 U	--
Methyl acetate	µg/L	NC	NC	1.0 U	1.0 U	1.0 U	--
Methyl cyclohexane	µg/L	NC	NC	1.8	1.0 U	1.0 U	--
Methyl Tert Butyl Ether	µg/L	10	NC	1.0 U	1.0 U	1.0 U	--
Methylene chloride	µg/L	NC	5	1.0 U	1.0 U	1.0 U	5.0 U
Styrene	µg/L	NC	5	1.0 U	1.0 U	1.0 U	--
Tetrachloroethene	µg/L	NC	5	1.0 U	1.0 U	1.0 U	5.0 U
Toluene	µg/L	NC	5	1.6	4.7 J	**9.8 J**	5.0 U
Total Monochlorotoluenes	µg/L	NC	NC	1 U	1 U	1 U	5.0 U
trans-1,2-Dichloroethene	µg/L	NC	5	1.0 U	1.0 U	1.0 U	0.96 J
trans-1,3-Dichloropropene	µg/L	NC	NC	1.0 U	1.0 U	1.0 U	5.0 U
Trichloroethene	µg/L	NC	5	1.0 U	1.0 U	1.0 U	5.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NC	5	1.0 U	1.0 U	1.0 U	--
Trifluorotrichloroethane (Freon 113)	µg/L	NC	5	1.0 U	1.0 U	1.0 U	--
Vinyl chloride	µg/L	NC	2	1.0 U	1.5	0.97 J	1.5 J
Xylene (total)	µg/L	NC	NC	3.0 U	2.0 U	2.0 U	--
Total VOCs	µg/L	NC	NC	15.34	10.9	15.22	5.67

Notes:

6.24 - Concentration exceed NYS TOGs
U - Not present at or above the associated MDL
J - Estimated concentration between the MDL and Reporting Limit
MDL - Method Detection Limit
NC - No criteria
NYS TOGs - New York State Technical and Operational Guidance Series
-- - Not analyzed

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	MW1-C-08	MW1-C-08	MW1-C-08
			Sample Name:	WG-11109628-100815-SG-012	WG-11109628-102516-SG-003	WG-11109628-100417-SG-010
			Sample Date:	10/08/2015	10/25/2016	10/04/2017
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**			
Volatile Organic Compounds (VOCs)						
1,1,1-Trichloroethane	µg/L	NC	5	5.0 U	5.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	NC	5	5.0 U	5.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	NC	1	5.0 U	5.0 U	1.0 U
1,1-Dichloroethane	µg/L	NC	5	0.65 J	0.75 J	0.67 J
1,1-Dichloroethene	µg/L	NC	5	5.0 U	5.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	NC	5	5.0 U	5.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NC	0.04	--	5.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	NC	0.0006	--	5.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	NC	3	5.0 U	5.0 U	1.0 U
1,2-Dichloroethane	µg/L	NC	0.6	5.0 U	5.0 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NC	NC	--	--	-
1,2-Dichloropropane	µg/L	NC	1	5.0 U	5.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	NC	3	5.0 U	5.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	NC	3	5.0 U	5.0 U	1.0 U
2-Butanone (Methyl Ethyl Ketone)	µg/L	50	NC	--	25 U	5.0 U
2-Chlorotoluene	ug/L	NC	5	--	--	1.0 U
2-Chloroethyl vinyl ether	µg/L	NC	NC	25 U	--	--
2-Hexanone	µg/L	50	NC	--	25 U	5.0 U
3-Chlorotoluene	µg/L	NC	5	--	--	--
4-Chlorotoluene	µg/L	NC	5	--	--	1.0 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	NC	NC	--	25 U	5.0 U
Acetone	µg/L	50	NC	25 U	25 U	5.0 U
Acrolein	µg/L	NC	5	100 U	--	--
Acrylonitrile	µg/L	NC	5	50 U	--	--
Benzene	µg/L	NC	1	0.62 J	5.0 U	0.18 J
Bromodichloromethane	µg/L	50	NC	5.0 U	5.0 U	1.0 U
Bromoform	µg/L	50	NC	5.0 U	5.0 U	1.0 U
Bromomethane (Methyl Bromide)	µg/L	NC	5	5.0 U	5.0 U	1.0 U
Carbon disulfide	µg/L	60	NC	--	5.0 U	1.0 U
Carbon tetrachloride	µg/L	NC	5	5.0 U	5.0 U	1.0 U
Chlorobenzene	µg/L	NC	5	5.0 U	5.0 U	1.0 U
Chloroethane	µg/L	NC	5	5.0 U	5.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	NC	7	5.0 U	5.0 U	1.0 U
Chloromethane (Methyl Chloride)	µg/L	NC	5	5.0 U	5.0 U	0.46 J
cis-1,2-Dichloroethene	µg/L	NC	5	5.0 U	5.0 U	1.0 U

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	**MW1-C-08**	**MW1-C-08**	**MW1-C-08**
			Sample Name:	**WG-11109628-100815-SG-012**	**WG-11109628-102516-SG-003**	**WG-11109628-100417-SG-010**
			Sample Date:	**10/08/2015**	**10/25/2016**	**10/04/2017**
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**			
Volatile Organic Compounds (VOCs)						
cis-1,3-Dichloropropene	µg/L	NC	NC	5.0 U	5.0 U	1.0 U
Cyclohexane	µg/L	NC	NC	--	--	1.0 U
Dibromochloromethane	µg/L	50	NC	5.0 U	5.0 U	1.0 U
Dibromodifluoromethane	µg/L	NC	NC	--	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	NC	5	--	5.0 U	1.0 U
Ethylbenzene	µg/L	NC	5	5.0 U	5.0 U	1.0 U
Isopropylbenzene	µg/L	NC	5	--	5.0 U	1.0 U
Methyl acetate	µg/L	NC	NC	--	--	5.0 U
Methyl cyclohexane	µg/L	NC	NC	--	--	1.0 U
Methyl Tert Butyl Ether	µg/L	10	NC	--	5.0 U	1.0 U
Methylene chloride	µg/L	NC	5	5.0 U	5.0 U	1.0 U
Styrene	µg/L	NC	5	--	5.0 U	1.0 U
Tetrachloroethene	µg/L	NC	5	5.0 U	5.0 U	1.0 U
Toluene	µg/L	NC	5	5.0 U	5.0 U	1.0 U
Total Monochlorotoluenes	µg/L	NC	NC	5.0 U	25 U	-
trans-1,2-Dichloroethene	µg/L	NC	5	5.0 U	5.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NC	NC	5.0 U	5.0 U	1.0 U
Trichloroethene	µg/L	NC	5	5.0 U	5.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NC	5	--	5.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	NC	5	--	5.0 U	1.0 U
Vinyl chloride	µg/L	NC	2	5.0 U	5.0 U	1.0 U
Xylene (total)	µg/L	NC	NC	--	10 U	2.0 U
Total VOCs	µg/L	NC	NC	1.27	0.75	1.31

Notes:

6.24 - Concentration exceed NYS TOGs
U - Not present at or above the associated MDL
J - Estimated concentration between the MDL and Reporting Limit
MDL - Method Detection Limit
NC - No criteria
NYS TOGs - New York State Technical and Operational Guidance Series
-- - Not analyzed

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	MW1-C-08	MW1-C-08	MW1-C-08
			Sample Name:	WG-11109628-100318-SG-010	WG-11109628-100119-SG-006	WG-11109628-100820-SG-008
			Sample Date:	10/03/2018	10/01/2019	10/8/2020
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**			
Volatile Organic Compounds (VOCs)						
1,1,1-Trichloroethane	µg/L	NC	5	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	NC	5	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	NC	1	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	NC	5	0.65 J	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NC	0.04	--	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	NC	0.0006	--	5.0 U	5.0 U
1,2-Dichlorobenzene	µg/L	NC	3	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	NC	0.6	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	µg/L	NC	NC	10 U	--	--
1,2-Dichloropropane	µg/L	NC	1	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	µg/L	NC	3	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	µg/L	NC	3	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl Ethyl Ketone)	µg/L	50	NC	25 U	25 U	25 U
2-Chlorotoluene	ug/L	NC	5	5.0 U	5.0 U	5.0 U
2-Chloroethyl vinyl ether	µg/L	NC	NC	--	--	--
2-Hexanone	µg/L	50	NC	25 U	25 U	25 U
3-Chlorotoluene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
4-Chlorotoluene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	NC	NC	25 U	25 U	25 U
Acetone	µg/L	50	NC	2.8 J	25 U	25 U
Acrolein	µg/L	NC	5	--	--	--
Acrylonitrile	µg/L	NC	5	--	--	--
Benzene	µg/L	NC	1	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	50	NC	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	50	NC	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl Bromide)	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	60	NC	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	NC	7	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl Chloride)	µg/L	NC	5	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	NC	5	5.0 U	5.0 U	5.0 U

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	**MW1-C-08**	**MW1-C-08**	**MW1-C-08**
			Sample Name:	**WG-11109628-100318-SG-010**	**WG-11109628-100119-SG-006**	**WG-11109628-100820-SG-008**
			Sample Date:	**10/03/2018**	**10/01/2019**	**10/8/2020**
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**			
Volatile Organic Compounds (VOCs)						
cis-1,3-Dichloropropene	µg/L	NC	NC	5.0 U	5.0 U	5.0 U
Cyclohexane	µg/L	NC	NC	--	--	--
Dibromochloromethane	µg/L	50	NC	5.0 U	5.0 U	5.0 U
Dibromodifluoromethane	µg/L	NC	NC	--	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	NC	5	--	5.0 U	5.0 U
Ethylbenzene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Isopropylbenzene	µg/L	NC	5	--	5.0 U	5.0 U
Methyl acetate	µg/L	NC	NC	--	--	--
Methyl cyclohexane	µg/L	NC	NC	--	--	--
Methyl Tert Butyl Ether	µg/L	10	NC	--	5.0 U	5.0 U
Methylene chloride	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Styrene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Toluene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Total Monochlorotoluenes	µg/L	NC	NC	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	NC	5	--	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	NC	NC	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NC	5	--	5.0 U	5.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	NC	5	--	5.0 U	5.0 U
Vinyl chloride	µg/L	NC	2	5.0 U	1.3 J	1.4 J
Xylene (total)	µg/L	NC	NC	10 U	10 U	10 U
Total VOCs	µg/L	NC	NC	3.45	1.3	1.4

Notes:

6.24 - Concentration exceed NYS TOGs
U - Not present at or above the associated MDL
J - Estimated concentration between the MDL and Reporting Limit
MDL - Method Detection Limit
NC - No criteria
NYS TOGs - New York State Technical and Operational Guidance Series
-- - Not analyzed

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	MW1-C-08	MW1-C-08	MW1-C-08
			Sample Name:	WG-11109628-100621-SG-008	WG-12595539-100522-KM-014	WG-12595539-100523-KM-012
			Sample Date:	10/6/2021	10/5/2022	10/05/2023
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**			
Volatile Organic Compounds (VOCs)						
1,1,1-Trichloroethane	µg/L	NC	5	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	NC	5	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	NC	1	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	NC	5	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NC	0.04	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	NC	0.0006	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	µg/L	NC	3	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	NC	0.6	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	µg/L	NC	NC	--	--	--
1,2-Dichloropropane	µg/L	NC	1	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	µg/L	NC	3	0.67 J	5.0 U	5.0 U
1,4-Dichlorobenzene	µg/L	NC	3	0.77 J	5.0 U	5.0 U
2-Butanone (Methyl Ethyl Ketone)	µg/L	50	NC	25 U	25 U	25 U
2-Chlorotoluene	ug/L	NC	5	5.0 U	5.0 U	5.0 U
2-Chloroethyl vinyl ether	µg/L	NC	NC	--	--	--
2-Hexanone	µg/L	50	NC	25 U	25 U	25 U
3-Chlorotoluene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
4-Chlorotoluene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	NC	NC	25 U	25 U	25 U
Acetone	µg/L	50	NC	25 U	25 U	25 U
Acrolein	µg/L	NC	5	--	--	--
Acrylonitrile	µg/L	NC	5	--	--	--
Benzene	µg/L	NC	1	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	50	NC	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	50	NC	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl Bromide)	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	60	NC	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	NC	7	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl Chloride)	µg/L	NC	5	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	NC	5	5.0 U	5.0 U	5.0 U

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	**MW1-C-08**	**MW1-C-08**	**MW1-C-08**
			Sample Name:	**WG-11109628-100621-SG-008**	**WG-12595539-100522-KM-014**	**WG-12595539-100523-KM-012**
			Sample Date:	**10/6/2021**	**10/5/2022**	**10/05/2023**
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**			
Volatile Organic Compounds (VOCs)						
cis-1,3-Dichloropropene	µg/L	NC	NC	5.0 U	5.0 U	5.0 U
Cyclohexane	µg/L	NC	NC	--	--	--
Dibromochloromethane	µg/L	50	NC	5.0 U	5.0 U	5.0 U
Dibromodifluoromethane	µg/L	NC	NC	--	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Isopropylbenzene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	NC	NC	--	--	--
Methyl cyclohexane	µg/L	NC	NC	--	--	--
Methyl Tert Butyl Ether	µg/L	10	NC	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Styrene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	NC	5	0.70 J	5.0 U	5.0 U
Toluene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Total Monochlorotoluenes	µg/L	NC	NC	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	NC	5	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	NC	NC	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	NC	5	0.92 J	5.0 U	5.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	NC	5	5.0 U	5.0 U	5.0 U
Vinyl chloride	µg/L	NC	2	5.0 U	5.0 U	5.0 U
Xylene (total)	µg/L	NC	NC	10 U	10 U	10 U
Total VOCs	µg/L	NC	NC	3.06	0	0

Notes:

6.24 - Concentration exceed NYS TOGs
U - Not present at or above the associated MDL
J - Estimated concentration between the MDL and Reporting Limit
MDL - Method Detection Limit
NC - No criteria
NYS TOGs - New York State Technical and Operational Guidance Series
-- - Not analyzed

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

				Location ID:	MW1-C-08	MW1-C-08	MW1-C-08
				Sample Name:	WG-12595539-100924-KM-015	WG-12595539-100924-KM-016	WG-12595539-100825-GH-002
				Sample Date:	10/9/2024	10/9/2024 (Duplicate)	8/10/2025
		New York State TOGs					
Parameter	**Units**	**Guidance Value**	**Standard**				
Volatile Organic Compounds (VOCs)							
1,1,1-Trichloroethane	µg/L	NC	5		5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	NC	5		5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	NC	1		5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	NC	5		5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	NC	5		5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	NC	5		5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NC	0.04		5.0 U	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	NC	0.0006		5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	µg/L	NC	3		5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	NC	0.6		5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	µg/L	NC	NC		--	--	--
1,2-Dichloropropane	µg/L	NC	1		5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	µg/L	NC	3		5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	µg/L	NC	3		5.0 U	5.0 U	5.0 U
2-Butanone (Methyl Ethyl Ketone)	µg/L	50	NC		25 U	25 U	25 U
2-Chlorotoluene	ug/L	NC	5		5.0 U	5.0 U	5.0 U
2-Chloroethyl vinyl ether	µg/L	NC	NC		--	--	--
2-Hexanone	µg/L	50	NC		25 U	25 U	25 U
3-Chlorotoluene	µg/L	NC	5		5.0 U	5.0 U	5.0 U
4-Chlorotoluene	µg/L	NC	5		5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	NC	NC		25 U	25 U	25 U
Acetone	µg/L	50	NC		25 U	25 U	25 U
Acrolein	µg/L	NC	5		--	--	--
Acrylonitrile	µg/L	NC	5		--	--	--
Benzene	µg/L	NC	1		5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	50	NC		5.0 U	5.0 U	5.0 U
Bromoform	µg/L	50	NC		5.0 U	5.0 U	5.0 U
Bromomethane (Methyl Bromide)	µg/L	NC	5		5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	60	NC		5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	NC	5		5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	NC	5		5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	NC	5		5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	NC	7		5.0 U	5.0 U	5.0 U
Chloromethane (Methyl Chloride)	µg/L	NC	5		5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	NC	5		5.0 U	5.0 U	5.0 U

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

		New York State TOGs		Location ID:	MW1-C-08	MW1-C-08	MW1-C-08
				Sample Name:	WG-12595539-100924-KM-015	WG-12595539-100924-KM-016	WG-12595539-100825-GH-002
				Sample Date:	10/9/2024	10/9/2024 (Duplicate)	8/10/2025
Parameter	**Units**	**Guidance Value**	**Standard**				
Volatile Organic Compounds (VOCs)							
cis-1,3-Dichloropropene	µg/L	NC	NC		5.0 U	5.0 U	5.0 U
Cyclohexane	µg/L	NC	NC		--	--	--
Dibromochloromethane	µg/L	50	NC		5.0 U	5.0 U	5.0 U
Dibromodifluoromethane	µg/L	NC	NC		--	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	NC	5		5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	NC	5		5.0 U	5.0 U	5.0 U
Isopropylbenzene	µg/L	NC	5		5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	NC	NC		--	--	--
Methyl cyclohexane	µg/L	NC	NC		--	--	--
Methyl Tert Butyl Ether	µg/L	10	NC		5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	NC	5		5.0 U	5.0 U	5.0 U
Styrene	µg/L	NC	5		5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	NC	5		5.0 U	5.0 U	5.0 U
Toluene	µg/L	NC	5		5.0 U	5.0 U	5.0 U
Total Monochlorotoluenes	µg/L	NC	NC		5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	NC	5		5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	NC	NC		5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	NC	5		5.0 U	5.0 U	5.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NC	5		5.0 U	5.0 U	5.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	NC	5		5.0 U	5.0 U	5.0 U
Vinyl chloride	µg/L	NC	2		5.0 U	5.0 U	5.0 U
Xylene (total)	µg/L	NC	NC		10 U	10 U	10 U
Total VOCs	µg/L	NC	NC		0	0	0

Notes:

6.24 - Concentration exceed NYS TOGs
U - Not present at or above the associated MDL
J - Estimated concentration between the MDL and Reporting Limit
MDL - Method Detection Limit
NC - No criteria
NYS TOGs - New York State Technical and Operational Guidance Series
-- - Not analyzed

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

				Location ID:	MW2-C-08	MW2-C-08	MW2-C-08
				Sample Name:	GW-47392-120508-JJW-011	GW-47392-040309-JJW-023	WG-47392-100714-SG-011
				Sample Date:	12/05/2008	04/03/2009	10/7/2014
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**				
Volatile Organic Compounds (VOCs)							
1,1,1-Trichloroethane	µg/L	NC	5		1.0 U	1.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	NC	5		1.0 U	1.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	NC	1		1.0 U	1.0 U	5.0 U
1,1-Dichloroethane	µg/L	NC	5		1.0 U	1.0 U	5.0 U
1,1-Dichloroethene	µg/L	NC	5		1.0 U	1.0 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	NC	5		1.0 UJ	1.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NC	0.04		1.0 U	1.0 U	--
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	NC	0.0006		1.0 U	1.0 U	--
1,2-Dichlorobenzene	µg/L	NC	3		1.5	1.5	2.8 J
1,2-Dichloroethane	µg/L	NC	0.6		1.0 U	1.0 U	5.0 U
1,2-Dichloroethene (total)	µg/L	NC	NC		--	-	-
1,2-Dichloropropane	µg/L	NC	1		1.0 U	1.0 U	5.0 U
1,3-Dichlorobenzene	µg/L	NC	3		2.3	**3.1**	**3.4 J**
1,4-Dichlorobenzene	µg/L	NC	3		**3.6**	**4.0**	**7.8**
2-Butanone (Methyl Ethyl Ketone)	µg/L	50	NC		5.0 U	5.0 U	--
2-Chlorotoluene	ug/L	NC	5		2.0	1.0 U	--
2-Chloroethyl vinyl ether	µg/L	NC	NC		--	--	25 U
2-Hexanone	µg/L	50	NC		5.0 U	5.0 U	--
3-Chlorotoluene	µg/L	NC	5		1.0 U	2.3	--
4-Chlorotoluene	µg/L	NC	5		1.0 U	1.0 U	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	NC	NC		5.0 U	5.0 U	--
Acetone	µg/L	50	NC		5.0 UJ	5.0 U	25 U
Acrolein	µg/L	NC	5		--	--	100 U
Acrylonitrile	µg/L	NC	5		--	--	50 U
Benzene	µg/L	NC	1		**33**	**30**	**8.6**
Bromodichloromethane	µg/L	50	NC		1.0 U	1.0 U	5.0 U
Bromoform	µg/L	50	NC		1.0 U	1.0 U	5.0 U
Bromomethane (Methyl Bromide)	µg/L	NC	5		1.0 U	1.0 U	5.0 U
Carbon disulfide	µg/L	60	NC		0.57 J	1.0 U	--
Carbon tetrachloride	µg/L	NC	5		1.0 U	1.0 U	5.0 U
Chlorobenzene	µg/L	NC	5		**24**	**26**	**38**
Chloroethane	µg/L	NC	5		1.0 U	1.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	NC	7		1.0 U	1.0 U	5.0 U
Chloromethane (Methyl Chloride)	µg/L	NC	5		1.0 U	1.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	NC	5		2.8	2.6	5.0 U

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

Parameter	Units	New York State TOGs Guidance Value	New York State TOGs Standard	Location ID: MW2-C-08 / Sample Name: GW-47392-120508-JJW-011 / Sample Date: 12/05/2008	Location ID: MW2-C-08 / Sample Name: GW-47392-040309-JJW-023 / Sample Date: 04/03/2009	Location ID: MW2-C-08 / Sample Name: WG-47392-100714-SG-011 / Sample Date: 10/7/2014
Volatile Organic Compounds (VOCs)						
cis-1,3-Dichloropropene	µg/L	NC	NC	1.0 U	1.0 U	5.0 U
Cyclohexane	µg/L	NC	NC	1.0 U	1.0 U	--
Dibromochloromethane	µg/L	50	NC	1.0 U	1.0 U	5.0 U
Dibromodifluoromethane	µg/L	NC	NC	--	1.0 U	--
Dichlorodifluoromethane (CFC-12)	µg/L	NC	5	1.0 U	--	--
Ethylbenzene	µg/L	NC	5	1.0 U	1.0 U	5.0 U
Isopropylbenzene	µg/L	NC	5	1.0 U	1.0 U	--
Methyl acetate	µg/L	NC	NC	1.0 UJ	1.0 UJ	--
Methyl cyclohexane	µg/L	NC	NC	1.0 U	1.0 U	--
Methyl Tert Butyl Ether	µg/L	10	NC	1.0 U	1.0 U	--
Methylene chloride	µg/L	NC	5	1.0 U	1.0 U	5.0 U
Styrene	µg/L	NC	5	1.0 U	1.0 U	--
Tetrachloroethene	µg/L	NC	5	1.0 U	1.0 U	5.0 U
Toluene	µg/L	NC	5	1.0	1.0 U	5.0 U
Total Monochlorotoluenes	µg/L	NC	NC	2	2.3	3.0 J
trans-1,2-Dichloroethene	µg/L	NC	5	0.80 J	0.61 J	5.0 U
trans-1,3-Dichloropropene	µg/L	NC	NC	1.0 U	1.0 U	5.0 U
Trichloroethene	µg/L	NC	5	0.63 J	0.52 J	5.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NC	5	1.0 U	1.0 U	--
Trifluorotrichloroethane (Freon 113)	µg/L	NC	5	1.0 U	1.0 U	--
Vinyl chloride	µg/L	NC	2	2.0	**3.0**	0.85 J
Xylene (total)	µg/L	NC	NC	3.0 U	2.0 U	--
Total VOCs	µg/L	NC	NC	74.2	73.63	64.45

Notes:

6.24 - Concentration exceed NYS TOGs
U - Not present at or above the associated MDL
J - Estimated concentration between the MDL and Reporting Limit
MDL - Method Detection Limit
NC - No criteria
NYS TOGs - New York State Technical and Operational Guidance Series
-- - Not analyzed

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	**MW2-C-08**	**MW2-C-08**	**MW2-C-08**
			Sample Name:	**WG-11109628-100715-SG-008**	**WG-11109628-102516-SG-006**	**WG-11109628-100417-SG-011**
			Sample Date:	**10/07/2015**	**10/25/2016**	**10/04/2017**
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**			
Volatile Organic Compounds (VOCs)						
1,1,1-Trichloroethane	µg/L	NC	5	5.0 U	20 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	NC	5	5.0 U	20 U	1.0 U
1,1,2-Trichloroethane	µg/L	NC	1	5.0 U	20 U	1.0 U
1,1-Dichloroethane	µg/L	NC	5	5.0 U	20 U	0.25 J
1,1-Dichloroethene	µg/L	NC	5	5.0 U	20 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	NC	5	5.0 U	20 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NC	0.04	--	20 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	NC	0.0006	--	20 U	1.0 U
1,2-Dichlorobenzene	µg/L	NC	3	**6.2**	**6.8 J**	**6.9**
1,2-Dichloroethane	µg/L	NC	0.6	5.0 U	20 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NC	NC	-	-	-
1,2-Dichloropropane	µg/L	NC	1	5.0 U	20 U	1.0 U
1,3-Dichlorobenzene	µg/L	NC	3	**13**	**20**	**22**
1,4-Dichlorobenzene	µg/L	NC	3	**25**	**37**	**41**
2-Butanone (Methyl Ethyl Ketone)	µg/L	50	NC	--	100 U	5.0 U
2-Chlorotoluene	ug/L	NC	5	--	--	**13**
2-Chloroethyl vinyl ether	µg/L	NC	NC	25 U	--	--
2-Hexanone	µg/L	50	NC	--	100 U	5.0 U
3-Chlorotoluene	µg/L	NC	5	--	--	--
4-Chlorotoluene	µg/L	NC	5	--	--	0.90 J
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	NC	NC	--	100 U	5.0 U
Acetone	µg/L	50	NC	25 U	100 U	5.7
Acrolein	µg/L	NC	5	100 U	--	--
Acrylonitrile	µg/L	NC	5	50 U	--	--
Benzene	µg/L	NC	1	**12**	**13 J**	**6.5**
Bromodichloromethane	µg/L	50	NC	--	20 U	1.0 U
Bromoform	µg/L	50	NC	5.0 U	20 U	1.0 U
Bromomethane (Methyl Bromide)	µg/L	NC	5	5.0 U	20 U	1.0 U
Carbon disulfide	µg/L	60	NC	--	20 U	1.0 U
Carbon tetrachloride	µg/L	NC	5	5.0 U	20 U	1.0 U
Chlorobenzene	µg/L	NC	5	**86**	**120**	**120**
Chloroethane	µg/L	NC	5	5.0 U	20 U	1.0 U
Chloroform (Trichloromethane)	µg/L	NC	7	5.0 U	20 U	1.0 U
Chloromethane (Methyl Chloride)	µg/L	NC	5	5.0 U	20 U	1.0 U
cis-1,2-Dichloroethene	µg/L	NC	5	0.67 J	20 U	0.56 J

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	**MW2-C-08**	**MW2-C-08**	**MW2-C-08**
			Sample Name:	**WG-11109628-100715-SG-008**	**WG-11109628-102516-SG-006**	**WG-11109628-100417-SG-011**
			Sample Date:	**10/07/2015**	**10/25/2016**	**10/04/2017**
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**			
Volatile Organic Compounds (VOCs)						
cis-1,3-Dichloropropene	µg/L	NC	NC	5.0 U	20 U	1.0 U
Cyclohexane	µg/L	NC	NC	--	--	--
Dibromochloromethane	µg/L	50	NC	5.0 U	20 U	1.0 U
Dibromodifluoromethane	µg/L	NC	NC	--	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	NC	5	--	20 U	1.0 U
Ethylbenzene	µg/L	NC	5	5.0 U	20 U	1.0 U
Isopropylbenzene	µg/L	NC	5	--	20 U	1.0 U
Methyl acetate	µg/L	NC	NC	--	--	5.0 U
Methyl cyclohexane	µg/L	NC	NC	--	--	1.0 U
Methyl Tert Butyl Ether	µg/L	10	NC	--	20 U	1.0 U
Methylene chloride	µg/L	NC	5	5.0 U	20 U	1.0 U
Styrene	µg/L	NC	5	--	20 U	1.0 U
Tetrachloroethene	µg/L	NC	5	5.0 U	20 U	0.92 J
Toluene	µg/L	NC	5	0.56 J	20 U	0.44 J
Total Monochlorotoluenes	µg/L	NC	NC	9.84 J	14 J	13.9
trans-1,2-Dichloroethene	µg/L	NC	5	5.0 U	20 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NC	NC	5.0 U	20 U	1.0 U
Trichloroethene	µg/L	NC	5	5.0 U	20 U	0.62 J
Trichlorofluoromethane (CFC-11)	µg/L	NC	5	--	20 U	1.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	NC	5	--	20 U	1.0 U
Vinyl chloride	µg/L	NC	2	1.1 J	20 U	0.58 J
Xylene (total)	µg/L	NC	NC	--	40 U	2.0 U
Total VOCs	µg/L	NC	NC	154.37	210.8	219.37

Notes:

6.24 - Concentration exceed NYS TOGs
U - Not present at or above the associated MDL
J - Estimated concentration between the MDL and Reporting Limit
MDL - Method Detection Limit
NC - No criteria
NYS TOGs - New York State Technical and Operational Guidance Series
-- - Not analyzed

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	**MW2-C-08**	**MW2-C-08**	**MW2-C-08**
			Sample Name:	**WG-11109628-100318-SG-012**	**WG-11109628-100319- SG-016**	**WG-11109628-100820-SG-014**
			Sample Date:	**10/03/2018**	**10/03/2019**	**10/8/2020**
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**			
Volatile Organic Compounds (VOCs)						
1,1,1-Trichloroethane	µg/L	NC	5	10 U	5.0 U	20 U
1,1,2,2-Tetrachloroethane	µg/L	NC	5	10 U	5.0 U	20 U
1,1,2-Trichloroethane	µg/L	NC	1	10 U	5.0 U	20 U
1,1-Dichloroethane	µg/L	NC	5	10 U	5.0 U	20 U
1,1-Dichloroethene	µg/L	NC	5	10 U	5.0 U	20 U
1,2,4-Trichlorobenzene	µg/L	NC	5	10 U	5.0 U	20 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NC	0.04	--	5.0 U	20 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	NC	0.0006	--	5.0 U	20 U
1,2-Dichlorobenzene	µg/L	NC	3	**6.2 J**	**5.2**	**6.2 J**
1,2-Dichloroethane	µg/L	NC	0.6	10 U	5.0 U	20 U
1,2-Dichloroethene (total)	µg/L	NC	NC	20 U	--	--
1,2-Dichloropropane	µg/L	NC	1	10 U	5.0 U	20 U
1,3-Dichlorobenzene	µg/L	NC	3	**23**	**19**	**27**
1,4-Dichlorobenzene	µg/L	NC	3	**40**	**36**	**51**
2-Butanone (Methyl Ethyl Ketone)	µg/L	50	NC	50 U	25 U	100 U
2-Chlorotoluene	ug/L	NC	5	**18**	**17**	**26**
2-Chloroethyl vinyl ether	µg/L	NC	NC	--	--	--
2-Hexanone	µg/L	50	NC	50 U	25 U	100 U
3-Chlorotoluene	µg/L	NC	5	10 U	1.2 J	1.7 J
4-Chlorotoluene	µg/L	NC	5	0.76 J	5.0 U	20 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	NC	NC	50 U	25 U	100 U
Acetone	µg/L	50	NC	50 U	25 U	100 U
Acrolein	µg/L	NC	5	--	--	--
Acrylonitrile	µg/L	NC	5	--	--	--
Benzene	µg/L	NC	1	**3.9 J**	**2.2 J**	20 U
Bromodichloromethane	µg/L	50	NC	10 U	5.0 U	20 U
Bromoform	µg/L	50	NC	10 U	5.0 U	20 U
Bromomethane (Methyl Bromide)	µg/L	NC	5	10 U	5.0 U	20 U
Carbon disulfide	µg/L	60	NC	10 U	5.0 U	20 U
Carbon tetrachloride	µg/L	NC	5	10 U	5.0 U	20 U
Chlorobenzene	µg/L	NC	5	**120**	**110**	**140**
Chloroethane	µg/L	NC	5	10 U	5.0 U	20 U
Chloroform (Trichloromethane)	µg/L	NC	7	10 U	5.0 U	20 U
Chloromethane (Methyl Chloride)	µg/L	NC	5	10 U	5.0 U	20 U
cis-1,2-Dichloroethene	µg/L	NC	5	10 U	5.0 U	20 U

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	**MW2-C-08**	**MW2-C-08**	**MW2-C-08**
			Sample Name:	**WG-11109628-100318-SG-012**	**WG-11109628-100319- SG-016**	**WG-11109628-100820-SG-014**
			Sample Date:	**10/03/2018**	**10/03/2019**	**10/8/2020**
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**			
Volatile Organic Compounds (VOCs)						
cis-1,3-Dichloropropene	µg/L	NC	NC	10 U	5.0 U	20 U
Cyclohexane	µg/L	NC	NC	--	--	--
Dibromochloromethane	µg/L	50	NC	10 U	5.0 U	20 U
Dibromodifluoromethane	µg/L	NC	NC	--	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	NC	5	--	5.0 U	20 U
Ethylbenzene	µg/L	NC	5	10 U	5.0 U	20 U
Isopropylbenzene	µg/L	NC	5	--	5.0 U	20 U
Methyl acetate	µg/L	NC	NC	--	--	--
Methyl cyclohexane	µg/L	NC	NC	--	--	--
Methyl Tert Butyl Ether	µg/L	10	NC	--	5.0 U	20 U
Methylene chloride	µg/L	NC	5	10 U	5.0 U	20 U
Styrene	µg/L	NC	5	10 U	5.0 U	20 U
Tetrachloroethene	µg/L	NC	5	10 U	5.0 U	20 U
Toluene	µg/L	NC	5	10 U	5.0 U	20 U
Total Monochlorotoluenes	µg/L	NC	NC	18.76	18.2	27.7
trans-1,2-Dichloroethene	µg/L	NC	5	--	5.0 U	20 U
trans-1,3-Dichloropropene	µg/L	NC	NC	10 U	5.0 U	20 U
Trichloroethene	µg/L	NC	5	10 U	5.0 U	20 U
Trichlorofluoromethane (CFC-11)	µg/L	NC	5	--	5.0 U	20 U
Trifluorotrichloroethane (Freon 113)	µg/L	NC	5	--	5.0 U	20 U
Vinyl chloride	µg/L	NC	2	10 U	5.0 U	20 U
Xylene (total)	µg/L	NC	NC	20 U	10 U	40 U
Total VOCs	µg/L	NC	NC	211.86	189.6	251.9

Notes:

6.24 - Concentration exceed NYS TOGs
U - Not present at or above the associated MDL
J - Estimated concentration between the MDL and Reporting Limit
MDL - Method Detection Limit
NC - No criteria
NYS TOGs - New York State Technical and Operational Guidance Series
-- - Not analyzed

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	MW2-C-08	MW2-C-08	MW2-C-08
			Sample Name:	WG-11109628-100620-DT-009	WG-12595539-100522-KM-015	WG-12595539-100523-KM-009
			Sample Date:	10/6/2021	10/5/2022	10/05/2023
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**			
Volatile Organic Compounds (VOCs)						
1,1,1-Trichloroethane	µg/L	NC	5	20 U	20 U	25 U
1,1,2,2-Tetrachloroethane	µg/L	NC	5	20 U	20 U	25 U
1,1,2-Trichloroethane	µg/L	NC	1	20 U	20 U	25 U
1,1-Dichloroethane	µg/L	NC	5	20 U	20 U	25 U
1,1-Dichloroethene	µg/L	NC	5	20 U	20 U	25 U
1,2,4-Trichlorobenzene	µg/L	NC	5	20 U	20 U	25 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NC	0.04	20 U	20 U	25 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	NC	0.0006	20 U	20 U	25 U
1,2-Dichlorobenzene	µg/L	NC	3	**7.9 J**	**5.7 J**	**7.8 J**
1,2-Dichloroethane	µg/L	NC	0.6	20 U	20 U	25 U
1,2-Dichloroethene (total)	µg/L	NC	NC	--	--	--
1,2-Dichloropropane	µg/L	NC	1	20 U	20 U	25 U
1,3-Dichlorobenzene	µg/L	NC	3	**38**	**31**	**50**
1,4-Dichlorobenzene	µg/L	NC	3	**70**	**60**	**100**
2-Butanone (Methyl Ethyl Ketone)	µg/L	50	NC	100 U	100 U	130 U
2-Chlorotoluene	ug/L	NC	5	**29**	**33**	**58**
2-Chloroethyl vinyl ether	µg/L	NC	NC	--	--	--
2-Hexanone	µg/L	50	NC	100 U	100 U	130 U
3-Chlorotoluene	µg/L	NC	5	20 U	1.2 J	25 U
4-Chlorotoluene	µg/L	NC	5	20 U	20 U	25 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	NC	NC	100 U	100 U	130 U
Acetone	µg/L	50	NC	100 U	100 U	130 U
Acrolein	µg/L	NC	5	--	--	--
Acrylonitrile	µg/L	NC	5	--	--	--
Benzene	µg/L	NC	1	20 U	20 U	25 U
Bromodichloromethane	µg/L	50	NC	20 U	20 U	25 U
Bromoform	µg/L	50	NC	20 U	20 U	25 U
Bromomethane (Methyl Bromide)	µg/L	NC	5	20 U	20 U	25 U
Carbon disulfide	µg/L	60	NC	20 U	20 U	25 U
Carbon tetrachloride	µg/L	NC	5	20 U	20 U	25 U
Chlorobenzene	µg/L	NC	5	**160**	**150**	**200**
Chloroethane	µg/L	NC	5	20 U	20 U	25 U
Chloroform (Trichloromethane)	µg/L	NC	7	20 U	20 U	25 U
Chloromethane (Methyl Chloride)	µg/L	NC	5	20 U	20 U	25 U
cis-1,2-Dichloroethene	µg/L	NC	5	20 U	20 U	25 U

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	**MW2-C-08**	**MW2-C-08**	**MW2-C-08**
			Sample Name:	**WG-11109628-100620-DT-009**	**WG-12595539-100522-KM-015**	**WG-12595539-100523-KM-009**
			Sample Date:	**10/6/2021**	**10/5/2022**	**10/05/2023**
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**			
Volatile Organic Compounds (VOCs)						
cis-1,3-Dichloropropene	µg/L	NC	NC	20 U	20 U	25 U
Cyclohexane	µg/L	NC	NC	--	--	--
Dibromochloromethane	µg/L	50	NC	20 U	20 U	25 U
Dibromodifluoromethane	µg/L	NC	NC	--	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	NC	5	20 U	20 U	25 U
Ethylbenzene	µg/L	NC	5	20 U	20 U	25 U
Isopropylbenzene	µg/L	NC	5	20 U	20 U	25 U
Methyl acetate	µg/L	NC	NC	--	--	--
Methyl cyclohexane	µg/L	NC	NC	--	--	--
Methyl Tert Butyl Ether	µg/L	10	NC	20 U	20 U	25 U
Methylene chloride	µg/L	NC	5	20 U	20 U	25 U
Styrene	µg/L	NC	5	20 U	20 U	25 U
Tetrachloroethene	µg/L	NC	5	20 U	20 U	25 U
Toluene	µg/L	NC	5	20 U	20 U	25 U
Total Monochlorotoluenes	µg/L	NC	NC	29	34.2	58
trans-1,2-Dichloroethene	µg/L	NC	5	20 U	20 U	25 U
trans-1,3-Dichloropropene	µg/L	NC	NC	20 U	20 U	25 U
Trichloroethene	µg/L	NC	5	20 U	20 U	25 U
Trichlorofluoromethane (CFC-11)	µg/L	NC	5	20 U	20 U	25 U
Trifluorotrichloroethane (Freon 113)	µg/L	NC	5	20 U	20 U	25 U
Vinyl chloride	µg/L	NC	2	20 U	20 U	25 U
Xylene (total)	µg/L	NC	NC	40 U	40 U	50 U
Total VOCs	µg/L	NC	NC	304.9	280.9	415.8

Notes:

6.24 - Concentration exceed NYS TOGs
U - Not present at or above the associated MDL
J - Estimated concentration between the MDL and Reporting Limit
MDL - Method Detection Limit
NC - No criteria
NYS TOGs - New York State Technical and Operational Guidance Series
-- - Not analyzed

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

				Location ID:	MW2-C-08	MW2-C-08	MW3-C-08
				Sample Name:	WG-12595539-100824-KM-008	WG-12595539-100925-GH-012	GW-47392-120408-JJW-006
				Sample Date:	10/8/2024	9/10/2025	12/04/2008
		New York State TOGs					
Parameter	**Units**	**Guidance Value**	**Standard**				
Volatile Organic Compounds (VOCs)							
1,1,1-Trichloroethane	µg/L	NC	5		25 U	20 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	NC	5		25 U	20 U	1.0 U
1,1,2-Trichloroethane	µg/L	NC	1		25 U	20 U	1.0 U
1,1-Dichloroethane	µg/L	NC	5		25 U	20 U	1.0 U
1,1-Dichloroethene	µg/L	NC	5		25 U	20 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	NC	5		25 U	20 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NC	0.04		25 U	20 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	NC	0.0006		25 U	20 U	1.0 U
1,2-Dichlorobenzene	µg/L	NC	3		25 U	20 U	0.54 J
1,2-Dichloroethane	µg/L	NC	0.6		25 U	20 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NC	NC		--	--	-
1,2-Dichloropropane	µg/L	NC	1		25 U	20 U	1.0 U
1,3-Dichlorobenzene	µg/L	NC	3		**50**	**49**	0.50 J
1,4-Dichlorobenzene	µg/L	NC	3		**100**	**100**	1.0
2-Butanone (Methyl Ethyl Ketone)	µg/L	50	NC		130 U	100 U	5.0 U
2-Chlorotoluene	ug/L	NC	5		**58**	**57**	0.67 J
2-Chloroethyl vinyl ether	µg/L	NC	NC		--	--	--
2-Hexanone	µg/L	50	NC		130 U	100 U	5.0 U
3-Chlorotoluene	µg/L	NC	5		25 U	20 U	1.0 U
4-Chlorotoluene	µg/L	NC	5		25 U	20 U	1.0 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	NC	NC		130 U	100 U	5.0 U
Acetone	µg/L	50	NC		130 U	130 U	5.0 U
Acrolein	µg/L	NC	5		--	--	--
Acrylonitrile	µg/L	NC	5		--	--	--
Benzene	µg/L	NC	1		25 U	20 U	0.83 J
Bromodichloromethane	µg/L	50	NC		25 U	20 U	1.0 U
Bromoform	µg/L	50	NC		25 U	20 U	1.0 U
Bromomethane (Methyl Bromide)	µg/L	NC	5		25 U	20 U	1.0 U
Carbon disulfide	µg/L	60	NC		25 U	20 U	1.0 U
Carbon tetrachloride	µg/L	NC	5		25 U	20 U	1.0 U
Chlorobenzene	µg/L	NC	5		**180**	**170**	1.3
Chloroethane	µg/L	NC	5		25 U	20 U	1.0 U
Chloroform (Trichloromethane)	µg/L	NC	7		25 U	20 U	0.60 J
Chloromethane (Methyl Chloride)	µg/L	NC	5		25 U	20 U	1.0 U
cis-1,2-Dichloroethene	µg/L	NC	5		25 U	20 U	1.8

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

				Location ID:	MW2-C-08	MW2-C-08	MW3-C-08
				Sample Name:	WG-12595539-100824-KM-008	WG-12595539-100925-GH-012	GW-47392-120408-JJW-006
				Sample Date:	10/8/2024	9/10/2025	12/04/2008
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**				
Volatile Organic Compounds (VOCs)							
cis-1,3-Dichloropropene	µg/L	NC	NC		25 U	20 U	1.0 U
Cyclohexane	µg/L	NC	NC		--	--	1.0 U
Dibromochloromethane	µg/L	50	NC		25 U	20 U	1.0 U
Dibromodifluoromethane	µg/L	NC	NC		--	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	NC	5		25 U	20 U	1.0 U
Ethylbenzene	µg/L	NC	5		25 U	20 U	1.0 U
Isopropylbenzene	µg/L	NC	5		25 U	20 U	1.0 U
Methyl acetate	µg/L	NC	NC		--	--	1.0 U
Methyl cyclohexane	µg/L	NC	NC		--	--	1.0 U
Methyl Tert Butyl Ether	µg/L	10	NC		25 U	20 U	1.0 U
Methylene chloride	µg/L	NC	5		25 U	20 U	1.0 U
Styrene	µg/L	NC	5		25 U	20 U	1.0 U
Tetrachloroethene	µg/L	NC	5		25 U	20 U	1.0 U
Toluene	µg/L	NC	5		25 U	20 U	1.0 U
Total Monochlorotoluenes	µg/L	NC	NC		58	57	0.67 J
trans-1,2-Dichloroethene	µg/L	NC	5		25 U	20 U	0.54 J
trans-1,3-Dichloropropene	µg/L	NC	NC		25 U	20 U	1.0 U
Trichloroethene	µg/L	NC	5		25 U	20 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NC	5		25 U	20 U	1.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	NC	5		25 U	20 U	1.0 U
Vinyl chloride	µg/L	NC	2		25 U	20 U	1.5
Xylene (total)	µg/L	NC	NC		50 U	40 U	3.0 U
Total VOCs	µg/L	NC	NC		388	376	9.28

Notes:

6.24 - Concentration exceed NYS TOGs
U - Not present at or above the associated MDL
J - Estimated concentration between the MDL and Reporting Limit
MDL - Method Detection Limit
NC - No criteria
NYS TOGs - New York State Technical and Operational Guidance Series
-- - Not analyzed

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	MW3-C-08	MW3-C-08	MW3-C-08
			Sample Name:	GW-47392-040109-JJW-019	WG-47392-100714-SG-012	WG-11109628-100715-DT-007
			Sample Date:	04/01/2009	10/7/2014	10/07/2015
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**			
Volatile Organic Compounds (VOCs)						
1,1,1-Trichloroethane	µg/L	NC	5	1.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	NC	5	1.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	NC	1	1.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	NC	5	1.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	NC	5	1.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	NC	5	1.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NC	0.04	1.0 U	--	--
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	NC	0.0006	1.0 U	--	--
1,2-Dichlorobenzene	µg/L	NC	3	0.58 J	5.0 U	0.98 J
1,2-Dichloroethane	µg/L	NC	0.6	1.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	µg/L	NC	NC	-	--	-
1,2-Dichloropropane	µg/L	NC	1	1.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	µg/L	NC	3	0.47 J	5.0 U	1.7 J
1,4-Dichlorobenzene	µg/L	NC	3	1.2	1.0 J	**3.3 J**
2-Butanone (Methyl Ethyl Ketone)	µg/L	50	NC	5.0 U	--	--
2-Chlorotoluene	ug/L	NC	5	1.0 U	--	--
2-Chloroethyl vinyl ether	µg/L	NC	NC	--	25 U	25 U
2-Hexanone	µg/L	50	NC	5.0 U	--	--
3-Chlorotoluene	µg/L	NC	5	0.56 J	--	--
4-Chlorotoluene	µg/L	NC	5	1.0 U	--	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	NC	NC	5.0 U	--	--
Acetone	µg/L	50	NC	5.0 U	25 U	25 U
Acrolein	µg/L	NC	5	--	100 U	100 U
Acrylonitrile	µg/L	NC	5	--	50 U	50 U
Benzene	µg/L	NC	1	1.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	50	NC	1.0 U	5.0 U	5.0 U
Bromoform	µg/L	50	NC	1.0 U	5.0 U	5.0 U
Bromomethane (Methyl Bromide)	µg/L	NC	5	1.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	60	NC	1.0 U	--	--
Carbon tetrachloride	µg/L	NC	5	1.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	NC	5	1.1	5.0 U	1.1 J
Chloroethane	µg/L	NC	5	1.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	NC	7	1.0 U	5.0 U	5.0 U
Chloromethane (Methyl Chloride)	µg/L	NC	5	1.0 UJ	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	NC	5	1.9	1.6 J	**45**

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

				Location ID:	MW3-C-08	MW3-C-08	MW3-C-08
				Sample Name:	GW-47392-040109-JJW-019	WG-47392-100714-SG-012	WG-11109628-100715-DT-007
				Sample Date:	04/01/2009	10/7/2014	10/07/2015
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**				
Volatile Organic Compounds (VOCs)							
cis-1,3-Dichloropropene	µg/L	NC	NC		1.0 U	5.0 U	5.0 U
Cyclohexane	µg/L	NC	NC		1.0 U	--	--
Dibromochloromethane	µg/L	50	NC		1.0 U	5.0 U	5.0 U
Dibromodifluoromethane	µg/L	NC	NC		1.0 U	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	NC	5		--	--	--
Ethylbenzene	µg/L	NC	5		1.0 U	5.0 U	5.0 U
Isopropylbenzene	µg/L	NC	5		1.0 U	--	--
Methyl acetate	µg/L	NC	NC		1.0 U	--	--
Methyl cyclohexane	µg/L	NC	NC		1.0 U	--	--
Methyl Tert Butyl Ether	µg/L	10	NC		1.0 U	--	--
Methylene chloride	µg/L	NC	5		1.0 U	5.0 U	5.0 U
Styrene	µg/L	NC	5		1.0 U	--	--
Tetrachloroethene	µg/L	NC	5		1.0 U	5.0 U	5.0 U
Toluene	µg/L	NC	5		1.0 U	5.0 U	5.0 U
Total Monochlorotoluenes	µg/L	NC	NC		0.56 J	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	NC	5		0.73 J	5.0 U	0.70 J
trans-1,3-Dichloropropene	µg/L	NC	NC		1.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	NC	5		1.0 U	5.0 U	1.8 J
Trichlorofluoromethane (CFC-11)	µg/L	NC	5		1.0 U	--	--
Trifluorotrichloroethane (Freon 113)	µg/L	NC	5		1.0 U	--	--
Vinyl chloride	µg/L	NC	2		1.0 U	0.93 J	**9**
Xylene (total)	µg/L	NC	NC		2.0 U	--	--
Total VOCs	µg/L	NC	NC		6.54	3.53	63.58

Notes:

6.24 - Concentration exceed NYS TOGs
U - Not present at or above the associated MDL
J - Estimated concentration between the MDL and Reporting Limit
MDL - Method Detection Limit
NC - No criteria
NYS TOGs - New York State Technical and Operational Guidance Series
-- - Not analyzed

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	MW3-C-08	MW3-C-08	MW3-C-08
			Sample Name:	WG-11109628-102616-SG-008	WG-11109628-100417-SG-009	WG-11109628-100418-DT-017
			Sample Date:	10/26/2016	10/04/2017	10/04/2018
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**			
Volatile Organic Compounds (VOCs)						
1,1,1-Trichloroethane	µg/L	NC	5	5.0 U	1.0 U	10 U
1,1,2,2-Tetrachloroethane	µg/L	NC	5	5.0 U	1.0 U	10 U
1,1,2-Trichloroethane	µg/L	NC	1	5.0 U	1.0 U	10 U
1,1-Dichloroethane	µg/L	NC	5	5.0 U	0.88 J	10 U
1,1-Dichloroethene	µg/L	NC	5	5.0 U	1.0 U	10 U
1,2,4-Trichlorobenzene	µg/L	NC	5	5.0 U	1.0 U	10 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NC	0.04	5.0 U	1.0 U	--
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	NC	0.0006	5.0 U	1.0 U	--
1,2-Dichlorobenzene	µg/L	NC	3	**3.5 J**	**9.1 J**	**42**
1,2-Dichloroethane	µg/L	NC	0.6	5.0 U	1.0 U	10 U
1,2-Dichloroethene (total)	µg/L	NC	NC	--	--	20 U
1,2-Dichloropropane	µg/L	NC	1	5.0 U	1.0 U	10 U
1,3-Dichlorobenzene	µg/L	NC	3	**3.2 J**	**6.1 J**	**26**
1,4-Dichlorobenzene	µg/L	NC	3	**13**	**34 J**	**140**
2-Butanone (Methyl Ethyl Ketone)	µg/L	50	NC	25 U	5.0 U	50 U
2-Chlorotoluene	ug/L	NC	5	--	3.6 J	**16**
2-Chloroethyl vinyl ether	µg/L	NC	NC	--	--	--
2-Hexanone	µg/L	50	NC	25 U	5.0 U	50 U
3-Chlorotoluene	µg/L	NC	5	25 U	--	10 U
4-Chlorotoluene	µg/L	NC	5	25 U	1.4 J	**6.3 J**
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	NC	NC	25 U	5.0 U	50 U
Acetone	µg/L	50	NC	25 U	8.0 J	50 U
Acrolein	µg/L	NC	5	--	--	--
Acrylonitrile	µg/L	NC	5	--	--	--
Benzene	µg/L	NC	1	5.0 U	**2.2 J**	**4.9 J**
Bromodichloromethane	µg/L	50	NC	5.0 U	1.0 U	10 U
Bromoform	µg/L	50	NC	5.0 U	1.0 U	10 U
Bromomethane (Methyl Bromide)	µg/L	NC	5	5.0 U	1.0 U	10 U
Carbon disulfide	µg/L	60	NC	5.0 U	1.0 U	10 U
Carbon tetrachloride	µg/L	NC	5	5.0 U	1.0 U	10 U
Chlorobenzene	µg/L	NC	5	**5.6**	**13 J**	**56**
Chloroethane	µg/L	NC	5	5.0 U	1.0 U	10 U
Chloroform (Trichloromethane)	µg/L	NC	7	5.0 U	1.0 U	10 U
Chloromethane (Methyl Chloride)	µg/L	NC	5	5.0 U	1.0 U	10 U
cis-1,2-Dichloroethene	µg/L	NC	5	5.0 U	1.0 U	10 U

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	**MW3-C-08**	**MW3-C-08**	**MW3-C-08**
			Sample Name:	**WG-11109628-102616-SG-008**	**WG-11109628-100417-SG-009**	**WG-11109628-100418-DT-017**
			Sample Date:	**10/26/2016**	**10/04/2017**	**10/04/2018**
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**			
Volatile Organic Compounds (VOCs)						
cis-1,3-Dichloropropene	µg/L	NC	NC	5.0 U	1.0 U	10 U
Cyclohexane	µg/L	NC	NC	--	1.0 U	--
Dibromochloromethane	µg/L	50	NC	5.0 U	1.0 U	10 U
Dibromodifluoromethane	µg/L	NC	NC	--	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	NC	5	5.0 U	1.0 U	--
Ethylbenzene	µg/L	NC	5	5.0 U	1.0 U	10 U
Isopropylbenzene	µg/L	NC	5	5.0 U	1.0 U	--
Methyl acetate	µg/L	NC	NC	--	1.0 U	--
Methyl cyclohexane	µg/L	NC	NC	--	1.0 U	--
Methyl Tert Butyl Ether	µg/L	10	NC	5.0 U	1.0 U	--
Methylene chloride	µg/L	NC	5	5.0 U	1.0 U	10 U
Styrene	µg/L	NC	5	5.0 U	1.0 U	10 U
Tetrachloroethene	µg/L	NC	5	5.0 U	1.0 U	10 U
Toluene	µg/L	NC	5	5.0 U	1.0 U	10 U
Total Monochlorotoluenes	µg/L	NC	NC	2.75 J	5	22.3
trans-1,2-Dichloroethene	µg/L	NC	5	5.0 U	0.21 J	--
trans-1,3-Dichloropropene	µg/L	NC	NC	5.0 U	1.0 U	10 U
Trichloroethene	µg/L	NC	5	5.0 U	1.0 U	10 U
Trichlorofluoromethane (CFC-11)	µg/L	NC	5	5.0 U	1.0 U	--
Trifluorotrichloroethane (Freon 113)	µg/L	NC	5	5.0 U	1.0 U	--
Vinyl chloride	µg/L	NC	2	5.0 U	1.0 U	10 U
Xylene (total)	µg/L	NC	NC	10 U	2.0 U	20 U
Total VOCs	µg/L	NC	NC	28.05	78.49	291.2

Notes:

6.24 - Concentration exceed NYS TOGs
U - Not present at or above the associated MDL
J - Estimated concentration between the MDL and Reporting Limit
MDL - Method Detection Limit
NC - No criteria
NYS TOGs - New York State Technical and Operational Guidance Series
-- - Not analyzed

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	**MW3-C-08**	**MW3-C-08**	**MW3-C-08**
			Sample Name:	**WG-11109628-100319-DJT-017**	**WG-11109628-100820-SG-016**	**WG-11109628-100721-DT-011**
			Sample Date:	**10/03/2019**	**10/8/2020**	**10/7/2021**
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**			
Volatile Organic Compounds (VOCs)						
1,1,1-Trichloroethane	µg/L	NC	5	5.0 U	10 U	10 U
1,1,2,2-Tetrachloroethane	µg/L	NC	5	5.0 U	10 U	10 U
1,1,2-Trichloroethane	µg/L	NC	1	5.0 U	10 U	10 U
1,1-Dichloroethane	µg/L	NC	5	5.0 U	10 U	10 U
1,1-Dichloroethene	µg/L	NC	5	5.0 U	10 U	10 U
1,2,4-Trichlorobenzene	µg/L	NC	5	5.0 U	10 U	10 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NC	0.04	--	10 U	10 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	NC	0.0006	--	10 U	10 U
1,2-Dichlorobenzene	µg/L	NC	3	**25**	**16**	**17**
1,2-Dichloroethane	µg/L	NC	0.6	5.0 U	10 U	10 U
1,2-Dichloroethene (total)	µg/L	NC	NC	--	--	--
1,2-Dichloropropane	µg/L	NC	1	50 U	10 U	10 U
1,3-Dichlorobenzene	µg/L	NC	3	**20**	**16**	**17**
1,4-Dichlorobenzene	µg/L	NC	3	**86**	**62**	**76**
2-Butanone (Methyl Ethyl Ketone)	µg/L	50	NC	25 U	50 U	50 U
2-Chlorotoluene	ug/L	NC	5	**16**	**11**	**9.6 J**
2-Chloroethyl vinyl ether	µg/L	NC	NC	--	--	--
2-Hexanone	µg/L	50	NC	25 U	50 U	50 U
3-Chlorotoluene	µg/L	NC	5	5 U	10 U	10 U
4-Chlorotoluene	µg/L	NC	5	1.7 J	0.93 J	0.90 J
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	NC	NC	25 U	50 U	50 U
Acetone	µg/L	50	NC	25 U	50 U	50 U
Acrolein	µg/L	NC	5	--	--	--
Acrylonitrile	µg/L	NC	5	--	--	--
Benzene	µg/L	NC	1	**4.3 J**	**2.8 J**	10 U
Bromodichloromethane	µg/L	50	NC	5.0 U	10 U	10 U
Bromoform	µg/L	50	NC	5.0 U	10 U	10 U
Bromomethane (Methyl Bromide)	µg/L	NC	5	5.0 U	10 U	10 U
Carbon disulfide	µg/L	60	NC	5.0 U	10 U	10 U
Carbon tetrachloride	µg/L	NC	5	5.0 U	10 U	10 U
Chlorobenzene	µg/L	NC	5	**39**	**30**	**45**
Chloroethane	µg/L	NC	5	5.0 U	10 U	10 U
Chloroform (Trichloromethane)	µg/L	NC	7	5.0 U	10 U	10 U
Chloromethane (Methyl Chloride)	µg/L	NC	5	5.0 U	10 U	10 U
cis-1,2-Dichloroethene	µg/L	NC	5	5.0 U	10 U	10 U

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	MW3-C-08	MW3-C-08	MW3-C-08
			Sample Name:	WG-11109628-100319-DJT-017	WG-11109628-100820-SG-016	WG-11109628-100721-DT-011
			Sample Date:	10/03/2019	10/8/2020	10/7/2021
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**			
Volatile Organic Compounds (VOCs)						
cis-1,3-Dichloropropene	µg/L	NC	NC	5.0 U	10 U	10 U
Cyclohexane	µg/L	NC	NC	--	--	--
Dibromochloromethane	µg/L	50	NC	5.0 U	10 U	10 U
Dibromodifluoromethane	µg/L	NC	NC	--	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	NC	5	--	10 U	10 U
Ethylbenzene	µg/L	NC	5	5.0 U	10 U	10 U
Isopropylbenzene	µg/L	NC	5	--	10 U	10 U
Methyl acetate	µg/L	NC	NC	--	--	--
Methyl cyclohexane	µg/L	NC	NC	--	--	--
Methyl Tert Butyl Ether	µg/L	10	NC	--	10 U	10 U
Methylene chloride	µg/L	NC	5	5.0 U	10 U	10 U
Styrene	µg/L	NC	5	5.0 U	10 U	10 U
Tetrachloroethene	µg/L	NC	5	5.0 U	10 U	10 U
Toluene	µg/L	NC	5	5.0 U	10 U	10 U
Total Monochlorotoluenes	µg/L	NC	NC	17.7	11.93	10.5
trans-1,2-Dichloroethene	µg/L	NC	5	--	10 U	10 U
trans-1,3-Dichloropropene	µg/L	NC	NC	5.0 U	10 U	10 U
Trichloroethene	µg/L	NC	5	5.0 U	10 U	10 U
Trichlorofluoromethane (CFC-11)	µg/L	NC	5	--	10 U	10 U
Trifluorotrichloroethane (Freon 113)	µg/L	NC	5	--	10 U	10 U
Vinyl chloride	µg/L	NC	2	5.0 U	10 U	10 U
Xylene (total)	µg/L	NC	NC	10 U	20 U	20 U
Total VOCs	µg/L	NC	NC	192.0	138.73	165.5

Notes:

6.24	- Concentration exceed NYS TOGs
U	- Not present at or above the associated MDL
J	- Estimated concentration between the MDL and Reporting Limit
MDL	- Method Detection Limit
NC	- No criteria
NYS TOGs	- New York State Technical and Operational Guidance Series
--	- Not analyzed

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	**MW3-C-08**	**MW3-C-08**	**MW3-C-08**	**MW3-C-08**
			Sample Name:	**WG-12595539-100522-KM-010**	**WG-12595539-100523-KM-013**	**WG-12595539-100523-KM-015**	**WG-12595539-100724-KM-004**
			Sample Date:	**10/5/2022**	**10/5/2023**	**10/5/2023 (Duplicate)**	**10/7/2024**
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**				
Volatile Organic Compounds (VOCs)							
1,1,1-Trichloroethane	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	NC	1	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NC	0.04	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	NC	0.0006	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	µg/L	NC	3	**8.7**	**5.6**	**5.8**	5.0 U
1,2-Dichloroethane	µg/L	NC	0.6	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	µg/L	NC	NC	--	--	--	--
1,2-Dichloropropane	µg/L	NC	1	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	µg/L	NC	3	**10**	**6.9**	**6.8**	5.0 U
1,4-Dichlorobenzene	µg/L	NC	3	**48**	**31**	**32**	**23**
2-Butanone (Methyl Ethyl Ketone)	µg/L	50	NC	25 U	25 U	25 U	25 U
2-Chlorotoluene	ug/L	NC	5	5	3.5 J	3.3 J	5.0 U
2-Chloroethyl vinyl ether	µg/L	NC	NC	--	--	--	--
2-Hexanone	µg/L	50	NC	25 U	25 U	25 U	25 U
3-Chlorotoluene	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorotoluene	µg/L	NC	5	0.49 J	0.38 J	5.0 U	5.0 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	NC	NC	25 U	25 U	25 U	25 U
Acetone	µg/L	50	NC	25 U	25 U	2.7 J	25 U
Acrolein	µg/L	NC	5	--	--	--	--
Acrylonitrile	µg/L	NC	5	--	--	--	--
Benzene	µg/L	NC	1	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	50	NC	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	50	NC	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl Bromide)	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	60	NC	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	NC	5	**19**	**13**	**12**	**14**
Chloroethane	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	NC	7	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl Chloride)	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	NC	5	5.0 U	0.99 J	1.1 J	5.0 U

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

				Location ID:	MW3-C-08	MW3-C-08	MW3-C-08	MW3-C-08
				Sample Name:	WG-12595539-100522-KM-010	WG-12595539-100523-KM-013	WG-12595539-100523-KM-015	WG-12595539-100724-KM-004
				Sample Date:	10/5/2022	10/5/2023	10/5/2023 (Duplicate)	10/7/2024
Parameter	**Units**	**New York State TOGs Guidance Value**	**Standard**					
Volatile Organic Compounds (VOCs)								
cis-1,3-Dichloropropene	µg/L	NC	NC	5.0 U	5.0 U	5.0 U	5.0 U	
Cyclohexane	µg/L	NC	NC	5.0 U	5.0 U	5.0 U	5.0 U	
Dibromochloromethane	µg/L	50	NC	--	--	--	--	
Dibromodifluoromethane	µg/L	NC	NC	5.0 U	5.0 U	5.0 U	5.0 U	
Dichlorodifluoromethane (CFC-12)	µg/L	NC	5	--	--	--	--	
Ethylbenzene	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U	
Isopropylbenzene	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U	
Methyl acetate	µg/L	NC	NC	5.0 U	5.0 U	5.0 U	5.0 U	
Methyl cyclohexane	µg/L	NC	NC	--	--	--	--	
Methyl Tert Butyl Ether	µg/L	10	NC	--	--	--	--	
Methylene chloride	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U	
Styrene	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U	
Tetrachloroethene	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U	
Toluene	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U	
Total Monochlorotoluenes	µg/L	NC	NC	5.49	3.88 J	3.3 J	5.0 U	
trans-1,2-Dichloroethene	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U	
trans-1,3-Dichloropropene	µg/L	NC	NC	5.0 U	5.0 U	5.0 U	5.0 U	
Trichloroethene	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U	
Trichlorofluoromethane (CFC-11)	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U	
Trifluorotrichloroethane (Freon 113)	µg/L	NC	5	5.0 U	5.0 U	5.0 U	5.0 U	
Vinyl chloride	µg/L	NC	2	5.0 U	5.0 U	1.2 J	1.2 J	
Xylene (total)	µg/L	NC	NC	5.0 U	10 U	10 U	10 U	
Total VOCs	µg/L	NC	NC	91.19	61.37	64.90	38.2	

Notes:

6.24 - Concentration exceed NYS TOGs
U - Not present at or above the associated MDL
J - Estimated concentration between the MDL and Reporting Limit
MDL - Method Detection Limit
NC - No criteria
NYS TOGs - New York State Technical and Operational Guidance Series
-- - Not analyzed

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	MW3-C-08
			Sample Name:	WG-12595539-100825-DB-003
			Sample Date:	8/10/2025
		New York State TOGs		
Parameter	**Units**	**Guidance Value**	**Standard**	
Volatile Organic Compounds (VOCs)				
1,1,1-Trichloroethane	µg/L	NC	5	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	NC	5	5.0 U
1,1,2-Trichloroethane	µg/L	NC	1	5.0 U
1,1-Dichloroethane	µg/L	NC	5	5.0 U
1,1-Dichloroethene	µg/L	NC	5	5.0 U
1,2,4-Trichlorobenzene	µg/L	NC	5	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NC	0.04	5.0 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	NC	0.0006	5.0 U
1,2-Dichlorobenzene	µg/L	NC	3	5.0 U
1,2-Dichloroethane	µg/L	NC	0.6	5.0 U
1,2-Dichloroethene (total)	µg/L	NC	NC	
1,2-Dichloropropane	µg/L	NC	1	5.0 U
1,3-Dichlorobenzene	µg/L	NC	3	5.0 U
1,4-Dichlorobenzene	µg/L	NC	3	**19**
2-Butanone (Methyl Ethyl Ketone)	µg/L	50	NC	25 U
2-Chlorotoluene	ug/L	NC	5	5.0 U
2-Chloroethyl vinyl ether	µg/L	NC	NC	--
2-Hexanone	µg/L	50	NC	25 U
3-Chlorotoluene	µg/L	NC	5	5.0 U
4-Chlorotoluene	µg/L	NC	5	5.0 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	NC	NC	25 U
Acetone	µg/L	50	NC	25 U
Acrolein	µg/L	NC	5	--
Acrylonitrile	µg/L	NC	5	--
Benzene	µg/L	NC	1	5.0 U
Bromodichloromethane	µg/L	50	NC	5.0 U
Bromoform	µg/L	50	NC	5.0 U
Bromomethane (Methyl Bromide)	µg/L	NC	5	5.0 U
Carbon disulfide	µg/L	60	NC	5.0 U
Carbon tetrachloride	µg/L	NC	5	5.0 U
Chlorobenzene	µg/L	NC	5	**9.4**
Chloroethane	µg/L	NC	5	5.0 U
Chloroform (Trichloromethane)	µg/L	NC	7	5.0 U
Chloromethane (Methyl Chloride)	µg/L	NC	5	5.0 U
cis-1,2-Dichloroethene	µg/L	NC	5	5.0 U

Table 2

Summary of Deep Groundwater (C-Zone) Analytical VOC Results - 2025 and Historical
Cascades Containerboard Packaging Site
Niagara Falls, New York

			Location ID:	**MW3-C-08**
			Sample Name:	**WG-12595539-100825-DB-003**
			Sample Date:	**8/10/2025**
		New York State TOGs		
Parameter	**Units**	**Guidance Value**	**Standard**	
Volatile Organic Compounds (VOCs)				
cis-1,3-Dichloropropene	µg/L	NC	NC	5.0 U
Cyclohexane	µg/L	NC	NC	5.0 U
Dibromochloromethane	µg/L	50	NC	--
Dibromodifluoromethane	µg/L	NC	NC	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	NC	5	--
Ethylbenzene	µg/L	NC	5	5.0 U
Isopropylbenzene	µg/L	NC	5	5.0 U
Methyl acetate	µg/L	NC	NC	5.0 U
Methyl cyclohexane	µg/L	NC	NC	--
Methyl Tert Butyl Ether	µg/L	10	NC	--
Methylene chloride	µg/L	NC	5	5.0 U
Styrene	µg/L	NC	5	5.0 U
Tetrachloroethene	µg/L	NC	5	5.0 U
Toluene	µg/L	NC	5	5.0 U
Total Monochlorotoluenes	µg/L	NC	NC	5.0 U
trans-1,2-Dichloroethene	µg/L	NC	5	5.0 U
trans-1,3-Dichloropropene	µg/L	NC	NC	5.0 U
Trichloroethene	µg/L	NC	5	5.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NC	5	5.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	NC	5	5.0 U
Vinyl chloride	µg/L	NC	2	5.0 U
Xylene (total)	µg/L	NC	NC	10 U
Total VOCs	µg/L	NC	NC	28.4

Notes:

6.24	- Concentration exceed NYS TOGs
U	- Not present at or above the associated MDL
J	- Estimated concentration between the MDL and Reporting Limit
MDL	- Method Detection Limit
NC	- No criteria
NYS TOGs	- New York State Technical and Operational Guidance Series
--	- Not analyzed

Table 3

Analytical Results Summary
2025 Annual Groundwater Sampling - PFCs and 1,4-Dioxane
Cascades Containerboard Packaging Company
Niagara Falls, New York
October 2025

Location ID:		MW1-9A	MW9	BH87-28	MW13	MW88-13A
Sample Name:		WG-12595539-100825-DB-001	WG-12595539-100825-DB-005	WG-12595539-100825-GH-010	WG-12595539-100825-GH-008	WG-12595539-100825-DB-007
Sample Date:		8/10/2025	8/10/2025	8/10/2025	8/10/2025	8/10/2025
Per/Polyfluoroalkyl Substances (PFAS)						
Fluorotelomer sulfonic acid(8:2)	ng/L	22	34	81	5.7	44
N-Ethyl perfluorooctane sulfonamidoacetic acid	ng/L	3.1 U	1.5 U	32 U	1.5 U	2.8 U
N-Methyl perfluorooctane sulfonamido acetic acid	ng/L	3.1 U	1.5 U	32 U	1.5 U	2.8 U
Perfluorobutane sulfonic acid (PFBS)	ng/L	3.1 U	1.5	6.3 U	2.3	2.8 U
Perfluorobutanoic acid (PFBA)	ng/L	120	44	220	41	220
Perfluorodecanesulfonic acid (PFDS)	ng/L	3.1 U	1.5 U	32 U	1.5 U	2.8 U
Perfluorodecanoic acid (PFDA)	ng/L	3.1 U	1.5 U	32 U	1.5 U	2.8 U
Perfluorododecanoic acid (PFDoDA)	ng/L	3.1 U	1.5 U	6.3 U	1.5 U	2.8 U
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	3.1 U	1.5 U	6.3 U	1.5 U	2.8 U
Perfluoroheptanoic acid (PFHpA)	ng/L	60	19	91	15	160
Perfluorohexane sulfonic acid (PFHxS)	ng/L	3.2	1.5 U	15	2.3	5.4
Perfluorohexanoic acid (PFHxA)	ng/L	180	66	320	55	290
Perfluorononanoic acid (PFNA)	ng/L	4.9	1.8	6.6	5.1	5
Perfluorooctane sulfonamide (FOSA)	ng/L	3.1 U	1.5 U	7.5 J	1.5 U	2.8 U
Perfluorooctane sulfonic acid (PFOS)	ng/L	3.5	2.6	32 U	21	16
Perfluorooctanoic acid (PFOA)	ng/L	100	31	130	30	140
Perfluoropentanoic acid (PFPeA)	ng/L	370	130	630	160	990
Perfluorotetradecanoic acid (PFTeDA)	ng/L	3.1 U	1.5 U	32 U	1.5 U	2.8 U
Perfluorotridecanoic acid (PFTrDA)	ng/L	3.1 U	1.5 U	32 U	1.5 U	2.8 U
Perfluoroundecanoic acid (PFUnA)	ng/L	3.1 U	1.5 U	32 U	1.5 U	2.8 U
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	ng/L	430	280	1500	54	1500

Location ID:		MW1-9A	MW9	BH87-28	MW13	MW88-13A
Sample Name:		WG-12595539-100825-DB-001	WG-12595539-101325-DB-013	WG-12595539-101325-GH-014	WG-12595539-101325-DB-015	WG-12595539-100825-DB-007
Sample Date:		8/10/2025	10/13/2025	10/13/2025	10/13/2025	8/10/2025
Semi-volatile Organic Compounds, SIM						
1,4-Dioxane	µg/L	19	12	6.6	1.0	12

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
- - Not applicable

Table 4

Summary of PFC ad 1,4-Dioxane Sampling Results - 2018 - 2025 Sampling Events
Cascades Containerboard Packaging Site
Niagara Falls, New York

Location ID:		MW1-9A	MW1-9A	MW1-9A	MW1-9A	MW1-9A
Sample Name:		WG-11109628-012318-DT-003	WG-11109628-092818-DT-004	WG-11109628-100119-DJT-001	WG-1119628-100720-SG-002	WG-1119628-100521-SG-004
Sample Date:		01/23/2018	09/28/2018	10/01/2019	10/07/20	10/5/2021
Parameters	**Unit**					
Per/Polyfluoroalkyl Substances (PFAS)						
Fluorotelomer sulfonic acid(8:2)	ng/L	820	390	1400	380	66
N-Ethyl perfluorooctane sulfonamidoacetic acid	ng/L	20 U	17 U	190 U	4.0 U	4.5 U
N-Methyl perfluorooctane sulfonamido acetic acid	ng/L	20 U	17 U	190 U	4.0 U	4.5 U
Perfluorobutane sulfonic acid (PFBS)	ng/L	2.0 U	1.5 J	19 U	1.6 U	1.8 U
Perfluorobutanoic acid (PFBA)	ng/L	230 J	230	540	190	110
Perfluorodecanesulfonic acid (PFDS)	ng/L	2.0 U	1.7 U	19 U	1.6 U	1.8 U
Perfluorodecanoic acid (PFDA)	ng/L	9.8	3.9	18 J	3.4	1.2 J
Perfluorododecanoic acid (PFDoDA)	ng/L	2.0 U	1.7 U	19 U	1.6 U	1.8 U
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	0.84 J	0.77 J	19 U	1.6 U	1.8 U
Perfluoroheptanoic acid (PFHpA)	ng/L	290	140	420	120	46 J
Perfluorohexane sulfonic acid (PFHxS)	ng/L	5.5	4.8	19 U	4.1	2.7
Perfluorohexanoic acid (PFHxA)	ng/L	750	410	1200	330	140
Perfluorononanoic acid (PFNA)	ng/L	28	14	53	11	5.9
Perfluorooctane sulfonamide (FOSA)	ng/L	1.9 J	0.60 J	19 U	1.2 J	1.8 U
Perfluorooctane sulfonic acid (PFOS)	ng/L	26	11	19	12	4.2
Perfluorooctanoic acid (PFOA)	ng/L	460	230	700	190	73
Perfluoropentanoic acid (PFPeA)	ng/L	1000	620	1700	450	230
Perfluorotetradecanoic acid (PFTeDA)	ng/L	2.0 U	1.7 U	19 U	1.6 U	1.8 U
Perfluorotridecanoic acid (PFTrDA)	ng/L	2.0 U	1.7 U	19 U	1.6 U	1.8 U
Perfluoroundecanoic acid (PFUnA)	ng/L	2.0 U	1.7 U	19 U	1.6 U	1.8 U
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	ng/L	7100	3700	10000 J	2700	810
Total Perfluorinated Compounds (PFCs)	ng/L	10,722.04	5,756.57	16,050	4391.7	1489.0
			MW1-9A	**MW1-9A**	**MW1-9A**	**MW1-9A**
			WG-11109628-100418-SG-016	**WG-11109628-100219-DJT-011**	**WG-11109628-100820-SG-010**	**WG-1119628-100521-SG-004**
			10/04/2018	**10/2/2019**	**10/08/20**	**10/5/2021**
Semi-volatile Organic Compounds, SIM						
1,4-Dioxane	µg/L	-	69	130	20	13

Notes:

SIM - Selective Ion Monitoring
J - Estimated concentration
U - Not detected at the associated reporting limit
- - Not applicable

Summary of PFC ad 1,4-Dioxane Sampling Results - 2018 - 2025 Sampling Events
Cascades Containerboard Packaging Site
Niagara Falls, New York

Location ID:		MW1-9A	MW1-9A	MW1-9A	MW1-9A	MW9
Sample Name:		WG-12595539-100422-KM-004	WG-12595539-100422-KM-005	WG-12595539-100824-DB-005	WG-12595539-100825-DB-001	WG-11109628-012318-DT-004
Sample Date:		10/4/2022	10/4/2023	10/08/2024	8/10/2025	01/23/2018
Parameters	**Unit**					
Per/Polyfluoroalkyl Substances (PFAS)						
Fluorotelomer sulfonic acid(8:2)	ng/L	26	27	40	22	730
N-Ethyl perfluorooctane sulfonamidoacetic acid	ng/L	4.2 U	4.0 U	4.3 U	3.1 U	21 U
N-Methyl perfluorooctane sulfonamido acetic acid	ng/L	4.2 U	4.0 U	4.3 U	3.1 U	21 U
Perfluorobutane sulfonic acid (PFBS)	ng/L	0.85 J	1.7 U	1.8	3.1 U	2.1 U
Perfluorobutanoic acid (PFBA)	ng/L	100	75	100	120	290 J
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.7 U	1.6 U	1.7 U	3.1 U	2.1 U
Perfluorodecanoic acid (PFDA)	ng/L	0.63 J	0.67 J	1.7 U	3.1 U	9.2
Perfluorododecanoic acid (PFDoDA)	ng/L	1.7 U	1.6 U	1.7 U	3.1 U	2.1 U
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	1.7 U	1.6 U	1.7 U	3.1 U	0.71 J
Perfluoroheptanoic acid (PFHpA)	ng/L	38	33	61	60	230
Perfluorohexane sulfonic acid (PFHxS)	ng/L	2	2	2.1	3.2	12
Perfluorohexanoic acid (PFHxA)	ng/L	94	110	150	180	650
Perfluorononanoic acid (PFNA)	ng/L	2.6	2.8	76 J	4.9	20
Perfluorooctane sulfonamide (FOSA)	ng/L	1.7 U	1.6 U	1.7 U	3.1 U	1.7 J
Perfluorooctane sulfonic acid (PFOS)	ng/L	2.5	2.9	5.9	3.5	23
Perfluorooctanoic acid (PFOA)	ng/L	55	46	86	100	350
Perfluoropentanoic acid (PFPeA)	ng/L	240	230	320 J	370	840
Perfluorotetradecanoic acid (PFTeDA)	ng/L	1.7 U	1.6 U	1.7 U	3.1 U	2.1 U
Perfluorotridecanoic acid (PFTrDA)	ng/L	1.7 U	1.6 U	1.7 U	3.1 U	2.1 U
Perfluoroundecanoic acid (PFUnA)	ng/L	1.7 U	1.6 U	1.7 U	3.1 U	2.1 U
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	ng/L	300	300	500 J	430	6300
Total Perfluorinated Compounds (PFCs)	ng/L	861.6	829.37	1342.8	1,296.60	9,456.61
		MW1-9A	**MW1-9A**	**MW1-9A**	**MW1-9A**	
		WG-12595539-100422-KM-006	**WG-12595539-100423-KM-007**	**WG-12595539-100824-DB-005**	**WG-12595539-100825-DB-001**	
		10/4/2022	**10/04/2023**	**10/08/2024**	**8/10/2025**	
Semi-volatile Organic Compounds, SIM						
1,4-Dioxane	µg/L	8.6	8.9	13	19	-

Notes:

SIM - Selective Ion Monitoring
J - Estimated concentration
U - Not detected at the associated reporting limit
- - Not applicable

Table 4

Summary of PFC ad 1,4-Dioxane Sampling Results - 2018 - 2025 Sampling Events
Cascades Containerboard Packaging Site
Niagara Falls, New York

Location ID:		MW9	MW9	MW9	MW9
Sample Name:		WG-11109628-092818-DT-005	WG-11109628-100119-DJT-005	WG-1119628-100720-SG-003	WG-1119628-100521-SG-003
Sample Date:		09/28/2018	10/01/2019	10/07/20	10/5/2021
Parameters	**Unit**				
Per/Polyfluoroalkyl Substances (PFAS)					
Fluorotelomer sulfonic acid(8:2)	ng/L	66 J	96 J	250	44
N-Ethyl perfluorooctane sulfonamidoacetic acid	ng/L	16 U	200 U	4.1 U	4.5 U
N-Methyl perfluorooctane sulfonamido acetic acid	ng/L	16 U	200 U	4.1 U	4.5 U
Perfluorobutane sulfonic acid (PFBS)	ng/L	1.1 J	20 U	2.5	3.7
Perfluorobutanoic acid (PFBA)	ng/L	140	120	150	41
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.6 U	20 U	1.6 U	1.8 U
Perfluorodecanoic acid (PFDA)	ng/L	0.89 J	20 U	3.5	1.2 J
Perfluorododecanoic acid (PFDoDA)	ng/L	1.6 U	20 U	1.6 U	1.8 U
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	1.6 U	20 U	1.6 U	1.8 U
Perfluoroheptanoic acid (PFHpA)	ng/L	62	88	110	21
Perfluorohexane sulfonic acid (PFHxS)	ng/L	2.4	20 U	4.3	1.0 J
Perfluorohexanoic acid (PFHxA)	ng/L	190	290	290	69
Perfluorononanoic acid (PFNA)	ng/L	4.6	7.5 J	8.6	3.4
Perfluorooctane sulfonamide (FOSA)	ng/L	1.6 U	20 U	1.6 U	1.8 U
Perfluorooctane sulfonic acid (PFOS)	ng/L	7.0	7.9 J	6.7	4.6
Perfluorooctanoic acid (PFOA)	ng/L	95	140	160	38
Perfluoropentanoic acid (PFPeA)	ng/L	290	390	440	100
Perfluorotetradecanoic acid (PFTeDA)	ng/L	1.6 U	20 U	1.6 U	1.8 U
Perfluorotridecanoic acid (PFTrDA)	ng/L	1.6 U	20 U	1.6 U	1.8 U
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	20 U	1.6 U	1.8 U
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	ng/L	2100	2800 J	2800	570
Total Perfluorinated Compounds (PFCs)	ng/L	2,958.99	3,939.40	4225.6	896.9
		MW9	**MW9**	**MW9**	**MW9**
		WG-11109628-100318-DT-013	**WG-11109628-100219-DJT-013**	**WG-11109628-100219-DJT-013**	**WG-1119628-100521-SG-003**
		10/03/2018	**10/2/2019**	**10/2/2019**	**10/5/2021**
Semi-volatile Organic Compounds, SIM					
1,4-Dioxane	µg/L	36	54	39	15

Notes:

SIM - Selective Ion Monitoring
J - Estimated concentration
U - Not detected at the associated reporting limit
- - Not applicable

Table 4

Summary of PFC ad 1,4-Dioxane Sampling Results - 2018 - 2025 Sampling Events
Cascades Containerboard Packaging Site
Niagara Falls, New York

Location ID:		MW9	MW9	MW9	MW9
Sample Name:		WG-12595539-100322-KM-002	WG-12595539-100323-KM-002	WG-12595539-100724-KM-002	WG-12595539-100825-DB-005
Sample Date:		10/3/2022	10/03/2023	10/07/2024	8/10/2025
Parameters	**Unit**				
Per/Polyfluoroalkyl Substances (PFAS)					
Fluorotelomer sulfonic acid(8:2)	ng/L	16	22	17	34
N-Ethyl perfluorooctane sulfonamidoacetic acid	ng/L	4.1 U	4.9 U	4.3 U	1.5 U
N-Methyl perfluorooctane sulfonamido acetic acid	ng/L	4.1 U	4.9 U	4.3 U	1.5 U
Perfluorobutane sulfonic acid (PFBS)	ng/L	1.4 J	0.88 J	1.7	1.5
Perfluorobutanoic acid (PFBA)	ng/L	31	54	47	44
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.6 U	1.9 U	1.7 U	1.5 U
Perfluorodecanoic acid (PFDA)	ng/L	0.30 J	1.9 U	1.7 U	1.5 U
Perfluorododecanoic acid (PFDoDA)	ng/L	1.6 U	1.9 U	1.7 U	1.5 U
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	1.6 U	1.9 U	1.7 U	1.5 U
Perfluoroheptanoic acid (PFHpA)	ng/L	13	20	21	19
Perfluorohexane sulfonic acid (PFHxS)	ng/L	1.4 J	1.9 U	1.7 U	1.5 U
Perfluorohexanoic acid (PFHxA)	ng/L	35	79	71	66
Perfluorononanoic acid (PFNA)	ng/L	1.0 J	0.98 J	35 J	1.8
Perfluorooctane sulfonamide (FOSA)	ng/L	0.83 J	1.9 U	1.7 U	1.5 U
Perfluorooctane sulfonic acid (PFOS)	ng/L	1.6 U	1.9	1.7 U	2.6
Perfluorooctanoic acid (PFOA)	ng/L	24	24	30	31
Perfluoropentanoic acid (PFPeA)	ng/L	77	180	160	130
Perfluorotetradecanoic acid (PFTeDA)	ng/L	1.6 U	1.9 U	1.7 U	1.5 U
Perfluorotridecanoic acid (PFTrDA)	ng/L	1.6 U	1.9 U	1.7 U	1.5 U
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.9 U	1.7 U	1.5 U
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	ng/L	180	190	250	280
Total Perfluorinated Compounds (PFCs)	ng/L	380.93	572.76	632.7	609.9

		MW9	MW9	MW9	MW9
		WG-12595539-100422-KM-008	WG-12595539-100523-KM-011	WG-12595539-100724-KM-002	WG-12595539-101325-DB-013
		10/4/2022	10/05/2023	10/07/2024	10/13/2025
Semi-volatile Organic Compounds, SIM					
1,4-Dioxane	µg/L	9.9	11	9.5	12

Notes:

SIM - Selective Ion Monitoring
J - Estimated concentration
U - Not detected at the associated reporting limit
- - Not applicable

Table 4

Summary of PFC ad 1,4-Dioxane Sampling Results - 2018 - 2025 Sampling Events
Cascades Containerboard Packaging Site
Niagara Falls, New York

Location ID:		BH87-28	BH87-28	BH87-28	BH87-28	BH87-28
Sample Name:		WG-11109628-100820-SG-005	WG-11109628-100521-SG-002	WG-12595539-100422-KM-003	WG-12595539-100323-KM-003	WG-12595539-100724-KM-001
Sample Date:		10/08/20	10/5/2021	10/4/2022	10/03/2023	10/07/2024
Parameters	**Unit**					
Per/Polyfluoroalkyl Substances (PFAS)						
Fluorotelomer sulfonic acid(8:2)	ng/L	28 J	8.6	3.6	32	110
N-Ethyl perfluorooctane sulfonamidoacetic acid	ng/L	4.2 U	4.5 U	4.1 U	4.9 U	10 U
N-Methyl perfluorooctane sulfonamido acetic acid	ng/L	4.2 U	4.5 U	4.1 U	4.9 U	10 U
Perfluorobutane sulfonic acid (PFBS)	ng/L	0.55 J	1.8 U	1.6 U	1.9 U	4.0 U
Perfluorobutanoic acid (PFBA)	ng/L	59	110	170	210 J	260
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.7 U	1.8 U	1.6 U	1.9 U	4.0 U
Perfluorodecanoic acid (PFDA)	ng/L	1.7 U	1.8 U	1.6 U	1.2 J	4.0 U
Perfluorododecanoic acid (PFDoDA)	ng/L	1.7 U	1.8 U	1.6 U	1.9 U	4.0 U
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	1.7 U	1.8 U	1.6 U	0.27 J	4.0 U
Perfluoroheptanoic acid (PFHpA)	ng/L	16	28 J	54	66	120
Perfluorohexane sulfonic acid (PFHxS)	ng/L	10 U	8.1	15 J	28 J	33 J
Perfluorohexanoic acid (PFHxA)	ng/L	76	150	190	260	330
Perfluorononanoic acid (PFNA)	ng/L	1.7 U	1.8 U	1.6 U	4.5 J	570 J
Perfluorooctane sulfonamide (FOSA)	ng/L	1.7 U	1.8 U	1.6 U	1.1 J	4.6
Perfluorooctane sulfonic acid (PFOS)	ng/L	8.4	7.1	4.3	18	42
Perfluorooctanoic acid (PFOA)	ng/L	19	36	44	78	130
Perfluoropentanoic acid (PFPeA)	ng/L	120	290	580	570	770
Perfluorotetradecanoic acid (PFTeDA)	ng/L	1.7 U	1.8 U	1.6 U	1.9 U	4.0 U
Perfluorotridecanoic acid (PFTrDA)	ng/L	1.7 U	1.8 U	1.6 U	1.9 U	4.0 U
Perfluoroundecanoic acid (PFUnA)	ng/L	1.7 U	1.8 U	1.6 U	1.9 U	4.0 U
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	ng/L	380	570	470	930	1600 J
Total Perfluorinated Compounds (PFCs)	ng/L	706.95	1,207.80	1530.9	2199.07	3969.6
		BH87-28	**BH87-28**	**BH87-28**	**BH87-28**	**BH87-28**
		WG-11109628-100820-SG-011	**WG-11109628-100521-SG-002**	**WG-12595539-100622-KM-016**	**WG-12595539-100523-KM-010**	**WG-12595539-100724-KM-001**
		10/08/20	**10/5/2021**	**10/6/2022**	**10/05/2023**	**10/07/2024**
Semi-volatile Organic Compounds, SIM						
1,4-Dioxane	µg/L	0.56	2.7	4.6	4.5	5.1

Notes:

SIM - Selective Ion Monitoring
J - Estimated concentration
U - Not detected at the associated reporting limit
- - Not applicable

Table 4

Summary of PFC ad 1,4-Dioxane Sampling Results - 2018 - 2025 Sampling Events
Cascades Containerboard Packaging Site
Niagara Falls, New York

Location ID:		BH87-28	MW13	MW13	MW13
Sample Name:		WG-12595539-100825-GH-010	WG-11109628-012318-DT-005	WG-11109628-092818-DT-001	WG-11109628-100119-SG-002
Sample Date:		8/10/2025	01/23/2018	09/28/2018	10/01/2019
Parameters	**Unit**				
Per/Polyfluoroalkyl Substances (PFAS)					
Fluorotelomer sulfonic acid(8:2)	ng/L	81	200	7.6 J	4.4 J
N-Ethyl perfluorooctane sulfonamidoacetic acid	ng/L	32 U	20 U	17 U	20 U
N-Methyl perfluorooctane sulfonamido acetic acid	ng/L	32 U	20 U	17 U	20 U
Perfluorobutane sulfonic acid (PFBS)	ng/L	6.3 U	2.0 U	1.7 U	0.31 J
Perfluorobutanoic acid (PFBA)	ng/L	220	200	94	120
Perfluorodecanesulfonic acid (PFDS)	ng/L	32 U	2.0 U	1.7 U	2.0 U
Perfluorodecanoic acid (PFDA)	ng/L	32 U	21	0.53 J	2.0 U
Perfluorododecanoic acid (PFDoDA)	ng/L	6.3 U	2.0 U	1.7 U	2.0 U
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	6.3 U	2.0 U	1.7 U	2.0 U
Perfluoroheptanoic acid (PFHpA)	ng/L	91	280	33	51
Perfluorohexane sulfonic acid (PFHxS)	ng/L	15	2.5	1.7 U	2.0 U
Perfluorohexanoic acid (PFHxA)	ng/L	320	410	160	220
Perfluorononanoic acid (PFNA)	ng/L	6.6	120	1.4 J	1.8 J
Perfluorooctane sulfonamide (FOSA)	ng/L	7.5 J	2.0 U	1.7 U	0.36 J
Perfluorooctane sulfonic acid (PFOS)	ng/L	32 U	49	4.9	5.6
Perfluorooctanoic acid (PFOA)	ng/L	130	430	21	37
Perfluoropentanoic acid (PFPeA)	ng/L	630	1100	470	630
Perfluorotetradecanoic acid (PFTeDA)	ng/L	32 U	2.0 U	1.7 U	2.0 U
Perfluorotridecanoic acid (PFTrDA)	ng/L	32 U	2.0 U	1.7 U	2.0 U
Perfluoroundecanoic acid (PFUnA)	ng/L	32 U	2.0 U	1.7 U	2.0 U
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	ng/L	1500	2400	270	430
Total Perfluorinated Compounds (PFCs)	ng/L	3001.1	5,212.50	1,062.43	1,500.47
		BH87-28		**MW13**	**MW13**
		WG-12595539-101325-GH-014		**WG-11109628-100318-SG-006**	**WG-11109628-100119-SG-002**
		10/13/2025		**10/03/2018**	**10/01/2019**
Semi-volatile Organic Compounds, SIM					
1,4-Dioxane	µg/L	6.6	-	1.2	1.2

Notes:

SIM - Selective Ion Monitoring
J - Estimated concentration
U - Not detected at the associated reporting limit
- - Not applicable

Table 4

Summary of PFC ad 1,4-Dioxane Sampling Results - 2018 - 2025 Sampling Events
Cascades Containerboard Packaging Site
Niagara Falls, New York

Location ID:		MW13	MW13	MW13	MW13
Sample Name:		WG-1119628-100720-SG-004	WG-1119628-100521-SG-001	WG-12595539-100322-KM-001	WG-12595539-100323-KM-001
Sample Date:		10/07/20	10/5/2021	10/3/2022	10/03/2023
Parameters	**Unit**				
Per/Polyfluoroalkyl Substances (PFAS)					
Fluorotelomer sulfonic acid(8:2)	ng/L	130	23	53	20 U
N-Ethyl perfluorooctane sulfonamidoacetic acid	ng/L	4.0 U	4.6 U	4.0 U	50 U
N-Methyl perfluorooctane sulfonamido acetic acid	ng/L	4.0 U	4.6 U	4.0 U	50 U
Perfluorobutane sulfonic acid (PFBS)	ng/L	0.68 J	2.5	2.5	20 U
Perfluorobutanoic acid (PFBA)	ng/L	62	93	55	120
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.6 U	1.9 U	1.6 U	20 U
Perfluorodecanoic acid (PFDA)	ng/L	2.8	1.9 U	1.8	20 U
Perfluorododecanoic acid (PFDoDA)	ng/L	1.6 U	1.9 U	1.6 U	20 U
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	1.6 U	0.38 J	0.59 J	20 U
Perfluoroheptanoic acid (PFHpA)	ng/L	48	36	28	62
Perfluorohexane sulfonic acid (PFHxS)	ng/L	2.3	3.0	2.4	20 U
Perfluorohexanoic acid (PFHxA)	ng/L	110	140	72	170
Perfluorononanoic acid (PFNA)	ng/L	13	5.2	10	3.4 J
Perfluorooctane sulfonamide (FOSA)	ng/L	1.4 J	1.9 U	2.3	20 U
Perfluorooctane sulfonic acid (PFOS)	ng/L	35	33	34	20 U
Perfluorooctanoic acid (PFOA)	ng/L	69	48	52	56
Perfluoropentanoic acid (PFPeA)	ng/L	270	370	230	580
Perfluorotetradecanoic acid (PFTeDA)	ng/L	1.6 U	1.9 U	1.6 U	20 U
Perfluorotridecanoic acid (PFTrDA)	ng/L	1.6 U	1.9 U	1.6 U	20 U
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.9 U	1.6 U	20 U
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	ng/L	800	310	310	150
Total Perfluorinated Compounds (PFCs)	ng/L	1544.18	1064.08	853.59	1141.4
		MW13	**MW13**	**MW13**	**MW13**
		WG-11109628-100820-SG-007	**WG-1119628-100521-SG-001**	**WG-12595539-100622-KM-020**	**WG-12595539-100523-KM-014**
		10/08/20	**10/5/2021**	**10/6/2022**	**10/05/2023**
Semi-volatile Organic Compounds, SIM					
1,4-Dioxane	µg/L	1	0.20 U	1.2	1.2 U

Notes:

SIM - Selective Ion Monitoring
J - Estimated concentration
U - Not detected at the associated reporting limit
- - Not applicable

Table 4

Summary of PFC ad 1,4-Dioxane Sampling Results - 2018 - 2025 Sampling Events
Cascades Containerboard Packaging Site
Niagara Falls, New York

Location ID:		MW13	MW13	MW88-13A	MW88-13A
Sample Name:		WG-12595539-101024-KM-020	WG-12595539-100825-GH-008	WG-11109628-012318-DT-002	WG-11109628-092818-DT-003
Sample Date:		10/10/2024	8/10/2025	01/23/2018	09/28/2018
Parameters	**Unit**				
Per/Polyfluoroalkyl Substances (PFAS)					
Fluorotelomer sulfonic acid(8:2)	ng/L	15	5.7	110 J	59 J
N-Ethyl perfluorooctane sulfonamidoacetic acid	ng/L	4.4 U	1.5 U	19 U	17 U
N-Methyl perfluorooctane sulfonamido acetic acid	ng/L	4.4 U	1.5 U	19 U	17 U
Perfluorobutane sulfonic acid (PFBS)	ng/L	2.8	2.3	2.0	1.9
Perfluorobutanoic acid (PFBA)	ng/L	72	41	1100 J	180 J
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.8 U	1.5 U	1.9 U	1.7 U
Perfluorodecanoic acid (PFDA)	ng/L	1.8 U	1.5 U	1.9 U	2.6
Perfluorododecanoic acid (PFDoDA)	ng/L	1.8 U	1.5 U	1.9 U	1.7 U
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	1.8 U	1.5 U	0.68 J	0.48 J
Perfluoroheptanoic acid (PFHpA)	ng/L	32	15	65	65
Perfluorohexane sulfonic acid (PFHxS)	ng/L	2.6	2.3	21	20
Perfluorohexanoic acid (PFHxA)	ng/L	110	55	180	180
Perfluorononanoic acid (PFNA)	ng/L	18	5.1	1.9 U	1.7 U
Perfluorooctane sulfonamide (FOSA)	ng/L	1. U	1.5 U	1.9	1.5 J
Perfluorooctane sulfonic acid (PFOS)	ng/L	39	21	37	39
Perfluorooctanoic acid (PFOA)	ng/L	50	30	110	100
Perfluoropentanoic acid (PFPeA)	ng/L	280 J	160	270	260
Perfluorotetradecanoic acid (PFTeDA)	ng/L	1.8 U	1.5 U	1.9 U	1.7 U
Perfluorotridecanoic acid (PFTrDA)	ng/L	1.8 U	1.5 U	1.9 U	1.7 U
Perfluoroundecanoic acid (PFUnA)	ng/L	1.8 U	1.5 U	1.9 U	1.7 U
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	ng/L	250	54	3000 J	3200
Total Perfluorinated Compounds (PFCs)	ng/L	871.4	391.4	4,897.58	4,109.48
		MW13	**MW13**		**MW88-13A**
		WG-12595539-101024-KM-020	**WG-12595539-101325-DB-015**		**WG-11109628-100418-SG-014**
		10/10/2024	**10/13/2025**		**10/04/2018**
Semi-volatile Organic Compounds, SIM					
1,4-Dioxane	µg/L	1.1	1.0	-	23

Notes:

SIM - Selective Ion Monitoring
J - Estimated concentration
U - Not detected at the associated reporting limit
- - Not applicable

Table 4

Summary of PFC ad 1,4-Dioxane Sampling Results - 2018 - 2025 Sampling Events
Cascades Containerboard Packaging Site
Niagara Falls, New York

Location ID:		MW88-13A	MW88-13A	MW88-13A	MW88-13A	MW88-13A
Sample Name:		WG-11109628-100119-DJT-003	WG-1119628-100720-SG-001	WG-1119628-100521-SG-005	WG-12595539-100422-KM-005	WG-12595539-100423-KM-004
Sample Date:		10/01/2019	10/07/20	10/5/2021	10/5/2022	10/04/2023
Parameters	**Unit**					
Per/Polyfluoroalkyl Substances (PFAS)						
Fluorotelomer sulfonic acid(8:2)	ng/L	110 J	280	86	74	5.3
N-Ethyl perfluorooctane sulfonamidoacetic acid	ng/L	19 U	1.7 J	4.5 U	4.2 U	4.1 U
N-Methyl perfluorooctane sulfonamido acetic acid	ng/L	19 U	4.1 U	4.5 U	4.2 U	4.1 U
Perfluorobutane sulfonic acid (PFBS)	ng/L	1.9 U	1.6 U	0.93 J	2.8	3.1
Perfluorobutanoic acid (PFBA)	ng/L	220 J	360 J	120	460	76
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.9 U	1.6 U	1.8 U	1.7 U	1.7 U
Perfluorodecanoic acid (PFDA)	ng/L	1.9 U	2.6	2.6	3	9.5
Perfluorododecanoic acid (PFDoDA)	ng/L	1.9 U	0.49 J	0.51 J	1.7 U	1.5 J
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	0.50 J	1.6 U	1.8 U	1.7 U	1.7 U
Perfluoroheptanoic acid (PFHpA)	ng/L	60	56	59	110	88
Perfluorohexane sulfonic acid (PFHxS)	ng/L	12	22 U	5.9	19	1.6 J
Perfluorohexanoic acid (PFHxA)	ng/L	160	170	160	290	120
Perfluorononanoic acid (PFNA)	ng/L	1.9 U	5.6	9.3	7.4 J	25
Perfluorooctane sulfonamide (FOSA)	ng/L	1.9	2.0	1.2 J	1.8	1.2 J
Perfluorooctane sulfonic acid (PFOS)	ng/L	37	33	18	24	7.2
Perfluorooctanoic acid (PFOA)	ng/L	95	73	62	91	68
Perfluoropentanoic acid (PFPeA)	ng/L	250	260	280	770	250
Perfluorotetradecanoic acid (PFTeDA)	ng/L	1.9 U	1.6 U	1.8 U	1.7 U	1.7 U
Perfluorotridecanoic acid (PFTrDA)	ng/L	1.9 U	1.6 U	1.8 U	1.7 U	1.7 U
Perfluoroundecanoic acid (PFUnA)	ng/L	1.9 U	1.6 U	1.8 U	1.7 U	1.9
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	ng/L	2200	1800	980	1400	70
Total Perfluorinated Compounds (PFCs)	ng/L	3,146.40	3,044.39	1,785.44	3,253.00	728.3

		MW88-13A	MW88-13A	MW88-13A	MW88-13A	MW88-13A
		WG-11109628-100219-SG-012	WG-11109628-100820-SG-006	WG-1119628-100521-SG-005	WG-12595539-100422-KM-007	WG-12595539-100423-KM-006
		10/2/2019	10/08/20	10/5/2021	10/4/2022	10/04/2023
Semi-volatile Organic Compounds, SIM						
1,4-Dioxane	µg/L	19	20	10	15	12

Notes:

SIM - Selective Ion Monitoring
J - Estimated concentration
U - Not detected at the associated reporting limit
- - Not applicable

Table 4

Summary of PFC ad 1,4-Dioxane Sampling Results - 2018 - 2025 Sampling Events
Cascades Containerboard Packaging Site
Niagara Falls, New York

Location ID:		MW88-13A	MW88-13A	MW12	MW12	MW12
Sample Name:		WG-12595539-100924-DB-013	WG-12595539-100825-DB-007	WG-11109628-012318-DT-001	WG-11109628-092818-DT-002	WG-11109628-100119-SG-004
Sample Date:		10/09/2024	8/10/2025	01/23/2018	09/28/2018	10/01/2019
Parameters	**Unit**					
Per/Polyfluoroalkyl Substances (PFAS)						
Fluorotelomer sulfonic acid(8:2)	ng/L	76	44	2.3 J	83 U	6.1 J
N-Ethyl perfluorooctane sulfonamidoacetic acid	ng/L	4.5 U	2.8 U	20 U	17 U	20 U
N-Methyl perfluorooctane sulfonamido acetic acid	ng/L	4.5 U	2.8 U	20 U	17 U	20 U
Perfluorobutane sulfonic acid (PFBS)	ng/L	2.7	2.8 U	4.2	2.9	1.2 J
Perfluorobutanoic acid (PFBA)	ng/L	350	220	180	140	88
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.8 U	2.8 U	2.0 U	1.7 U	2.0 U
Perfluorodecanoic acid (PFDA)	ng/L	2.1	2.8 U	1.4 J	1.7 U	1.0 J
Perfluorododecanoic acid (PFDoDA)	ng/L	1.8 U	2.8 U	2.0 U	1.7 U	2.0 U
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	1.8 U	2.8 U	0.36 J	1.7 U	0.29 J
Perfluoroheptanoic acid (PFHpA)	ng/L	250	160	60	34	33
Perfluorohexane sulfonic acid (PFHxS)	ng/L	8.8 J	5.4	11	20	6.8
Perfluorohexanoic acid (PFHxA)	ng/L	570	290	290	160	160
Perfluorononanoic acid (PFNA)	ng/L	260 J	5	5.2	1.7 U	3.7
Perfluorooctane sulfonamide (FOSA)	ng/L	3	2.8 U	2.0 U	0.64 J	0.52 J
Perfluorooctane sulfonic acid (PFOS)	ng/L	25	16	26	15	14
Perfluorooctanoic acid (PFOA)	ng/L	190	140	70	44	37
Perfluoropentanoic acid (PFPeA)	ng/L	1400	990	790	320	390
Perfluorotetradecanoic acid (PFTeDA)	ng/L	1.8 U	2.8 U	2.0 U	1.7 U	2.0 U
Perfluorotridecanoic acid (PFTrDA)	ng/L	1.8 U	2.8 U	2.0 U	1.7 U	2.0 U
Perfluoroundecanoic acid (PFUnA)	ng/L	1.8 U	2.8 U	2.0 U	1.7 U	2.0 U
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	ng/L	1900	1500	160 J	680	140
Total Perfluorinated Compounds (PFCs)	ng/L	5037.6	3,370.40	1,600.46	1,499.54	881.61

		MW88-13A	MW88-13A		MW12	MW12
		WG-12595539-100924-DB-013	WG-12595539-100825-DB-007		WG-11109628-100318-SG-008	WG-11109628-100219-SG-009
		10/09/2024	8/10/2025		10/03/2018	10/2/2019
Semi-volatile Organic Compounds, SIM						
1,4-Dioxane	µg/L	11	12	-	1.9	1.1

Notes:

SIM - Selective Ion Monitoring
J - Estimated concentration
U - Not detected at the associated reporting limit
- - Not applicable

Table 5

Total Perfluorinated Chemicals (PFCs) Results Summary - 2018 - 2025
Cascades Containerboard Packaging Site
Niagara Falls, New York

Monitoring Well	January 2018 Total PFC Detections (ng/L) (µg/L)	September 2018 Total PFC Detections (ng/L)	October 2019 Total PFC Detections (ng/L)	October 2020 Total PFC Detections (ng/L)	October 2021 Total PFC Detections (ng/L)	October 2022 Total PFC Detections (ng/L)	October 2023 Total PFC Detections (ng/L)	October 2024 Total PFC Detections (ng/L)	October 2025 Total PFC Detections (ng/L)
MW01 9A	10,722.04	5,756.57	16,050	4,391.70	1,489	861.6	829.37	1342.8	1296.6
MW 9	9,456.61	2,958.99	3,939.40	4,225.60	896.9	380.93	527.36	632.7	609.9
MW 12	1,600.46	1,499.54	881.61	NS	NS	NS	NS	NS	NS
BH87 28	NS	NS	NS	706.95	1,207.80	1530.9	2199.07	3969.6	3001.1
MW 13	5,212.50	1,062.43	1,500.47	1,544.18	1,064.08	853.59	1141.4	871.4	391.4
MW88 13A	4,897.58	4,109.48	3,146.40	3,044.39	1,785.44	3253	728.3	5037.6	3370.4

Notes:
NS - Not Sampled
ND - Not Detected

Table 6

Perfluorooctanoic Acid (PFOA) Results Summary - 2018 - 2025
Cascades Containerboard Packaging Site
Niagara Falls, New York

Monitoring Well	NYS MCLs for PFOA (ng/L)	January 2018 PFOA Reuslts (ng/L)	September 2018 PFOA Reuslts (ng/L)	October 2019 PFOA Reuslts (ng/L)	October 2020 PFOA Reuslts (ng/L)	October 2021 PFOA Reuslts (ng/L)	October 2022 PFOA Reuslts (ng/L)	October 2023 PFOA Reuslts (ng/L)	October 2024 PFOA Reuslts (ng/L)	October 2025 PFOA Reuslts (ng/L)
MW01 9A	10	460	230	700	190	73	55	46	86	100
MW 9	10	350	95	140	160	38	24	24	30	31
MW 12	10	70	44	37	NS	NS	NS	NS	NS	NS
BH87 28	10	NS	NS	NS	19	36	44	78	130	130
MW 13	10	430	21	37	69	48	52	56	50	30
MW88 13A	10	110	100	95	73	62	91	68	190	140

Notes:
NS - Not Sampled
ND - Not Detected

Table 7

Perfluorooctane Sulfonate (PFOS) Results Summary - 2018 - 2025
Cascades Containerboard Packaging Site
Niagara Falls, New York

Monitoring Well	NYS MCLs for PFOS (ng/L)	January 2018 PFOS ReusIts (ng/L)	September 2018 PFOA ReusIts (ng/L)	October 2019 PFOS ReusIts (ng/L)	October 2020 PFOS ReusIts (ng/L)	October 2021 PFOS ReusIts (ng/L)	October 2022 PFOS ReusIts (ng/L)	October 2023 PFOS ReusIts (ng/L)	October 2024 PFOS ReusIts (ng/L)	October 2025 PFOS ReusIts (ng/L)
MW01 9A	10	26	11	19	12	4.2	2.5	2.9	5.9	3.5
MW 9	10	23	7	7.9	6.7	4.6	ND	1.9	ND	2.6
MW 12	10	26	15	14	NS	NS	NS	NS	NS	NS
BH87 28	10	NS	NS	NS	8.4	7.1	4.3	18	42	ND
MW 13	10	49	4.9	5.6	35	33	34	ND	39	21
MW88 13A	10	37	39	37	33	18	24	7.2	25	16

Notes:
NS - Not Sampled
ND - Not Detected

Table 8

1,4-Dioxane Results Summary - 2018 - 2025
Cascades Containerboard Packaging Site
Niagara Falls, New York

Monitoring Well	NYS MCLs for 1,4 dioxane (µg/L)	September 2018 1,4 dioxane Results (µg/L)	October 2019 1,4 dioxane Results (µg/L)	October 2020 1,4 dioxane Results (µg/L)	October 2021 1,4 dioxane Results (µg/L)	October 2022 1,4 dioxane Results (µg/L)	October 2023 1,4 dioxane Results (µg/L)	October 2024 1,4 dioxane Results (µg/L)	October 2025 1,4 dioxane Results (µg/L)
MW01 9A	1	69	130	20	13	8.6	8.9	13	19
MW 9	1	36	54	39	15	9.9	11	9.5	12
MW 12	1	1.9	1.1	NS	NS	NS	NS	NS	NS
BH87 28	1	NS	NS	0.56	2.7	4.6	4.5	5.1	6.6
MW 13	1	1.2	1.2	1	ND	1.2	ND	1.1	1.0
MW88 13A	1	23	19	20	10	15	12	11	12

Notes:
NS - Not Sampled
ND - Not Detected

Table 9

2025 Analytical Results Summary
Additional Sampling - A-Zone and B-Zone
Cascades Containerboard Packaging Site
Niagara Falls, New York
October 2025

Location ID:		MW88-12A	MW88-8A	MW88-8B
Sample Name:		WG-12595539-101325-GH-018	WG-12595539-101325-GH-016	WG-12595539-101325-DB-017
Sample Date:		10/13/2025	10/13/2025	10/13/2025
Parameters	**Unit**			
Volatile Organic Compounds				
1,1-Dichloroethane	µg/L	36	10000 U	50 U
1,2,4-Trichlorobenzene	µg/L	25 U	10000 U	50 U
1,2-Dichlorobenzene	µg/L	25 U	10000 U	50 U
1,3-Dichlorobenzene	µg/L	25 U	10000 U	86
1,4-Dichlorobenzene	µg/L	25 U	10000 U	340
2-Chlorotoluene	µg/L	25 U	10000 U	540
3-Chlorotoluene	µg/L	25 U	10000 U	50 U
4-Chlorotoluene	µg/L	25 U	10000 U	50 U
Acetone	µg/L	130 U	50000 U	250 U
Benzene	µg/L	25 U	10000 U	50 U
Chlorobenzene	µg/L	25 U	10000 U	560
cis-1,2-Dichloroethene	µg/L	67	41000	50 U
Tetrachloroethene	µg/L	25 U	82000	50 U
Toluene	µg/L	25 U	10000 U	50 U
Trichloroethene	µg/L	25 U	120000	53
Vinyl chloride	µg/L	410	10000 U	50 U
Total SSPL VOCs	µg/L	513.0	243,000	1,579.00
Metals				
Arsenic	µg/L	15 U	48	15 U
Iron	µg/L	21,000	210	1,500
Potassium	µg/L	320,000	820000	70,000
Sodium	µg/L	160,000	260000	130,000
General Chemistry				
Phenolics (total)	µg/L	10 U	43	10 U

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
SSPL - Site Specific Parameter List

Table 10

Analytical Results Summary - 2020 - 2025
Additional Sampling - MW88-12A, MW88-8A, MW88-8B
Cascades Containerboard Packaging Site
Niagara Falls, New York

Location ID:		MW88-12A	MW88-12A	MW88-12A	MW88-12A	MW88-12A	MW88-12A
Sample Name:		WG-11109628-100920-SG-017	WG-11109628-100621-SG-010	WG-125955398-100522-KM-012	WG-12595539-100623-KM-020	WG-12595539-101024-KM-018	WG-12595539-101325-GH-018
Sample Date:		10/09/20	10/6/2021	10/5/2022	10/06/2023	10/10/2024	10/13/2025
Parameters	**Unit**						
Volatile Organic Compounds							
1,1-Dichloroethane	µg/L	150	43 J	32 J	21	25 U	36
1,2,4-Trichlorobenzene	µg/L	20 U	100 U	50 U	20 U	25 U	25 U
1,2-Dichlorobenzene	µg/L	20 U	100 U	50 U	20 U	25 U	25 U
1,3-Dichlorobenzene	µg/L	20 U	100 U	50 U	20 U	25 U	25 U
1,4-Dichlorobenzene	µg/L	20 U	100 U	50 U	20 U	25 U	25 U
2-Chlorotoluene	µg/L	11 J	100 U	50 U	20 U	25 U	25 U
3-Chlorotoluene	µg/L	20 U	100 U	50 U	20 U	25 U	25 U
4-Chlorotoluene	µg/L	20 U	100 U	50 U	20 U	25 U	25 U
Acetone	µg/L	100 U	500 U	250 U	11 J	130 U	130 U
Benzene	µg/L	120	14 J	12 J	7.8 J	25 U	25 U
Chlorobenzene	µg/L	15 J	100 U	7.7 J	6.6 J	25 U	25 U
cis-1,2-Dichloroethene	µg/L	9500	13 J	14 J	20 U	25 U	67
Tetrachloroethene	µg/L	4.1 J	9.3 J	9.3 J	20 U	25 U	25 U
Toluene	µg/L	160	100 U	100 U	20 U	25 U	25 U
Trichloroethene	µg/L	13 J	100 U	100 U	20 U	25 U	25 U
Vinyl chloride	µg/L	25000	600	750	76	33	410
Total SSPL VOCs	µg/L	34,958	679.3	825.0	124.4	33.0	513.0
Metals							
Arsenic	µg/L	11 J	15 U	11 J	7.6 J	15 U	15 U
Iron	µg/L	6700	7100	7100	15,700	14,000	21,000
Potassium	µg/L	347000	253000	253000	281000	290,000	320,000
Sodium	µg/L	76400	39500	41100	71000	120,000	160,000
General Chemistry							
Phenolics (total)	µg/L	16	10 U	10 U	10 U	23	10 U
Fumigant							
Chloropicrin	µg/L	0.50 U	0.50 U	0.51 U	NA	NA	NA

J - Estimated concentration
U - Not detected at the associated reporting limit
SSPL - Site Specific Parameter List
NA - Not analyzed

Analytical Results Summary - 2020 - 2025
Additional Sampling - MW88-12A, MW88-8A, MW88-8B
Cascades Containerboard Packaging Site
Niagara Falls, New York

Location ID:		MW88-8A	MW88-8A	MW88-8A	MW88-8A	MW88-8A	MW88-8A
Sample Name:		WG-11109628-100920-SG-018	WG-11109628-100721-SG-004	WG-125955398-100522-KM-017	WG-12595539-100623-KM-019	WG-12595539-101024-DB-017	WG-12595539-101325-GH-016
Sample Date:		10/09/20	10/7/2021	10/5/2022	10/06/2023	10/10/2024	10/13/2025
Parameters	**Unit**						
Volatile Organic Compounds							
1,1-Dichloroethane	µg/L	2000 U	1000 U	63	20000 U	10000 U	10000 U
1,2,4-Trichlorobenzene	µg/L	2000 U	1000 U	6.5 J	20000 U	10000 U	10000 U
1,2-Dichlorobenzene	µg/L	2000 U	1000 U	30 J	20000 U	10000 U	10000 U
1,3-Dichlorobenzene	µg/L	2000 U	1000 U	44 J	20000 U	10000 U	10000 U
1,4-Dichlorobenzene	µg/L	2000 U	1000 U	22 J	20000 U	10000 U	10000 U
2-Chlorotoluene	µg/L	2000 U	410 J	370	20000 U	10000 U	10000 U
3-Chlorotoluene	µg/L	390 J	1000 U	50 U	20000 U	10000 U	10000 U
4-Chlorotoluene	µg/L	2000 U	1000 U	39 J	20000 U	10000 U	10000 U
Acetone	µg/L	10000 U	5000 U	250 U	100000 U	50000 U	50000 U
Benzene	µg/L	2000 U	1000 U	46 J	20000 U	10000 U	10000 U
Chlorobenzene	µg/L	260 J	220 J	190	20000 U	10000 U	10000 U
cis-1,2-Dichloroethene	µg/L	54000	59000	47000	70000	43000	41000
Tetrachloroethene	µg/L	120000	77000	80000	92000	90000	82000
Toluene	µg/L	840 J	530 J	490	20000 U	10000 U	10000 U
Trichloroethene	µg/L	180000	130000	50 U	180000	130000	120000
Vinyl chloride	µg/L	13000	12000	13000	7900 J	10000 U	10000 U
Total SSPL VOCs	µg/L	368,490	279,160	141,301	349,900	263,000	243,000
Metals							
Arsenic	µg/L	22	16	20	28	44	48
Iron	µg/L	330	680	620	420	270	210
Potassium	µg/L	636000	434000	477000	637000	670000	820000
Sodium	µg/L	138000	156000	151000	172000	210000	260000
General Chemistry							
Phenolics (total)	µg/L	44	20	19	31	31	43
Fumigant							
Chloropicrin	µg/L	0.50 U	0.50 U	0.52 U	NA	NA	NA

J - Estimated concentration
U - Not detected at the associated r
SSPL - Site Specific Parameter List
NA - Not analyzed

Table 10

Analytical Results Summary - 2020 - 2025
Additional Sampling - MW88-12A, MW88-8A, MW88-8B
Cascades Containerboard Packaging Site
Niagara Falls, New York

Location ID:		MW88-8B	MW88-8B	MW88-8B	MW88-8B	MW88-8B	MW88-8B
Sample Name:		WG-11109628-100920-SG-020	WG-11109628-100721-SG-002	WG-125955398-100522-KM-019	WG-12595539-100623-KM-018	WG-12595539-101024-DB-019	WG-12595539-101325-DB-017
Sample Date:		10/09/20	10/7/2021	10/5/2022	10/06/2023	10/10/2024	10/13/2025
Parameters	**Unit**						
Volatile Organic Compounds							
1,1-Dichloroethane	µg/L	50 U	1.8 J	50 U	1000 U	40 U	50 U
1,2,4-Trichlorobenzene	µg/L	50 U	5.0 U	50 U	1000 U	40 U	50 U
1,2-Dichlorobenzene	µg/L	140	39	14 J	1000 U	40 U	50 U
1,3-Dichlorobenzene	µg/L	390	160	110	250 J	49	86
1,4-Dichlorobenzene	µg/L	640	430	270	410 J	200	340
2-Chlorotoluene	µg/L	660	530	330	590 J	320	540
3-Chlorotoluene	µg/L	50 U	3.9 J	50 U	1000 U	40 U	50 U
4-Chlorotoluene	µg/L	17 J	5.0 U	50 U	1000 U	40 U	50 U
Acetone	µg/L	250 U	25 U	250 U	5000 U	200 U	250 U
Benzene	µg/L	27 J	15	9.9 J	1000 U	40 U	50 U
Chlorobenzene	µg/L	1300	890	680	1400	340	560
cis-1,2-Dichloroethene	µg/L	830	850	62	2100	40 U	50 U
Tetrachloroethene	µg/L	590	800	65	2600	65	50 U
Toluene	µg/L	50 U	1.1 J	50 U	1000 U	40 U	50 U
Trichloroethene	µg/L	1400	1700	130	6400	120	53
Vinyl chloride	µg/L	160	59	31 J	190 J	40 U	50 U
Total SSPL VOCs	µg/L	6,154	5,479.80	1,701.90	13,940.00	1,094.00	1,579.00
Metals							
Arsenic	µg/L	15 U	15 U	15 U	15 U	15 U	15 U
Iron	µg/L	1400	1500	1700	1600	1800	1,500
Potassium	µg/L	186000	109000	94700	172000	66000	70,000
Sodium	µg/L	149000	123000	102000	103000	120000	130,000
General Chemistry							
Phenolics (total)	µg/L	6.9 J	10 U	10 U	10 U	10 U	10 U
Fumigant							
Chloropicrin	µg/L	0.50 U	0.50 U	0.51 U	NA	NA	NA

J - Estimated concentration
U - Not detected at the associated r
SSPL - Site Specific Parameter List
NA - Not analyzed

Attachment A

October 2025 Site Inspection

SITE INSPECTION FORM
CASCADES CONTAINERBOARD PACKAGING SITE
NIAGARA FALLS, NEW YORK
NYSDEC SITE NO. 932110

INSPECTION DATE: 10/6/25

INSPECTED BY: D Burr, G. Harlach

Overall Site

Has the Site use changed since the last inspection? *Yes* _____ *No* ✓

If yes, please describe the changes: _____

Have neighboring property uses changed? *Yes* _____ *No* ✓

If yes, please describe the changes: _____

Asphalt/Concrete Cover System

Potential Problems	***Concern***	***Corrective Action***
Potholes and cracks	• Deterioration of asphalt pavement or concrete • Safety hazard	• Use cold mix or hot mix asphalt and liquid bituminous material to patch, repair, or replace asphalt • For concrete, select repair method based on type and extent of damage
Ponding water	• Safety hazard	• No action required if ponding is minor • If ponding is significant, install drainage holes in asphalt/concrete pavement
Obstructions/Debris	• Safety hazard	• Remove obstructions as soon as possible

Inspect For	***Inspection Item Identified (circle one)***		***Action Required (circle one)***		***Comments***
Deterioration	Yes	(No)	Yes	(No)	
Obstruction/Debris	Yes	(No)	Yes	(No)	
Potholes	Yes	(No)	Yes	(No)	
Drainage/Puddles	Yes	(No)	Yes	(No)	
Other	Yes	(No)	Yes	(No)	

SITE INSPECTION FORM
CASCADES CONTAINERBOARD PACKAGING SITE
NIAGARA FALLS, NEW YORK
NYSDEC SITE NO. 932110

INSPECTION DATE: 10/6/25

INSPECTED BY: D. Burr, G. Haslach

Soil Cover System

Potential Problems	***Concern***	***Corrective Action***
Erosion	• Deterioration of integrity of crushed concrete cover • Washed out cover	• Backfill with additional imported crushed stone as needed • If persistent erosion occurs, erosion control mats may be required in selected areas
Animal burrows	• Potential for crushed concrete erosion • Safety hazard	• Contract exterminator regarding trapping and relocation of persistent rodents • Fill all holes with crushed stone
Damage to fence	• Potential access to Site by unauthorized persons	• No action if damage is minor and does not allow access by unauthorized persons • Repair fence if appropriate

Inspect For	***Inspection Item Identified (circle one)***		***Action Required (circle one)***		***Comments***
Erosion	Yes	(No)	Yes	No	
Animal Burrows	Yes	(No)	Yes	No	
Damage to fence	Yes	(No)	Yes	No	
Other	Yes	(No)	Yes	No	

SITE INSPECTION FORM
CASCADES CONTAINERBOARD PACKAGING SITE
NIAGARA FALLS, NEW YORK
NYSDEC SITE NO. 932110

INSPECTION DATE: 10/6/2025

INSPECTED BY: D. Burr, G. Harlach

Monitoring Wells

Potential Problems	***Concern***	***Corrective Action***
Missing locks	• Potential access by unauthorized persons	• Replace lock
Missing J-plugs	• Potential well contamination from surface water or rain water	• Replace J-plug
Concrete surface seal	• Damaged seal can allow water infiltration around casing and contamination of groundwater	• Contract drilling subcontractor to have surface seal replaced
Damaged flush-mount or stickup casing	• Damaged casing can result in damage to riser	• Contract drilling subcontractor to have casing replaced

Monitoring Well	***Well Condition (circle one)***			***Comments***
MW3C-08	(Good)	Fair	Needs Repair	
BH87-3A	(Good)	Fair	Needs Repair	
BH87-3B	(Good)	Fair	Needs Repair	
MW01-9A	(Good)	Fair	Needs Repair	
MW-9	(Good)	Fair	Needs Repair	
MW2C-08	(Good)	Fair	Needs Repair	
MW88-13A	Good	(Fair)	Needs Repair	Missing Lid. Has J-Plug
BH87-28	Good	Fair	(Needs Repair)	Damage to top of well/casing
MW-12	(Good)	Fair	Needs Repair	
MW1C-08	(Good)	Fair	Needs Repair	
MW-13	(Good)	Fair	Needs Repair	

Attachment B

May 2025 and November 2025 Semi-Annual Groundwater Discharge Reports

2055 Niagara Falls Boulevard
Niagara Falls, NY 14304
USA
www.ghd.com

Our ref: 12595539

May 27, 2025

Mr. Matthew LaGamba
Senior Industrial Waste Inspector
Niagara Falls Water Board
1201 Buffalo Avenue
Niagara Falls, NY 14303

Semi-annual Groundwater Discharge Report SIU Permit #78 Cascades Containerboard Packaging, Inc. (Former Frontier Chemical Site)

Dear Mr. LaGamba:

This semi-annual report has been prepared in accordance with Paragraph F of the Significant Industrial User Permit #78 effective on October 2, 2020 by the Niagara Falls Water Board to Cascades Containerboard Packaging, Inc. (formerly Norampac Industries, Inc. and formerly Frontier Chemical Site PRP Group) in Niagara Falls, New York (Site). The report presents the analytical data and field measurements taken for the semi-annual period covering December 2024 through May 2025. The data collected have been used to calculate the volume of groundwater and the chemical loading associated with the groundwater that discharges into the Falls Street Tunnel (FST) and the 47th Street Tunnel, which are located immediately adjacent to the former Frontier Chemical Site.

1. Data Collection

Groundwater levels were measured in all of the available monitoring wells in the A Zone and B Zone of the bedrock formation at the Site. The groundwater levels were measured on April 7, 2025, and the data are presented on attached Figures 1 and 2.

Groundwater samples were collected from the following monitoring wells on April 8 and 9, 2025 and analysed for the list of parameters specified in Paragraphs E and F of the Permit.

A Zone

– MW01-9A
– MW88-13A
– BH87-28
– BH-87-3A

B Zone

– BH87-3B
– MW-9
– MW-12
– MW-13

2. Flow Calculation

The groundwater flow volume is calculated based upon the thickness of the bedrock aquifer through which the groundwater flows, the aquifer permeability, and the gradient (slope) of the groundwater table. These three factors are combined, using Darcy's Law of hydraulic flow, to determine the flow volume (Flow = permeability x gradient x cross sectional saturated area). The groundwater gradients used in the flow calculation are presented on Figures 1 and 2. The calculation of groundwater flow is presented in Table 1. The Bedrock A Zone migration boundary along the south side of the Site has been divided into the west side and the east side. The October 2024 groundwater levels show that a portion of the A Zone groundwater discharge from the western half of the Site continues to discharge towards Royal Avenue. The most likely receiver of the A Zone groundwater in this area is the underlying B Zone, which is captured by the 47th Street Tunnel.

The calculated volume of groundwater discharge to the tunnels from the entire Site for the December 2024 through May 2025 time period is 1,651 gallons per day.

It is noted that the groundwater in the B Zone continues to flow to the east toward 47th Street with no migration to the south. This flow pattern is consistent with the pattern that developed after the closure of a portion of the FST and was first measured during the October 19, 2012 groundwater monitoring event.

3. Loading Calculation

The chemical loading to the tunnel sewer system is determined by multiplying groundwater flow volume by the concentration of the chemicals in the groundwater at the downgradient boundary of the Site, adjacent to where the groundwater enters the tunnels. Since there are multiple wells available along the tunnels, the chemical concentrations of this group of wells have been averaged to provide the best estimate of chemical loading. The concentrations of chemicals present in the April 2025 groundwater samples and the calculated chemical loadings to the tunnel sewers for each individual compound for each flow zone are presented in Tables 2a, 2b, 2c, 3a, and 3b. The total daily chemical loading for each compound is summarized in Table 4.

4. Discharge Limitations

The calculated volume of groundwater discharge to the tunnels and the associated chemical loadings have been compared to the limitations of the Permit (see Table 5). The calculations show that all parameters are within the Permit limits.

It is noted that, while it is expected that the chemical loadings will decrease over time, some variability should be expected in the groundwater hydraulics and concentrations used to calculate the infiltration conditions and, therefore, some flexibility is needed in the Permit limits for the Site. It is believed that the Permit limits are reasonable, given the current conditions and making allowance for some continued variation over time. However, if conditions change, modifications may be necessary.

5. Next Report

The next semi-annual report will be submitted to the Niagara Falls Water Board by November 30, 2025.

Should you have any questions, please contact me.

Regards,



Shaun McEvoy
Engineer

+1 716 205-1975
shaun.mcevoy@ghd.com

Attachments

Copy to: Dr. Abderrahman Zehraoui, Niagara Falls Water Board
Doug Williamson, Niagara Falls Water Board
Jennifer Booker, Greenpac Mill, LLC
Derek Claus, Greenpac Mill, LLC

REPUTED OWNER
CASCADES CONTAINERBOARD PACKAGING, INC.

MW88-4A
(557.14)

MW-14
(557.36)

MW88-1A
(NM)

MW90-1A
(557.30)

CHAIN LINK FENCE

CONCRETE PAD

DEMOLITION DEBRIS

PAVED

MW-17
(Destroyed 2015)

MW88-14A

MW88-8A
(554.48)

MW88-10A
(557.90)

REPUTED OWNER
CASCADES CONTAINERBOARD PACKAGING, INC.
L-3118, P-293

MW88-12A
(555.04)

MW-15
(Destroyed 2020)

BH87-2A
(557.70)

MW88-7A

MW88-2A

MW88-3A

BH87-5A*
(564.50)

47th STREET

MW-2
(NM)

REPUTED OWNER
GREEN PAC MILL
L-2362, P-255

MW88-9A
(Well Damaged)

47TH STREET TUNNEL

MW01-9A
(555.92)

MW88-6A

MW88-13A
(554.52)

BH87-3A
(556.27)

GRAVEL

BH87-28
(551.48)

ROYAL AVENUE

7' x 6' FALLS ST. SEWER TUNNEL (UNLINED)

SOUTHSIDE INTERCEPTOR SEWER TUNNEL (72-INCH DIAMETER)

REPUTED OWNER
PRAXAIR

h_1 h_2 h_3 h_4

$i_1 = \frac{h_1 - h_2}{L_1}$ $i_2 = \frac{h_3 - h_4}{L_2}$

LEGEND

● MW88-12A	A-ZONE MONITORING WELL LOCATION
⊗ MW88-2A	WELL DECOMMISSIONED DURING 2013 SOIL REMEDIATION
(557.30)	GROUNDWATER ELEVATION (ft. AMSL)
(NM)	NOT MEASURED
*	ANOMALOUS VALUE, NOT USED IN CONTOURING
555	GROUNDWATER CONTOUR (ft. AMSL)
	GROUNDWATER FLOW DIRECTION

0 50 100 ft
1" = 100 ft

N

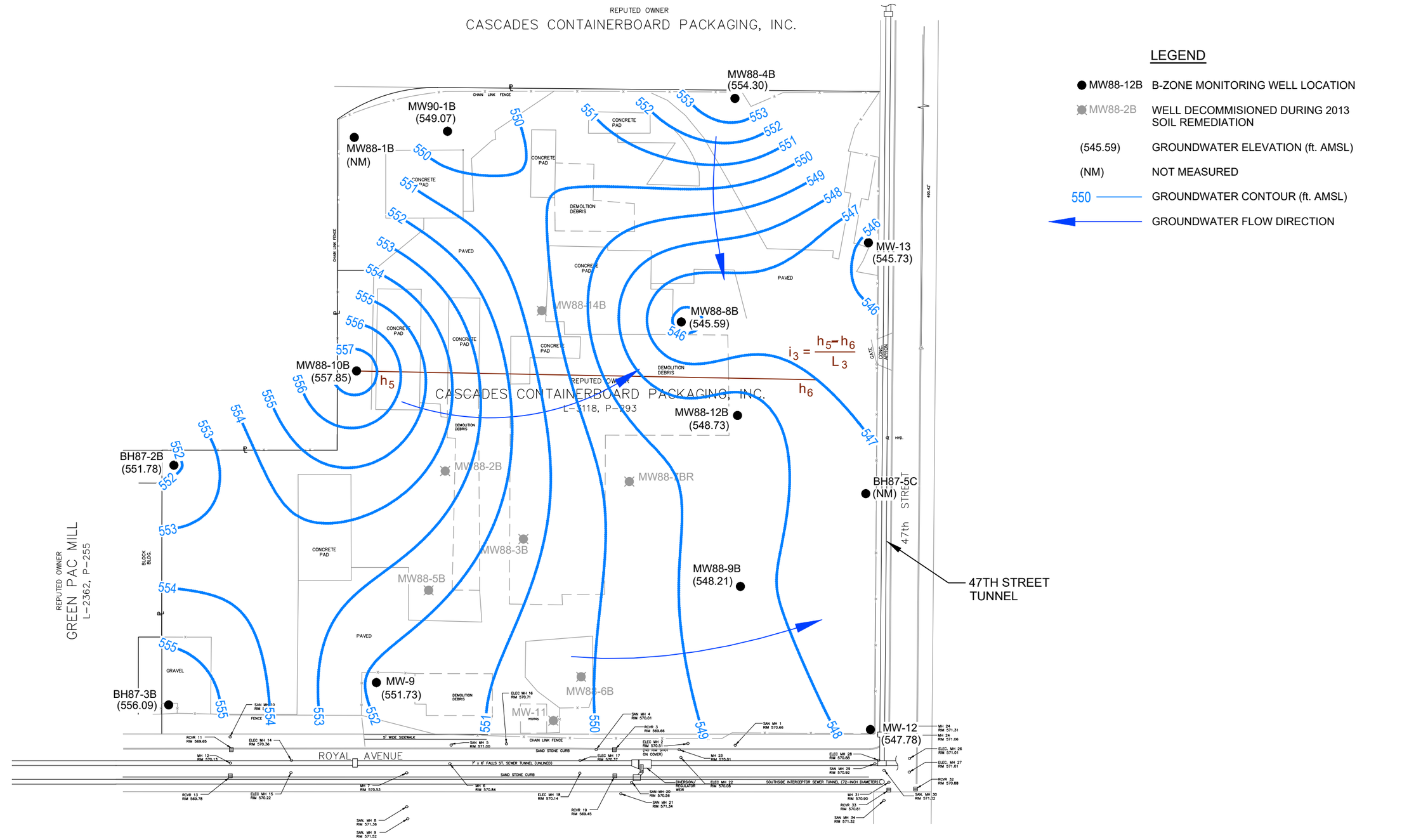
GHD

CASCADES CONTAINERBOARD PACKAGING, NIAGARA FALLS DIVISION NIAGARA FALLS, NEW YORK

GROUNDWATER CONTOURS - ZONE A APRIL 2025

Project No. **12595539**
Date **May 2025**

FIGURE 1



LEGEND

● MW88-12B	B-ZONE MONITORING WELL LOCATION
⊗ MW88-2B	WELL DECOMMISIONED DURING 2013 SOIL REMEDIATION
(545.59)	GROUNDWATER ELEVATION (ft. AMSL)
(NM)	NOT MEASURED
550	GROUNDWATER CONTOUR (ft. AMSL)
←	GROUNDWATER FLOW DIRECTION

0 50 100 ft
1" = 100 ft

N

GHD

CASCADES CONTAINERBOARD PACKAGING,
NIAGARA FALLS DIVISION
NIAGARA FALLS, NEW YORK

GROUNDWATER CONTOURS - ZONE B
APRIL 2025

Project No. **12595539**
Date **May 2025**

FIGURE 2

Filename: N:\US\Niagara Falls\Projects\564\12595539\Digital_Design\ACAD\Figures\LTR-LaGamba001-2595539-GHD-00-00-LTR-EN-D101_WA-LaGamba002.DWG Plot Date: 27 May 2025 10:38 AM

Table 1

Spring 2025
Groundwater Flow Rate Estimate
Cascades Containerboard Packaging, Inc. - Former Frontier Chemical Site
Niagara Falls, New York

A) Bedrock A-Zone (Figure 1)

Royal Avenue West Side
Flow Thickness: Upper 3 to 5 feet of bedrock
Head Difference = h1-h2
= 1.78 ft

Distance between h1 & h2 = 294 ft

i = 1.78/294 = 0.0061

Flow Width: 370 ft
K = 2.5×10^{-5} to 5.2×10^{-5} ft/sec
Flow rate: = 5ft x 0.0061 x 370 ft x 5.2×10^{-5} ft/sec
= 5.9×10^{-4} ft^3/sec
= 379.24 USgal/day
= 138,425 USgal/year

Royal Avenue East Side
Flow Thickness: Upper 3 to 5 feet of bedrock
Head Difference = h3-h4
= 5.82 ft

Distance between h3 & h4 = 762 ft

i = 5.82/762 = 0.0076

Flow Width: 385 ft
K = 2.5×10^{-5} to 5.2×10^{-5} ft/sec
Flow rate: = 5ft x 0.0076 x 385 ft x 5.2×10^{-5} ft/sec
= 7.6×10^{-4} ft^3/sec
= 491.66 USgal/day
= 179.455 USgal/year

47th Street South Side
Flow Thickness: Upper 3 to 5 feet of bedrock
Head Difference = h3-h4
= 5.82 ft

Distance between h_3 & h_4 = 762 ft

i = 5.82/762 = 0.0076

Flow Width: 400 ft
K = 2.5×10^{-5} to 5.2×10^{-5} ft/sec
Flow rate: = 5ft x 0.0076 x 400 ft x 5.2×10^{-5} ft/sec
= 7.9×10^{-4} ft^3/sec
= 510.81 USgal/day
= 186.447 USgal/year

Note:

See Figure 1 for locations of h_1, h_2, h_3 and h_4.

Spring 2025
Groundwater Flow Rate Estimate
Cascades Containerboard Packaging, Inc. - Former Frontier Chemical Site
Niagara Falls, New York

B) Bedrock B-Zone (Figure 2)

Flow Thickness: 2-foot-thick fracture zone from 8 to 10 feet beneath A-Zone
Flow from B-Zone discharges to the east

• Easterly Flow:

Head Difference = h_5-h_6 = 10.85 feet
Distance between h_5 & h_6 = 481 ft
Gradient (i): = 10.85/481 = 0.0226
Flow Width: = 660 ft
Hydraulic Conductivity: = 1.4 x 10^{-5} ft/sec
Flow rate: = 2ft x 0.0226 x 660 ft x 1.4 x 10^{-5} ft/sec
= 4.2 x 10^{-4} ft^3/sec
= 269.55 USgal/day
= 98,387 USgal/year

Note:

See Figure 2 for locations of h_5 and h_6.

Table 2A

A-Fracture Zone Bedrock, Royal Avenue West Side Discharge
April 2025 Chemical Flux
Cascades Containerboard Packaging, Inc. - Frontier Site
Niagara Falls, New York

Analyte	Adjacent Wells MW-01-9A 4/8/2025	Adjacent Wells BH87-3A 4/8/2025	Average Concentration (µg/L) Adjacent Wells	Mass Flux (pounds/day) Adjacent Wells
VOCs by Method OLM04.2 (µg/L)				
1,1-Dichloroethane	100 U	40 U	0.0	0.00000
1,2,4-Trichlorobenzene	100 U	40 U	0.0	0.00000
1,2-Dichlorobenzene	100 U	**85**	47.5	0.00015
1,3-Dichlorobenzene	100 U	**339**	174.5	0.00055
1,4-Dichlorobenzene	**310**	**420**	365.0	0.00115
Acetone	500 U	200 U	0.0	0.00000
Benzene	100 U	50 U	0.0	0.00000
Chlorobenzene	**870**	**400**	635.0	0.00201
cis-1,2-Dichloroethene	100 U	40 U	0.0	0.00000
Tetrachloroethene	100 U	40 U	0.0	0.00000
Toluene	100 U	40 U	0.0	0.00000
Trichloroethene	100 U	40 U	0.0	0.00000
Vinyl chloride	100 U	40 U	0.0	0.00000
Monochlorotoluene	**380**	**50**	215.0	0.00068
SVOCs by Method OLM04.2 (µg/L)				
Phenol	10 U	10 U	0.0	0.00000
TAL Metals by Method ILM04.0 (µg/L)				
Arsenic	**18**	15 U	9.8	0.00003
Iron	**810**	**4320**	2565.0	0.00811
Potassium	**1,100,000**	**46,000**	573000.0	1.81280
Sodium	**220,000**	**71,000**	145500.0	0.46032

Notes:

(1) For U Values where compound was detected in one or more of the listed wells, 10 percent of U value was used to calculate average concentration

(2) For U values where compound was not detected in any listed wells, the average concentration was set to 0 µg/L

(3) Flow rate = 379.24 US gallons/day

VOCs - Volatile Organic Compounds

SVOCs - Semivolatile Organic Compounds

TAL - Target Analyte List

J - Estimated concentration

Table 2B

A-Fracture Zone Bedrock, Royal Avenue East Side Discharge
April 2025 Chemical Flux
Cascades Containerboard Packaging, Inc. - Frontier Site
Niagara Falls, New York

Analyte	Adjacent Wells BH87-28 4/9/2025	Adjacent Wells MW-88-6A	Adjacent Wells MW-88-13A 4/9/2025	Average Concentration (µg/L) Adjacent Wells	Mass Flux (pounds/day) Adjacent Wells
VOCs by Method OLM04.2 (µg/L)					
1,1-Dichloroethane	40 U	**NS**	**40**	22.0	0.000090
1,2,4-Trichlorobenzene	40 U	**NS**	40 U	0.0	0.000000
1,2-Dichlorobenzene	**150**	**NS**	**190**	170.0	0.000697
1,3-Dichlorobenzene	**430**	**NS**	**77**	253.5	0.001040
1,4-Dichlorobenzene	**350**	**NS**	**110**	230.0	0.000943
Acetone	200 U	**NS**	200 U	0.0	0.000000
Benzene	**260**	**NS**	40 U	132.0	0.000541
Chlorobenzene	**730**	**NS**	**58**	394.0	0.001616
cis-1,2-Dichloroethene	**42**	**NS**	**160**	101.0	0.000414
Tetrachloroethene	40 U	**NS**	**47**	25.5	0.000105
Toluene	40 U	**NS**	40 U	0.0	0.000000
Trichloroethene	40 U	**NS**	**66**	35.0	0.000144
Vinyl chloride	**220**	**NS**	40 U	112.0	0.000459
Monochlorotoluene	**454**	**NS**	**197**	325.5	0.001335
SVOCs by Method OLM04.2 (µg/L)					
Phenol	**24**	**NS**	**14**	19.0	0.000078
TAL Metals by Method ILM04.0 (µg/L)					
Arsenic	**16**	**NS**	**22**	19.0	0.000078
Iron	**120**	**NS**	**230**	175.0	0.000718
Potassium	**3,100,000**	**NS**	**520,000**	1810000.0	7.423762
Sodium	**320,000**	**NS**	**91,000**	205500.0	0.842864

Notes:

(1) For U Values where compound was detected in one or more of the listed wells, 10 percent of U value was used to calculate average concentration

(2) For U values where compound was not detected in any listed wells, the average concentration was set to 0 µg/L

(3) Flow rate = 491.66 US gallons/day

NS - Not samplable (Abandoned)

VOCs - Volatile Organic Compounds

SVOCs - Semivolatile Organic Compounds

TAL - Target Analyte List

J - Estimated concentration

Table 2C

A-Fracture Zone Bedrock, 47th Street Discharge
April 2025 Chemical Flux
Cascades Containerboard Packaging, Inc. - Frontier Site
Niagara Falls, New York

Analyte	Adjacent Wells: BH87-28 4/9/2025	Adjacent Wells: BH87-5C	Average Concentration (µg/L): Adjacent Wells	Mass Flux (pounds/day): Adjacent Wells
VOCs by Method OLM04.2 (µg/L)				
1,1-Dichloroethane	40 U	NS	0.0	0.000000
1,2,4-Trichlorobenzene	40 U	NS	0.0	0.000000
1,2-Dichlorobenzene	**150**	NS	150.0	0.000639
1,3-Dichlorobenzene	**430**	NS	430.0	0.001832
1,4-Dichlorobenzene	**350**	NS	350.0	0.001491
Acetone	200 U	NS	0.0	0.000000
Benzene	**260**	NS	260.0	0.001108
Chlorobenzene	**730**	NS	730.0	0.003111
cis-1,2-Dichloroethene	**42**	NS	42.0	0.000179
Tetrachloroethene	40 U	NS	0.0	0.000000
Toluene	40 U	NS	0.0	0.000000
Trichloroethene	40 U	NS	0.0	0.000000
Vinyl chloride	**220**	NS	220.0	0.000937
Monochlorotoluene	**454**	NS	454.0	0.001935
SVOCs by Method OLM04.2 (µg/L)				
Phenol	**24**	NS	24.0	0.000102
TAL Metals by Method ILM04.0 (µg/L)				
Arsenic	**16**	NS	16.0	0.000068
Iron	**120**	NS	120.0	0.000511
Potassium	**3,100,000**	NS	3100000.0	13.209965
Sodium	**320,000**	NS	320000.0	1.363609

Notes:

(1) For U Values where compound was detected in one or more of the listed wells, 10 percent of U value was used to calculate average concentration

(2) For U values where compound was not detected in any listed wells, the average concentration was set to 0 µg/L

(3) Flow rate = 510.81 US gallons/day

NS - Well not sampleable

VOCs - Volatile Organic Compounds

SVOCs - Semivolatile Organic Compounds

TAL - Target Analyte List

J - Estimated concentration

Table 3A

B-Fracture Zone Bedrock - Southerly Discharge
April 2025 Chemical Flux
Cascades Containerboard Packaging, Inc. - Frontier Site
Niagara Falls, New York

Analyte	Adjacent Wells					Average Concentration (µg/L) Southerly Discharge	Mass Flux (pounds/day) Adjacent Wells
	MW-9 4/8/2025	MW-11	MW-12 4/9/2025	BH87-3B 4/8/2025	MW-88-6B		
VOCs by Method OLM04.2 (µg/L)							
1,1-Dichloroethane	**26 / 23**	**NS**	20 U	50 U	**NS**	10.5	0.0000
1,2,4-Trichlorobenzene	20 U / 20 U	**NS**	20 U	50 U	**NS**	0.0	0.0000
1,2-Dichlorobenzene	20 U / 20 U	**NS**	20 U	**72**	**NS**	25.3	0.0000
1,3-Dichlorobenzene	20 U / 20 U	**NS**	20 U	**130**	**NS**	44.7	0.0000
1,4-Dichlorobenzene	20 U / 20 U	**NS**	20 U	**220**	**NS**	74.7	0.0000
Acetone	100 U / 100 U	**NS**	100 U	250 U	**NS**	0.0	0.0000
Benzene	20 U / 20 U	**NS**	20 U	50 U	**NS**	0.0	0.0000
Chlorobenzene	20 U / 20 U	**NS**	20 U	**500**	**NS**	168.0	0.0000
cis-1,2-Dichloroethene	20 U / 20 U	**NS**	20 U	50 U	**NS**	0.0	0.0000
Tetrachloroethene	20 U / 20 U	**NS**	20 U	50 U	**NS**	0.0	0.0000
Toluene	20 U / 20 U	**NS**	20 U	50 U	**NS**	0.0	0.0000
Trichloroethene	20 U / 20 U	**NS**	20 U	50 U	**NS**	0.0	0.0000
Vinyl chloride	20 U / 20 U	**NS**	20 U	50 U	**NS**	0.0	0.0000
Monochlorotoluene	20 U / 20 U	**NS**	20 U	50 U	**NS**	0.0	0.0000
SVOCs by Method OLM04.2 (µg/L)							
Phenol	10 U	**NS**	10 U	10 U	**NS**	0.0	0.0000
TAL Metals by Method ILM04.0 (µg/L)							
Arsenic	**18 / 17**	**NS**	15 U	15 U	**NS**	6.8	0.0000
Iron	**310 / 420**	**NS**	**640**	**280**	**NS**	428.3	0.0000
Potassium	**1,300,000 / 1,300,000**	**NS**	**3,900,000**	**87,000**	**NS**	1762333.3	0.0000
Sodium	**220,000 / 210,000**	**NS**	**330,000**	**73,000**	**NS**	206000.0	0.0000

Notes:

(1) For U Values where compound was detected in one or more of the listed wells, 10 percent of U value was used to calculate average concentration
(2) For U values where compound was not detected in any listed well, the average concentration was set to 0 µg/L
(3) Flow rate = 0 US gallons/day
NS - Not sampleable (Abandoned)
VOCs - Volatile Organic Compounds
SVOCs - Semivolatile Organic Compounds
TAL - Target Analyte List
J - Estimated concentration

Table 3B

B-Fracture Zone Bedrock - Easterly Discharge
October 2024 Chemical Flux
Cascades Containerboard Packaging, Inc. - Frontier Site
Niagara Falls, New York

Analyte	Adjacent Wells			Average Concentration (µg/L)	Mass Flux (pounds/day)
	MW-12 4/9/2025	MW-13 4/8/2025	BH87-5A	Easterly Discharge	Adjacent Wells
VOCs by Method OLM04.2 (µg/L)					
1,1-Dichloroethane	20 U	5 U	NS	0.0	0
1,2,4-Trichlorobenzene	20 U	5 U	NS	0.0	0
1,2-Dichlorobenzene	20 U	5 U	NS	0.0	0
1,3-Dichlorobenzene	20 U	5 U	NS	0.0	0
1,4-Dichlorobenzene	20 U	5 U	NS	0.0	0
Acetone	100 U	25 U	NS	0.0	0
Benzene	20 U	20 U	NS	0.0	0
Chlorobenzene	20 U	20 U	NS	0.0	0
cis-1,2-Dichloroethene	20 U	**8.5**	NS	5.25	1.18054E-05
Tetrachloroethene	20 U	20 U	NS	0.0	0
Toluene	20 U	20 U	NS	0.0	0
Trichloroethene	20 U	20 U	NS	0.0	0
Vinyl chloride	20 U	20 U	NS	0.0	0
Monochlorotoluene	20 U	**45**	NS	23.50	5.2843E-05
SVOCs by Method OLM04.2 (µg/L)					
Phenol	10 U	10 U	NS	0.0	0
TAL Metals by Method ILM04.0 (µg/L)					
Arsenic	15 U	15 U	NS	0.0	0
Iron	**640**	**6,100**	NS	3370.0	0.007577917
Potassium	**3,900,000**	**42,000**	NS	1971000.0	4.43206946
Sodium	**330,000**	**140,000**	NS	235000.0	0.528430402

Notes:

(1) For U Values where compound was detected in one or more of the listed wells, 10 percent of U value was used to calculate average concentration

(2) For U values where compound was not detected in any listed well, the average concentration was set to 0 µg/L

(3) Flow rate = 269.55 US gallons/day

NS - Not samplable (Abandoned)

VOCs - Volatile Organic Compounds

SVOCs - Semivolatile Organic Compounds

TAL - Target Analyte List

J - Estimated concentration

Table 4

Total Chemical Flux
April 2025
Cascades Containerboard Packaging, Inc. - Frontier Site
Niagara Falls, New York

Analyte	Zone A Royal Ave West Side Mass Flux Adjacent Wells (pounds/day)	Zone A Royal Avenue East Side Mass Flux Adjacent Wells (pounds/day)	Zone A 47th Street Mass Flux Adjacent Wells (pounds/day)	Zone B Easterly Flow Mass Flux Adjacent Wells (pounds/day)	Total (pounds/day)
VOCs by Method OLM04.2 (µg/L)					
1,1-Dichloroethane	0.0000	0.0001	0.0000	0.0000	0.0001
1,2,4-Trichlorobenzene	0.0000	0.0000	0.0000	0.0000	0.0000
1,2-Dichlorobenzene	0.0002	0.0007	0.0006	0.0000	0.0015
1,3-Dichlorobenzene	0.0006	0.0010	0.0018	0.0000	0.0034
1,4-Dichlorobenzene	0.0012	0.0009	0.0015	0.0000	0.0036
Acetone	0.0000	0.0000	0.0000	0.0000	0.0000
Benzene	0.0000	0.0005	0.0011	0.0000	0.0016
Chlorobenzene	0.0020	0.0016	0.0031	0.0000	0.0067
cis-1,2-Dichloroethene	0.0000	0.0004	0.0002	< 0.0001	0.0006
Tetrachloroethene	0.0000	0.0001	0.0000	0.0000	0.0001
Toluene	0.0000	0.0000	0.0000	0.0000	0.0000
Trichloroethene	0.0000	0.0001	0.0000	0.0000	0.0001
Vinyl chloride	0.0000	0.0005	0.0009	0.0000	0.0014
Monochlorotoluene	0.0007	0.0013	0.0019	< 0.0001	0.0040
Total VOCs	0.0045	0.0074	0.0112	0.0001	0.0232
SVOCs by Method OLM04.2 (µg/L)					
Phenol	0.0000	<0.0001	0.0001	0.0000	0.0002
TAL Metals by Method ILM04.0 (µg/L)					
Arsenic	0.0000	<0.0001	0.0001	0.0000	0.0002
Iron	0.0081	0.000718	0.0005	0.0076	0.0169
Potassium	1.8128	7.423762	13.2100	4.4321	26.8786
Sodium	0.4603	0.842864	1.3636	0.5284	3.1952

Notes:

VOCs - Volatile Organic Compounds
SVOCs - Semivolatile Organic Compounds
TAL - Target Analyte List

Table 5

Comparisons of Loading to Interim Discharge Limitations
Cascades Containerboard Packaging, Inc. - Frontier Site – April 2025
Niagara Falls, New York

Outfall Number Effluent Parameter	Discharge Limitations		Units	Minimum Monitoring Requirements		Calculated Daily Discharge May 2025 pounds/day Except as noted (gallons/day)
	Annual Average	Daily Maximum		Measurement Frequency	Sample Type	
MS #1 Flow		4000	gallons/day	2 per year	See E-2	1,651
MS #1 Arsenic		0.008	pounds/day	2 per year	See E-3	0.0002
MS#1 Iron		0.24	pounds/day	2 per year	See E-3	0.0169
MS #1 Potassium		400	pounds/day	2 per year	See E-3	26.8786
MS #1 Sodium		40.0	pounds/day	2 per year	See E-3	3.1952
MS #1 T. Phenol		0.05	pounds/day	2 per year	See E-3	0.0002
MS #1 1,1-Dichloroethane		0.13	pounds/day	2 per year	See E-3	0.0001
MS#1 1,2,4-Trichlorobenzene		0.026	pounds/day	2 per year	See E-3	0.0000
MS #1 1,2-Dichlorobenzene		0.26	pounds/day	2 per year	See E-3	0.0015
MS #1 1,3-Dichlorobenzene		0.11	pounds/day	2 per year	See E-3	0.0034
MS#1 1,4-Dichlorobenzene		0.17	pounds/day	2 per year	See E-3	0.0036
MS #1 Acetone		0.026	pounds/day	2 per year	See E-3	0.0000
MS #1 Benzene		0.15	pounds/day	2 per year	See E-3	0.0016
MS #1 Chlorobenzene		0.10	pounds/day	2 per year	See E-3	0.0067
MS #1 Cis-1,2-Dichloroethene		0.060	pounds/day	2 per year	See E-3	0.0006
MS #1 Tetrachloroethene		0.05	pounds/day	2 per year	See E-3	0.0001
MS#1 Toluene		0.03	pounds/day	2 per year	See E-3	0.0000
MS #1 Trichloroethene		0.15	pounds/day	2 per year	See E-3	0.0001
MS #1 Vinyl Chloride		0.012	pounds/day	2 per year	See E-3	0.0014
MS #1 Monochlorotoluene		0.2	pounds/day	2 per year	See E-3	0.0040

NIAGARA FALLS WATER BOARD
WASTEWATER FACILITIES
ENFORCEMENT DIVISION

SELF-MONITORING REPORT
SIGNIFICANT INDUSTRIAL USERS

PERMIT NO. 078 SEMI-ANNUAL DECEMBER 2024 – MAY 2025

INDUSTRY NAME: Cascades Containerboard Packaging, Inc. – Frontier Site

Pursuant to federal pretreatment reporting requirements and the Niagara Falls Water Board Regulations Part 1960, Significant Industrial Users shall submit periodic self-monitoring and compliance reports. Such reports shall be submitted using this form, according to the following schedule:

Quarterly	-	1st Quarter by February 28th
	-	2nd Quarter by May 31st
	-	3rd Quarter by August 31st
	-	4th Quarter by November 30th
Semi-Annual	-	by May 31st and
	-	by November 30th

Each section of this report form shall be filled out for those parameters listed in Section “E” of the company’s Wastewater Discharge Permit. The analysis results must be reported in both concentration and mass. In addition, the calculated annual average load (pounds/day) for each pollutant shall also be reported.

The samples shall be collected at the monitoring points identified in the user permit. Identification of those points in this report should be as listed on page two (2) of the User Permit.

SELF-MONITORING REPORT
Significant Industrial Users (SIUs)

PAGE 2

PART II of the report is the Compliance Monitoring section. The user is obligated to determine if the analysis results indicates compliance. All violations noted should be brought to the Niagara Falls Water Board – Wastewater Facilities attention immediately upon noting and should also be reported in this section. The analysis result should be compared against all applicable federal, state and local standards and limitations. If no violations are noted then **"NO VIOLATIONS"** should appear on the report.

Pursuant to 40 CFR Part 403.12g of the Federal Standards, all violations noted must be followed up by a sample recollect/analysis and the results submitted to the Niagara Falls Water Board within thirty (30) days of first becoming aware of the violation.

Pursuant to 40 CFR Part 403.12g all Periodic Self-Monitoring Reports must be signed by a "responsible company official" certifying the following statement:

> I, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed: 

Title: Consultant for Cascades Containerboard Packaging, Inc.

Date: May 27, 2025

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **Cascades Containerboard Packaging, Inc. – Frontier Site**

SIU PERMIT NO.: **078**

SAMPLE LOCATION: **Monitoring Wells in Bedrock A Zone Royal Avenue- West Side**

	RESULTS µg/L	/ µg/L	RESULTS pounds/day	/pounds/day	ANNUAL AVERAGE µg/L	ANNUAL AVERAGE pounds/day
DATE SAMPLED: April 8, 2025						
24-HOUR FLOW IN MGD	0.00028				0.00027	
BENZENE	0.0		0.0000		0.0	0.0000
MONOCHLOROBENZENE	635		0.0020		628	0.0017
1,2 – DICHLOROBENZENE	47.5		0.0002		23.8	0.0001
1,3 – DICHLOROBENZENE	175		0.0006		168	0.0005
1,4 – DICHLOROBENZENE	365		0.0012		325	0.0009
1,2,4 - TRICHLOROBENZENE	0.0		0.0000		0.0	0.0000
1,1 - DICHLOROETHANE	0.0		0.0000		0.0	0.0000
CIS – 1,2 - DICHLOROETHYLENE	0.0		0.0000		0.0	0.0000
ACETONE	0.0		0.0000		0.0	0.0000
TETRACHLOROETHYLENE	0.0		0.0000		0.0	0.0000
TOLUENE	0.0		0.0000		0.0	0.0000
TRICHLOROETHYLENE	0.0		0.0000		0.0	0.0000
VINYL CHLORIDE	0.0		0.0000		0.0	0.0008
MONOCHLOROTOLUENES	215		0.0007		128	0.0004
TOTAL PHENOL	0.0		0.0000		0.0	0.0000
ARSENIC	9.8		<0.0001		11.8	<0.0001
IRON	2,565		0.0081		8,975	0.0207
POTASSIUM	573,000		1.8128		578,750	1.5367
SODIUM	145,500		0.4603		130,500	0.3547

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **Cascades Containerboard Packaging, Inc. – Frontier Site**

SIU PERMIT NO.: **078**

SAMPLE LOCATION: **Monitoring Wells in Bedrock A Zone - Royal Avenue East Side**

	RESULTS µg/L / µg/L		RESULTS pounds/day/pounds/day		ANNUAL AVERAGE µg/L	ANNUAL AVERAGE pounds/day
DATE SAMPLED: April 9, 2025						
24-HOUR FLOW IN MGD	0.00049				0.00043	
BENZENE	132		0.0005		186	0.0006
MONOCHLOROBENZENE	394		0.0016		462	0.0016
1,2 - DICHLOROBENZENE	170		0.0007		740	0.0023
1,3 - DICHLOROBENZENE	254		0.0010		372	0.0013
1,4 - DICHLOROBENZENE	230		0.0009		523	0.0017
1,2,4 - TRICHLOROBENZENE	0.0		0.0000		0.0	0.0000
1,1 - DICHLOROETHANE	22		0.0001		82.5	0.0003
CIS – 1,2 - DICHLOROETHYLENE	101		0.0004		414	0.0013
ACETONE	0.0		0.0000		0.0	0.0000
TETRACHLOROETHYLENE	25.5		0.0001		104	0.0004
TOLUENE	0.0		0.0000		0.0	0.0000
TRICHLOROETHYLENE	35		0.0001		139	0.0004
VINYL CHLORIDE	112		0.0005		99.8	0.0004
MONOCHLOROTOLUENES	326		0.0013		810	0.0026
TOTAL PHENOL	19		0.0001		65	0.0002
ARSENIC	19		0.0001		33.8	0.0001
IRON	175		0.0007		633	0.0020
POTASSIUM	1,810,000		7.4238		2,040,000	7.1198
SODIUM	205,500		0.8429		227,750	0.7968

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **Cascades Containerboard Packaging, Inc. – Frontier Site**

SIU PERMIT NO.: **078**

SAMPLE LOCATION: **Monitoring Wells in Bedrock A-Zone 47th Street**

	RESULTS µg/L	/ µg/L	RESULTS pounds/day	/pounds/day	ANNUAL AVERAGE µg/L	ANNUAL AVERAGE pounds/day
DATE SAMPLED: April 9, 2025						
24-HOUR FLOW IN MGD	0.00052				0.00045	
BENZENE	260		0.0011		230	0.0009
MONOCHLOROBENZENE	730		0.0031		610	0.0024
1,2 - DICHLOROBENZENE	150		0.0006		135	0.0005
1,3 - DICHLOROBENZENE	430		0.0018		360	0.0014
1,4 - DICHLOROBENZENE	350		0.0015		290	0.0012
1,2,4 - TRICHLOROBENZENE	0.0		0.0000		0.0	0.0000
1,1-DICHLOROETHANE	0.0		0.0000		0.0	0.0000
CIS – 1,2 - DICHLOROETHYLENE	42		0.0002		46.5	0.0002
ACETONE	0.0		0.0000		0.0	0.0000
TETRACHLOROETHYLENE	0.0		0.0000		0.0	0.0000
TOLUENE	0.0		0.0000		0.0	0.0000
TRICHLOROETHYLENE	0.0		0.0000		0.0	0.0000
VINYL CHLORIDE	220		0.0009		0.0	0.0000
MONOCHLOROTOLUENES	454		0.0019		375	0.0015
TOTAL PHENOL	24		0.0001		102	0.0004
ARSENIC	16		0.0001		26.5	0.0001
IRON	120		0.0005		350	0.0013
POTASSIUM	3,100,000		13.2100		3,400,000	13.1400
SODIUM	320,000		1.3636		310,00	1.2823

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **Cascades Containerboard Packaging, Inc. – Frontier Site**

SIU PERMIT NO.: **078**

SAMPLE LOCATION: **Monitoring Wells in Bedrock B Zone (South)**

	RESULTS µg/L	/ µg/L	RESULTS pounds/day	/pounds/day	ANNUAL AVERAGE µg/L	ANNUAL AVERAGE pounds/day
DATE SAMPLED: April 8 and 9, 2025						
24-HOUR FLOW IN MGD	0.000000[1]				0.000000	
BENZENE	0.0		0.0000		16.9	0.0000
MONOCHLOROBENZENE	168		0.0000		226	0.0000
1,2 - DICHLOROBENZENE	25.3		0.0000		22.7	0.0000
1,3 - DICHLOROBENZENE	44.7		0.0000		53.9	0.0000
1,4 - DICHLOROBENZENE	74.7		0.0000		115.9	0.0000
1,2,4 - TRICHLOROBENZENE	0.0		0.0000		0.0	0.0000
1,1 - DICHLOROETHANE	10.5		0.0000		5.3	0.0000
CIS - 1,2 - DICHLOROETHYLENE	0.0		0.0000		0.0	0.0000
ACETONE	0.0		0.0000		0.0	0.0000
TETRACHLOROETHYLENE	0.0		0.0000		0.0	0.0000
TOLUENE	0.0		0.0000		0.0	0.0000
TRICHLOROETHYLENE	0.0		0.0000		0.0	0.0000
VINYL CHLORIDE	0.0		0.0000		0.0	0.0000
MONOCHLOROTOLUENES	0.0		0.0000		56	0.0000
TOTAL PHENOL	0.0		0.0000		0.0	0.0000
						0.0000
ARSENIC	6.8		0.0000		7.1	0.0000
IRON	428		0.0000		310	0.0000
POTASSIUM	1,762,333		0.0000		1,709,500	0.0000
SODIUM	206,000		0.0000		199,000	0.0000

[1] No discharge to the south in the B-Zone for the reporting period of December 2024 through May 2025.

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **Cascades Containerboard Packaging, Inc. – Frontier Site**

SIU PERMIT NO.: **078**

SAMPLE LOCATION: **Monitoring Wells in Bedrock B Zone (East)**

	RESULTS µg/L	/ µg/L	RESULTS pounds/day	/pounds/day	ANNUAL AVERAGE µg/L	ANNUAL AVERAGE pounds/day
DATE SAMPLED: April 8 and 9, 2025						
24-HOUR FLOW IN MGD	0.00027				0.00026	
BENZENE	0.0		0.0000		0.0	0.0000
MONOCHLOROBENZENE	0.0		0.0000		0.0	0.0000
1,2 - DICHLOROBENZENE	0.0		0.0000		0.0	0.0000
1,3 - DICHLOROBENZENE	0.0		0.0000		0.0	0.0001
1,4 - DICHLOROBENZENE	0.0		0.0000		0.0	0.0000
1,2,4 - TRICHLOROBENZENE	0.0		0.0000		0.0	0.0000
1,1 - DICHLOROETHANE	0.0		0.0000		0.0	0.0000
CIS – 1,2 - DICHLOROETHYLENE	5.3		< 0.0001		25.7	<0.0001
ACETONE	0.0		0.0000		0.0	0.0000
TETRACHLOROETHYLENE	0.0		0.0000		0.0	0.0000
TOLUENE	0.0		0.0000		0.0	0.0000
TRICHLOROETHYLENE	0.0		0.0000		0.0	0.0000
VINYL CHLORIDE	0.0		0.0000		14.3	<0.0001
MONOCHLOROTOLUENES	23.5		< 0.0001		70.8	0.0001
TOTAL PHENOL	0.0		0.0000		0.0	0.0000
ARSENIC	0.0		0.0000		5.2	<0.0001
IRON	3,370		0.0076		1,942	0.0044
POTASSIUM	1,971,000		4.4321		2,067,250	4.4363
SODIUM	235,000		0.5284		240,000	0.5362

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **Cascades Containerboard Packaging, Inc. – Frontier Site**

SIU PERMIT NO.: **078**

SAMPLE LOCATION: **Total Sum of Bedrock A and B Zones**

	RESULTS µg/L	/ µg/L	RESULTS pounds/day	/pounds/day	ANNUAL AVERAGE µg/L	ANNUAL AVERAGE pounds/day
DATE SAMPLED: April 8 and 9, 2025						
24-HOUR FLOW IN MGD	0.001651				0.001466	
BENZENE			0.0016			0.0015
MONOCHLOROBENZENE			0.0067			0.0057
1,2 - DICHLOROBENZENE			0.0015			0.0030
1,3 - DICHLOROBENZENE			0.0034			0.0031
1,4 - DICHLOROBENZENE			0.0036			0.0038
1,2,4 - TRICHLOROBENZENE			0.0000			0.0000
1,1 - DICHLOROETHANE			0.0001			0.0003
CIS – 1,2 - DICHLOROETHYLENE			0.0006			0.0016
ACETONE			0.0000			0.0000
TETRACHLOROETHYLENE			0.0001			0.0003
TOLUENE			0.0000			0.0000
TRICHLOROETHYLENE			0.0001			0.0004
VINYL CHLORIDE			0.0014			0.0009
MONOCHLOROTOLUENES			0.0040			0.0047
TOTAL PHENOL			0.0002			0.0006
ARSENIC			0.0002			0.0003
IRON			0.0169			0.0283
POTASSIUM			26.8786			26.2326
SODIUM			3.1952			2.9699

PART II

COMPLIANCE MONITORING

SIU NAME: Cascades Containerboard Packaging, Inc. – Frontier Site

PERMIT NO.: 078

NO VIOLATIONS

VIOLATION PARAMETER	DATE	FLOW [MGD]	SAMPLE POINT LOCATION	ACTUAL* DISCHARGE	PERMIT LIMIT	TYPE** LIMIT VIOLATED

NOTE:

* - Actual discharge – list actual analytical results and appropriate units.

** - Type Limit Violated – List Type:

A.A. = Annual Average

D.M. = Daily Maximum

L.L. = Local Limits (Regulation 1960.5)

ADMIN\WINWORD\LAGAMBA\SIU\SELF-MONITORING REPORT FORM - BLANK

Phone: 716-691-2600 Fax: 716-691-7991

Eurofins | Environment Testing

Client Information

Client Contact: Sheri Finn	Sampler: DBurr & G.Harlach	Lab PM: Heckler, Denise D	Carrier Tracking No(s): Hand Delivered	COC No: 480-203951-41645.1
Company: GHD Services Inc.	Phone:	E-Mail: Denise.Heckler@et.eurofinsus.com	State of Origin: NY	Page: Page ~~1 of 3~~ 1 of 1
Address: 2055 Niagara Falls Blvd., Suite 3	PWSID:	Due Date Requested:		Job #:
City: Niagara Falls		TAT Requested (days):		
State, Zip: NY, 14304		Compliance Project: Δ Yes Δ No		
Phone: 716-297-6150(Tel)		PO #: Purchase Order Requested		
Email: sheri.finn@ghd.com		WO #: 12595539		
Project Name: 12595539 , Cascades		Project #: 48017427		
Site: Cascades		SSOW#:		

Analysis Requested

Preservation Codes: A - HCL; S - H2SO4; D - HNO3

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	624.1_PREC - SSPL VOCs	420.4_NP - Phenols	200.7 - SSPL Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	S	D		
TB-12595539-040825	4/8/25	9:30	G	Water			X			2	
TB-12595539-040925	4/9/25	10:15	G	Water			X			2	
WG-12595539-040825-DB-001	4/8/25	11:10	G	Water		X	X	X	X	~~6~~ 18	MS/MSD
WG-12595539-040825-GH-002	4/8/25	10:55	G	Water			X	X	X	6	
WG-12595539-040825-DB-003	4/8/25	13:35	G	Water			X	X	X	6	
WG-12595539-040825-GH-004	4/8/25	1540	G	Water			X	X	X	6	
WG-12595539-040825-DB-005	4/8/25	13:35	G	Water			X	X	X	6	
WG-12595539-040925-GH-006	4/9/25	13:35	G	Water			X	X	X	6	
WG-12595539-040825-DB-007	4/8/25	1645	G	Water			X	X	X	6	
WG-12595539-040925-GH-008	4/9/25	1425	G	Water			X	X	X	6	
WG-12595539-040925-DB-009	4/9/25	1210	G	Water			X	X	X	6	

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 4/9/25 4:00	Company: GHD	Received by:	Date/Time: 4-9-25 1600	Company: TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

2055 Niagara Falls Boulevard
Niagara Falls, New York 14304
United States
ghd.com

Our ref: 12595539

November 21, 2025

Mr. Matthew LaGamba
Senior Industrial Waste Inspector
Niagara Falls Water Board
1201 Buffalo Avenue
Niagara Falls, NY 14303

Semi-Annual Groundwater Discharge Report SIU Permit #78 Cascades Containerboard Packaging, Inc. (Former Frontier Chemical Site)

Dear Mr. LaGamba:

This semi-annual report has been prepared in accordance with Paragraph F of the Significant Industrial User Permit #78 effective on October 1, 2025 by the Niagara Falls Water Board to Cascades Containerboard Packaging, Inc. (formerly Norampac Industries, Inc. and formerly Frontier Chemical Site PRP Group) in Niagara Falls, New York (Site). The report presents the analytical data and field measurements taken for the semi-annual period covering June 2025 through November 2025. The data collected have been used to calculate the volume of groundwater and the chemical loading associated with the groundwater that discharges into the Falls Street Tunnel (FST) and the 47th Street Tunnel, which are located immediately adjacent to the former Frontier Chemical Site.

1. Data Collection

Groundwater levels were measured in all of the available monitoring wells in the A Zone and B Zone of the bedrock formation at the Site. The groundwater levels were measured on October 6, 2025, and the data are presented on attached Figures 1 and 2.

Groundwater samples were collected from the following monitoring wells on October 8 - 13, 2025 and analyzed for the list of parameters specified in Paragraphs E and F of the Permit.

A Zone

- MW01-9A
- MW88-13A
- BH87-28
- BH-87-3A

B Zone

– BH87-3B
– MW-9
– MW-12
– MW-13

2. Flow Calculation

The groundwater flow volume is calculated based upon the thickness of the bedrock aquifer through which the groundwater flows, the aquifer permeability, and the gradient (slope) of the groundwater table. These three factors are combined, using Darcy's Law of hydraulic flow, to determine the flow volume (Flow = permeability x gradient x cross sectional saturated area). The groundwater gradients used in the flow calculation are presented on Figures 1 and 2. The calculation of groundwater flow is presented in Table 1. The Bedrock A Zone migration boundary along the south side of the Site has been divided into the west side and the east side. The October 2025 groundwater levels show that a portion of the A Zone groundwater discharge from the western half of the Site continues to discharge towards Royal Avenue. The most likely receiver of the A Zone groundwater in this area is the underlying B Zone, which is captured by the 47th Street Tunnel.

The calculated volume of groundwater discharge to the tunnels from the entire Site for the June 2025 through November 2025 time period is 1,603 gallons per day.

It is noted that the groundwater in the B Zone continues to flow to the east toward 47th Street with no migration to the south. This flow pattern is consistent with the pattern that developed after the closure of a portion of the FST and was first measured during the October 19, 2012 groundwater monitoring event.

3. Loading Calculation

The chemical loading to the tunnel sewer system is determined by multiplying groundwater flow volume by the concentration of the chemicals in the groundwater at the downgradient boundary of the Site, adjacent to where the groundwater enters the tunnels. Since there are multiple wells available along the tunnels, the chemical concentrations of this group of wells have been averaged to provide the best estimate of chemical loading. The concentrations of chemicals present in the October 2025 groundwater samples and the calculated chemical loadings to the tunnel sewers for each individual compound for each flow zone are presented in Tables 2a, 2b, 2c, 3a, and 3b. The total daily chemical loading for each compound is summarized in Table 4.

4. Discharge Limitations

The calculated volume of groundwater discharge to the tunnels and the associated chemical loadings have been compared to the limitations of the Permit (see Table 5). The calculations show that all parameters are within the Permit limits.

It is noted that, while it is expected that the chemical loadings will decrease over time, some variability should be expected in the groundwater hydraulics and concentrations used to calculate the infiltration conditions and, therefore, some flexibility is needed in the Permit limits for the Site. It is believed that the Permit limits are reasonable, given the current conditions and making allowance for some continued variation over time, however, if conditions change, modifications may be necessary.

5. Next Report

The next semi-annual report will be submitted to the Niagara Falls Water Board by May 31, 2026.

Should you have any questions, please contact me.

Regards,



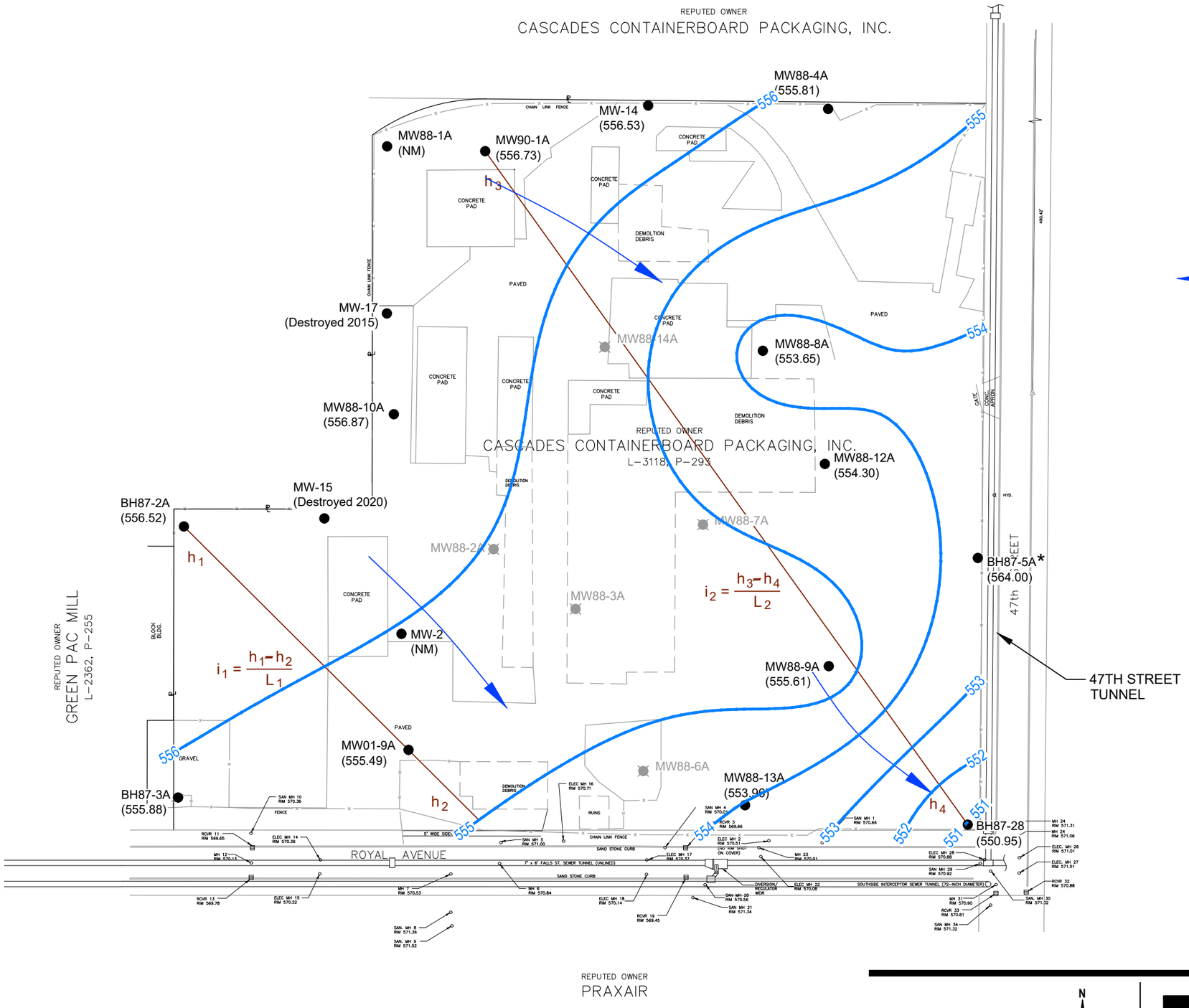
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Attachments

Copy to: Dr. Abderrahman Zehraoui, Niagara Falls Water Board
Doug Williamson, Niagara Falls Water Board
Jennifer Booker, Greenpac Mill, LLC
John Atkinson, Greenpac Mill, LLC

Figures



LEGEND

● MW88-12A	A-ZONE MONITORING WELL LOCATION
⊗ MW88-2A	WELL DECOMMISSIONED DURING 2013 SOIL REMEDIATION
(554.12)	GROUNDWATER ELEVATION (ft. AMSL)
(NM)	NOT MEASURED
*	ANOMALOUS VALUE, NOT USED IN CONTOURING
555	GROUNDWATER CONTOUR (ft. AMSL)
	GROUNDWATER FLOW DIRECTION

0 50 100 ft
1" = 100 ft

N

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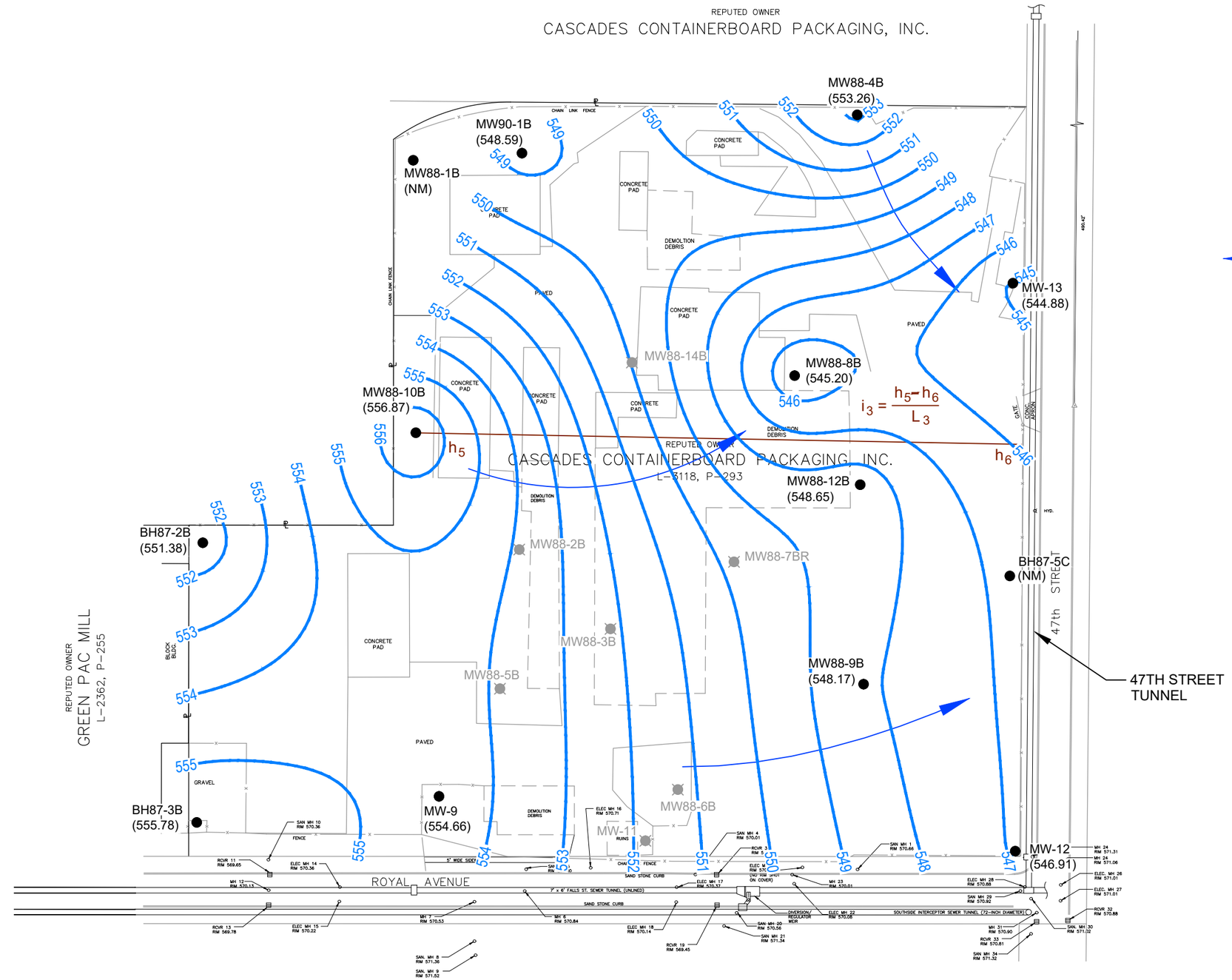
CASCADES CONTAINERBOARD PACKAGING, NIAGARA FALLS DIVISION
NIAGARA FALLS, NEW YORK

GROUNDWATER CONTOURS - ZONE A
OCTOBER 2025

Project No. **12595539**
Date **November 2025**

FIGURE 1

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Plot Date: 11 November 2025 1:57 PM



LEGEND

● MW88-12B	B-ZONE MONITORING WELL LOCATION
● MW88-2B	WELL DECOMMISIONED DURING 2013 SOIL REMEDIATION
(556.83)	GROUNDWATER ELEVATION (ft. AMSL)
(NM)	NOT MEASURED
550	GROUNDWATER CONTOUR (ft. AMSL)
	GROUNDWATER FLOW DIRECTION

0 50 100 ft
1" = 100 ft

N

GHD

CASCADES CONTAINERBOARD PACKAGING,
NIAGARA FALLS DIVISION
NIAGARA FALLS, NEW YORK

GROUNDWATER CONTOURS - ZONE B
OCTOBER 2025

Project No. **12595539**
Date **November 2025**

FIGURE 2

Filename: C:\ADSK\ACCDocs\GHD Services Pty Ltd\11230862-Enviro Projs\Project Files\12595539\01 WIP\Env\Figures\LTR-LaGamba002\12595539-GHD-00-00-LTR-EN-D102_WA-LaGamba002.dwg
Plot Date: 07 November 2025 11:45 AM

Tables

Table 1

Fall 2025
Groundwater Flow Rate Estimate
Cascades Containerboard Packaging, Inc. - Former Frontier Chemical Site
Niagara Falls, New York

A) Bedrock A-Zone (Figure 1)

Royal Avenue West Side
Flow Thickness: Upper 3 to 5 feet of bedrock
Head Difference = h1-h2
= 1.52 ft

Distance between h1 & h2 = 272 ft

i = 1.52/272 = 0.0056

Flow Width: 350 ft
K = 2.5×10^{-5} to 5.2×10^{-5} ft/sec
Flow rate: = 5ft x 0.0056 x 350 ft x 5.2×10^{-5} ft/sec
= 5.2×10^{-4} ft^3/sec
= 329.60 USgal/day
= 120,303 USgal/year

Royal Avenue East Side
Flow Thickness: Upper 3 to 5 feet of bedrock
Head Difference = h3-h4
= 5.78 ft

Distance between h3 & h4 = 741 ft

i = 5.78/741 = 0.0078

Flow Width: 381 ft
K = 2.5×10^{-5} to 5.2×10^{-5} ft/sec
Flow rate: = 5ft x 0.0078 x 381 ft x 5.2×10^{-5} ft/sec
= 7.7×10^{-4} ft^3/sec
= 499.35 USgal/day
= 182,264 USgal/year

47th Street South Side
Flow Thickness: Upper 3 to 5 feet of bedrock
Head Difference = h3-h4
= 5.78 ft

Distance between h_3 & h_4 = 741 ft

i = 5.78/741 = 0.0078

Flow Width: 400 ft
K = 2.5×10^{-5} to 5.2×10^{-5} ft/sec
Flow rate: = 5ft x 0.0078 x 400 ft x 5.2×10^{-5} ft/sec
= 8.1×10^{-4} ft^3/sec
= 524.25 USgal/day
= 191,353 USgal/year

Note:

See Figure 1 for locations of h_1, h_2, h_3 and h_4.

Fall 2025
Groundwater Flow Rate Estimate
Cascades Containerboard Packaging, Inc. - Former Frontier Chemical Site
Niagara Falls, New York

B) Bedrock B-Zone (Figure 2)

Flow Thickness: 2-foot-thick fracture zone from 8 to 10 feet beneath A-Zone
Flow from B-Zone discharges to the east

• Easterly Flow:

Head Difference = h_5-h_6 = 10.87 feet
Distance between h_5 & h_6 = 519 ft
Gradient (i): = 10.87/519 = 0.0209
Flow Width: = 660 ft
Hydraulic Conductivity: = 1.4 x 10^{-5} ft/sec
Flow rate: = 2ft x 0.0209 x 660 ft x 1.4 x 10^{-5} ft/sec
= 3.9 x 10^{-4} ft^3/sec
= 249.61 USgal/day
= 91,108 USgal/year

Note:

See Figure 2 for locations of h_5 and h_6.

Table 2A

A-Fracture Zone Bedrock, Royal Avenue West Side Discharge
October 2025 Chemical Flux
Cascades Containerboard Packaging, Inc. - Frontier Site
Niagara Falls, New York

Analyte	Adjacent Wells MW-01-9A 10/8/2025	Adjacent Wells BH87-3A 10/9/2025	Average Concentration (µg/L) Adjacent Wells	Mass Flux (pounds/day) Adjacent Wells
VOCs by Method OLM04.2 (µg/L)				
1,1-Dichloroethane	50 U	10 U	0.0	0.00000
1,2,4-Trichlorobenzene	50 U	10 U	0.0	0.00000
1,2-Dichlorobenzene	50 U	**43**	24.0	0.00007
1,3-Dichlorobenzene	50 U	**97**	51.0	0.00014
1,4-Dichlorobenzene	**140**	**140**	140.0	0.00038
Acetone	250 U	50 U	0.0	0.00000
Benzene	50 U	10 U	0.0	0.00000
Chlorobenzene	**340**	**130**	235.0	0.00065
cis-1,2-Dichloroethene	50 U	**14**	9.5	0.00003
Tetrachloroethene	50 U	**11**	8.0	0.00002
Toluene	50 U	10 U	0.0	0.00000
Trichloroethene	50 U	**14**	9.5	0.00003
Vinyl chloride	50 U	10 U	0.0	0.00000
Monochlorotoluene	**160**	**17**	88.5	0.00024
SVOCs by Method OLM04.2 (µg/L)				
Phenol	10 U	10 U	0.0	0.00000
TAL Metals by Method ILM04.0 (µg/L)				
Arsenic	**19**	15 U	10.3	0.00003
Iron	**2,600**	**77**	1338.5	0.00368
Potassium	**960,000**	**17,000**	488500.0	1.34317
Sodium	**200,000**	**44,000**	122000.0	0.33545

Notes:

(1) For U Values where compound was detected in one or more of the listed wells, 10 percent of U value was used to calculate average concentration

(2) For U values where compound was not detected in any listed wells, the average concentration was set to 0 µg/L

(3) Flow rate = 329.60 US gallons/day

VOCs - Volatile Organic Compounds

SVOCs - Semivolatile Organic Compounds

TAL - Target Analyte List

J - Estimated concentration

Table 2B

A-Fracture Zone Bedrock, Royal Avenue East Side Discharge
October 2025 Chemical Flux
Cascades Containerboard Packaging, Inc. - Frontier Site
Niagara Falls, New York

Analyte	Adjacent Wells BH87-28 10/13/2025	MW-88-6A	MW-88-13A 10/8/2025	Average Concentration (µg/L) Adjacent Wells	Mass Flux (pounds/day) Adjacent Wells
VOCs by Method OLM04.2 (µg/L)					
1,1-Dichloroethane	50 U	**NS**	**250**	127.5	0.000531
1,2,4-Trichlorobenzene	50 U	**NS**	200 U	0.0	0.000000
1,2-Dichlorobenzene	**67**	**NS**	**2400**	1233.5	0.005138
1,3-Dichlorobenzene	**220**	**NS**	**660**	440.0	0.001833
1,4-Dichlorobenzene	**170**	**NS**	**1300**	735.0	0.003062
Acetone	250 U	**NS**	1000 U	0.0	0.000000
Benzene	**220**	**NS**	**270**	245.0	0.001021
Chlorobenzene	**490**	**NS**	**560**	525.0	0.002187
cis-1,2-Dichloroethene	50 U	**NS**	**1600**	802.5	0.003343
Tetrachloroethene	50 U	**NS**	200 U	0.0	0.000000
Toluene	50 U	**NS**	200 U	0.0	0.000000
Trichloroethene	50 U	**NS**	200 U	0.0	0.000000
Vinyl chloride	**210**	**NS**	200 U	115.0	0.000479
Monochlorotoluene	**235**	**NS**	**2140**	1187.5	0.004947
SVOCs by Method OLM04.2 (µg/L)					
Phenol	**140**	**NS**	**78**	109.0	0.000454
TAL Metals by Method ILM04.0 (µg/L)					
Arsenic	**18**	**NS**	**65**	41.5	0.000173
Iron	**10,000**	**NS**	**6,300**	8150.0	0.033950
Potassium	**3,500,000**	**NS**	**830,000**	2165000.0	9.018692
Sodium	**340,000**	**NS**	**170,000**	255000.0	1.062248

Notes:

(1) For U Values where compound was detected in one or more of the listed wells, 10 percent of U value was used to calculate average concentration

(2) For U values where compound was not detected in any listed wells, the average concentration was set to 0 µg/L

(3) Flow rate = 499.35 US gallons/day

NS - Not sampleable (Abandoned)

VOCs - Volatile Organic Compounds

SVOCs - Semivolatile Organic Compounds

TAL - Target Analyte List

J - Estimated concentration

Table 2C

A-Fracture Zone Bedrock, 47th Street Discharge
October 2025 Chemical Flux
Cascades Containerboard Packaging, Inc. - Frontier Site
Niagara Falls, New York

Analyte	Adjacent Wells: BH87-28 10/13/2025	Adjacent Wells: BH87-5C	Average Concentration (µg/L): Adjacent Wells	Mass Flux (pounds/day): Adjacent Wells
VOCs by Method OLM04.2 (µg/L)				
1,1-Dichloroethane	50 U	NS	0.0	0.000000
1,2,4-Trichlorobenzene	50 U	NS	0.0	0.000000
1,2-Dichlorobenzene	**67**	NS	67.0	0.000293
1,3-Dichlorobenzene	**220**	NS	220.0	0.000962
1,4-Dichlorobenzene	**170**	NS	170.0	0.000743
Acetone	250 U	NS	0.0	0.000000
Benzene	**220**	NS	220.0	0.000962
Chlorobenzene	**490**	NS	490.0	0.002143
cis-1,2-Dichloroethene	50 U	NS	0.0	0.000000
Tetrachloroethene	50 U	NS	0.0	0.000000
Toluene	50 U	NS	0.0	0.000000
Trichloroethene	50 U	NS	0.0	0.000000
Vinyl chloride	**210**	NS	210.0	0.000918
Monochlorotoluene	**235**	NS	235.0	0.001028
SVOCs by Method OLM04.2 (µg/L)				
Phenol	**140**	NS	140.0	0.000612
TAL Metals by Method ILM04.0 (µg/L)				
Arsenic	**18**	NS	18.0	0.000079
Iron	**10,000**	NS	10000.0	0.043734
Potassium	**3,500,000**	NS	3500000.0	15.306894
Sodium	**340,000**	NS	340000.0	1.486955

Notes:

(1) For U Values where compound was detected in one or more of the listed wells, 10 percent of U value was used to calculate average concentration

(2) For U values where compound was not detected in any listed wells, the average concentration was set to 0 µg/L

(3) Flow rate = 524.25 US gallons/day

NS - Well not sampleable

VOCs - Volatile Organic Compounds

SVOCs - Semivolatile Organic Compounds

TAL - Target Analyte List

J - Estimated concentration

Table 3A

B-Fracture Zone Bedrock - Southerly Discharge
October 2025 Chemical Flux
Cascades Containerboard Packaging, Inc. - Frontier Site
Niagara Falls, New York

Analyte	Adjacent Wells					Average Concentration (µg/L) Southerly Discharge	Mass Flux (pounds/day) Adjacent Wells
	MW-9 10/8/2025	MW-11	MW-12 10/8/2025	BH87-3B 10/9/2025	MW-88-6B		
VOCs by Method OLM04.2 (µg/L)							
1,1-Dichloroethane	100 U	**NS**	100 U / 20 U	25 U	**NS**	0.0	0.0000
1,2,4-Trichlorobenzene	100 U	**NS**	100 U / 20 U	25 U	**NS**	0.0	0.0000
1,2-Dichlorobenzene	100 U	**NS**	100 U / 20 U	**35**	**NS**	17.0	0.0000
1,3-Dichlorobenzene	**180**	**NS**	100 U / 20 U	**63**	**NS**	83.0	0.0000
1,4-Dichlorobenzene	**410**	**NS**	100 U / 20 U	**110**	**NS**	175.3	0.0000
Acetone	500 U	**NS**	500 U / 100 U	130 U	**NS**	0.0	0.0000
Benzene	**320**	**NS**	100 U / 20 U	25 U	**NS**	109.5	0.0000
Chlorobenzene	**650**	**NS**	100 U / 20 U	**270**	**NS**	308.7	0.0000
cis-1,2-Dichloroethene	100 U	**NS**	100 U / 20 U	25 U	**NS**	0.0	0.0000
Tetrachloroethene	100 U	**NS**	100 U / 20 U	25 U	**NS**	0.0	0.0000
Toluene	100 U	**NS**	100 U / 20 U	25 U	**NS**	0.0	0.0000
Trichloroethene	100 U	**NS**	100 U / 20 U	25 U	**NS**	0.0	0.0000
Vinyl chloride	100 U	**NS**	100 U / 20 U	25 U	**NS**	0.0	0.0000
Monochlorotoluene	**480**	**NS**	100 U / 20 U	25 U	**NS**	162.8	0.0000
SVOCs by Method OLM04.2 (µg/L)							
Phenol	**42**	**NS**	10 U	10 U	**NS**	14.7	0.0000
TAL Metals by Method ILM04.0 (µg/L)							
Arsenic	**15**	**NS**	15 U / 15 U	15 U	**NS**	6.0	0.0000
Iron	**40,000**	**NS**	**230 / 330**	**230**	**NS**	13503.3	0.0000
Potassium	**960,000**	**NS**	**3900000 / 3900000**	**41,000**	**NS**	1633666.7	0.0000
Sodium	**210,000**	**NS**	**330000 / 330000**	**47,000**	**NS**	195666.7	0.0000

Notes:

(1) For U Values where compound was detected in one or more of the listed wells, 10 percent of U value was used to calculate average concentration
(2) For U values where compound was not detected in any listed well, the average concentration was set to 0 µg/L
(3) Flow rate = 0 US gallons/day
NS - Not sampleable (Abandoned)
VOCs - Volatile Organic Compounds
SVOCs - Semivolatile Organic Compounds
TAL - Target Analyte List
J - Estimated concentration

Table 3B

B-Fracture Zone Bedrock - Easterly Discharge
October 2024 Chemical Flux
Cascades Containerboard Packaging, Inc. - Frontier Site
Niagara Falls, New York

Analyte	Adjacent Wells			Average Concentration (µg/L)	Mass Flux (pounds/day)
	MW-12 10/8/2025	MW-13 10/13/2025	BH87-5A	Easterly Discharge	Adjacent Wells
VOCs by Method OLM04.2 (µg/L)					
1,1-Dichloroethane	100 U / 20 U	20 U	NS	0.0	0
1,2,4-Trichlorobenzene	100 U / 20 U	20 U	NS	0.0	0
1,2-Dichlorobenzene	100 U / 20 U	20 U	NS	0.0	0
1,3-Dichlorobenzene	100 U / 20 U	20 U	NS	0.0	0
1,4-Dichlorobenzene	100 U / 20 U	20 U	NS	0.0	0
Acetone	500 U / 100 U	100 U	NS	0.0	0
Benzene	100 U / 20 U	20 U	NS	0.0	0
Chlorobenzene	100 U / 20 U	20 U	NS	0.0	0
cis-1,2-Dichloroethene	100 U / 20 U	**32**	NS	19.00	3.95636E-05
Tetrachloroethene	100 U / 20 U	20 U	NS	0.0	0
Toluene	100 U / 20 U	20 U	NS	0.0	0
Trichloroethene	100 U / 20 U	20 U	NS	0.0	0
Vinyl chloride	100 U / 20 U	20 U	NS	0.0	0
Monochlorotoluene	100 U / 20 U	**174**	NS	90.00	0.000187407
SVOCs by Method OLM04.2 (µg/L)					
Phenol	10 U	10 U	NS	0.0	0
TAL Metals by Method ILM04.0 (µg/L)					
Arsenic	15 U / 15 U	17	NS	9.25	1.92612E-05
Iron	**230 / 330**	**30,000**	NS	15140.0	0.03152597
Potassium	**3900000 / 3900000**	**29,000**	NS	1964500.0	4.090671557
Sodium	**330000 / 330000**	**240,000**	NS	285000.0	0.593454514

Notes:

(1) For U Values where compound was detected in one or more of the listed wells, 10 percent of U value was used to calculate average concentration

(2) For U values where compound was not detected in any listed well, the average concentration was set to 0 µg/L

(3) Flow rate = 249.61 US gallons/day

NS - Not sampleable (Abandoned)

VOCs - Volatile Organic Compounds

SVOCs - Semivolatile Organic Compounds

TAL - Target Analyte List

J - Estimated concentration

Table 4

Total Chemical Flux
October 2025
Cascades Containerboard Packaging, Inc. - Frontier Site
Niagara Falls, New York

Analyte	Zone A Royal Ave West Side Mass Flux Adjacent Wells (pounds/day)	Zone A Royal Avenue East Side Mass Flux Adjacent Wells (pounds/day)	Zone A 47th Street Mass Flux Adjacent Wells (pounds/day)	Zone B Easterly Flow Mass Flux Adjacent Wells (pounds/day)	Total (pounds/day)
VOCs by Method OLM04.2 (µg/L)					
1,1-Dichloroethane	0.0000	0.0005	0.0000	0	0.0005
1,2,4-Trichlorobenzene	0.0000	0.0000	0.0000	0	0.0000
1,2-Dichlorobenzene	0.0001	0.0051	0.0003	0	0.0055
1,3-Dichlorobenzene	0.0001	0.0018	0.0010	0	0.0029
1,4-Dichlorobenzene	0.0004	0.0031	0.0007	0	0.0042
Acetone	0.0000	0.0000	0.0000	0	0.0000
Benzene	0.0000	0.0010	0.0010	0	0.0020
Chlorobenzene	0.0006	0.0022	0.0021	0	0.0050
cis-1,2-Dichloroethene	< 0.0001	0.0033	0.0000	< 0.0001	0.0034
Tetrachloroethene	< 0.0001	0.0000	0.0000	0	<0.0001
Toluene	0.0000	0.0000	0.0000	0	0.0000
Trichloroethene	< 0.0001	0.0000	0.0000	0	<0.0001
Vinyl chloride	0.0000	0.0005	0.0009	0	0.0014
Monochlorotoluene	0.0002	0.0049	0.0010	0.0002	0.0064
Total VOCs	0.0016	0.0225	0.0070	0.0002	0.0314
SVOCs by Method OLM04.2 (µg/L)					
Phenol	0.0000	0.000454	0.0006	0.0000	0.0011
TAL Metals by Method ILM04.0 (µg/L)					
Arsenic	< 0.0001	0.000173	< 0.0001	< 0.0001	0.0003
Iron	0.0037	0.033950	0.0437	0.0315	0.1129
Potassium	1.3432	9.018692	15.3069	4.0907	29.7594
Sodium	0.3354	1.062248	1.4870	0.5935	3.4781

Notes:

VOCs - Volatile Organic Compounds
SVOCs - Semivolatile Organic Compounds
TAL - Target Analyte List

Table 5

Comparisons of Loading to Interim Discharge Limitations
Cascades Containerboard Packaging, Inc. - Frontier Site – October 2025
Niagara Falls, New York

Outfall Number Effluent Parameter	Discharge Limitations		Units	Minimum Monitoring Requirements		Calculated Daily Discharge November 2025 pounds/day Except as noted (gallons/day)
	Annual Average	Daily Maximum		Measurement Frequency	Sample Type	
MS #1 Flow		4000	gallons/day	2 per year	See E-2	1,603
MS #1 Arsenic		0.008	pounds/day	2 per year	See E-3	0.0003
MS#1 Iron		0.24	pounds/day	2 per year	See E-3	0.1129
MS #1 Potassium		400	pounds/day	2 per year	See E-3	29.7594
MS #1 Sodium		40.0	pounds/day	2 per year	See E-3	3.4781
MS #1 T. Phenol		0.05	pounds/day	2 per year	See E-3	0.0011
MS #1 1,1-Dichloroethane		0.13	pounds/day	2 per year	See E-3	0.0005
MS#1 1,2,4-Trichlorobenzene		0.026	pounds/day	2 per year	See E-3	0.0000
MS #1 1,2-Dichlorobenzene		0.26	pounds/day	2 per year	See E-3	0.0055
MS #1 1,3-Dichlorobenzene		0.11	pounds/day	2 per year	See E-3	0.0029
MS#1 1,4-Dichlorobenzene		0.17	pounds/day	2 per year	See E-3	0.0042
MS #1 Acetone		0.026	pounds/day	2 per year	See E-3	0.0000
MS #1 Benzene		0.15	pounds/day	2 per year	See E-3	0.0020
MS #1 Chlorobenzene		0.10	pounds/day	2 per year	See E-3	0.0050
MS #1 Cis-1,2-Dichloroethene		0.060	pounds/day	2 per year	See E-3	0.0034
MS #1 Tetrachloroethene		0.05	pounds/day	2 per year	See E-3	0.0000
MS#1 Toluene		0.03	pounds/day	2 per year	See E-3	0.0000
MS #1 Trichloroethene		0.15	pounds/day	2 per year	See E-3	< 0.0001
MS #1 Vinyl Chloride		0.012	pounds/day	2 per year	See E-3	0.0014
MS #1 Monochlorotoluene		0.2	pounds/day	2 per year	See E-3	0.0064

Attachment 1

NIAGARA FALLS WATER BOARD
WASTEWATER FACILITIES
ENFORCEMENT DIVISION

SELF-MONITORING REPORT
SIGNIFICANT INDUSTRIAL USERS

PERMIT NO. 078 SEMI-ANNUAL JUNE 2025 – NOVEMBER 2025

INDUSTRY NAME: Cascades Containerboard Packaging, Inc. – Frontier Site

Pursuant to federal pretreatment reporting requirements and the Niagara Falls Water Board Regulations Part 1960, Significant Industrial Users shall submit periodic self-monitoring and compliance reports. Such reports shall be submitted using this form, according to the following schedule:

Quarterly	-	1st Quarter by February 28th
	-	2nd Quarter by May 31st
	-	3rd Quarter by August 31st
	-	4th Quarter by November 30th
Semi-Annual	-	by May 31st and
	-	by November 30th

Each section of this report form shall be filled out for those parameters listed in Section "E" of the company's Wastewater Discharge Permit. The analysis results must be reported in both concentration and mass. In addition, the calculated annual average load (pounds/day) for each pollutant shall also be reported.

The samples shall be collected at the monitoring points identified in the user permit. Identification of those points in this report should be as listed on page two (2) of the User Permit.

SELF-MONITORING REPORT
Significant Industrial Users (SIUs)

PAGE 2

PART II of the report is the Compliance Monitoring section. The user is obligated to determine if the analysis results indicates compliance. All violations noted should be brought to the Niagara Falls Water Board – Wastewater Facilities attention immediately upon noting and should also be reported in this section. The analysis result should be compared against all applicable federal, state and local standards and limitations. If no violations are noted then **"NO VIOLATIONS"** should appear on the report.

Pursuant to 40 CFR Part 403.12g of the Federal Standards, all violations noted must be followed up by a sample recollect/analysis and the results submitted to the Niagara Falls Water Board within thirty (30) days of first becoming aware of the violation.

Pursuant to 40 CFR Part 403.12g all Periodic Self-Monitoring Reports must be signed by a "responsible company official" certifying the following statement:

> I, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed: 

Title: Consultant for Cascades Containerboard Packaging, Inc.

Date: November 21, 2025

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **Cascades Containerboard Packaging, Inc. – Frontier Site**

SIU PERMIT NO.: **078**

SAMPLE LOCATION: **Monitoring Wells in Bedrock A Zone Royal Avenue- West Side**

	RESULTS µg/L	/ µg/L	RESULTS pounds/day	/pounds/day	ANNUAL AVERAGE µg/L	ANNUAL AVERAGE pounds/day
DATE SAMPLED: October 8 and 9, 2025						
24-HOUR FLOW IN MGD	0.00033				0.00031	
BENZENE	0.0		0.0000		0.0	0.0000
MONOCHLOROBENZENE	235		0.0007		435	0.0014
1,2 – DICHLOROBENZENE	24		<0.0001		35.8	0.0001
1,3 – DICHLOROBENZENE	51		0.0001		113	0.0004
1,4 – DICHLOROBENZENE	140		0.0004		253	0.0008
1,2,4 - TRICHLOROBENZENE	0.0		0.0000		0.0	0.0000
1,1 - DICHLOROETHANE	0.0		0.0000		0.0	0.0000
CIS – 1,2 - DICHLOROETHYLENE	9.5		<0.0001		4.8	<0.0001
ACETONE	0.0		0.0000		0.0	0.0000
TETRACHLOROETHYLENE	8.0		<0.0001		4.0	<0.0001
TOLUENE	0.0		0.0000		0.0	0.0000
TRICHLOROETHYLENE	9.5		<0.0001		4.8	<0.0001
VINYL CHLORIDE	0.0		0.0000		0.0	0.0008
MONOCHLOROTOLUENES	88.5		0.0002		152	0.0005
TOTAL PHENOL	0.0		0.0000		0.0	0.0000
ARSENIC	10.3		<0.0001		10.1	<0.0001
IRON	1,339		0.0037		1,952	0.0059
POTASSIUM	488,500		1.3432		530,750	1.5780
SODIUM	122,000		0.3355		133,750	0.3979

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **Cascades Containerboard Packaging, Inc. – Frontier Site**

SIU PERMIT NO.: **078**

SAMPLE LOCATION: **Monitoring Wells in Bedrock A Zone - Royal Avenue East Side**

	RESULTS µg/L / µg/L		RESULTS pounds/day/pounds/day		ANNUAL AVERAGE µg/L	ANNUAL AVERAGE pounds/day
DATE SAMPLED: October 8 and 13, 2025						
24-HOUR FLOW IN MGD	0.00050				0.00049	
BENZENE	245		0.0010		189	0.0008
MONOCHLOROBENZENE	525		0.0022		460	0.0019
1,2 - DICHLOROBENZENE	1,233		0.0051		702	0.0029
1,3 - DICHLOROBENZENE	440		0.0019		347	0.0015
1,4 - DICHLOROBENZENE	735		0.0031		483	0.0020
1,2,4 - TRICHLOROBENZENE	0.0		0.0000		0.0	0.0000
1,1 - DICHLOROETHANE	128		0.0005		75	0.0003
CIS – 1,2 - DICHLOROETHYLENE	803		0.0033		452	0.0019
ACETONE	0.0		0.0000		0.0	0.0000
TETRACHLOROETHYLENE	0.0		0.0000		12.8	<0.0001
TOLUENE	0.0		0.0000		0.0	0.0000
TRICHLOROETHYLENE	0.0		0.0000		17.5	<0.0001
VINYL CHLORIDE	115		0.0005		114	0.0005
MONOCHLOROTOLUENES	1,188		0.0049		757	0.0031
TOTAL PHENOL	109		0.0005		64	0.0003
ARSENIC	41.5		0.0001		30.3	0.0001
IRON	8,150		0.0340		4,162	0.0174
POTASSIUM	2,165,000		9.0187		1,987,500	8.2213
SODIUM	255,000		1.0622		230,250	0.9526

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **Cascades Containerboard Packaging, Inc. – Frontier Site**

SIU PERMIT NO.: **078**

SAMPLE LOCATION: **Monitoring Wells in Bedrock A-Zone 47th Street**

	RESULTS µg/L	/ µg/L	RESULTS pounds/day	/pounds/day	ANNUAL AVERAGE µg/L	ANNUAL AVERAGE pounds/day
DATE SAMPLED: October 13, 2025						
24-HOUR FLOW IN MGD	0.00052				0.00052	
BENZENE	220		0.0010		240	0.0010
MONOCHLOROBENZENE	490		0.0021		610	0.0026
1,2 - DICHLOROBENZENE	67.0		0.0003		109	0.0005
1,3 - DICHLOROBENZENE	220		0.0010		325	0.0014
1,4 - DICHLOROBENZENE	170		0.0007		260	0.0011
1,2,4 - TRICHLOROBENZENE	0.0		0.0000		0.0	0.0000
1,1-DICHLOROETHANE	0.0		0.0000		0.0	0.0000
CIS – 1,2 - DICHLOROETHYLENE	0.0		0.0000		21	0.0001
ACETONE	0.0		0.0000		0.0	0.0000
TETRACHLOROETHYLENE	0.0		0.0000		0.0	0.0000
TOLUENE	0.0		0.0000		0.0	0.0000
TRICHLOROETHYLENE	0.0		0.0000		0.0	0.0000
VINYL CHLORIDE	210		0.0009		215	0.0009
MONOCHLOROTOLUENES	235		0.0010		345	0.0015
TOTAL PHENOL	140		0.0006		82	0.0004
ARSENIC	18		< 0.0001		17.0	<0.0001
IRON	10,000		0.0437		5,060	0.0221
POTASSIUM	3,500,000		15.3069		3,300,000	14.2585
SODIUM	320,000		1.4870		320,000	1.4253

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **Cascades Containerboard Packaging, Inc. – Frontier Site**

SIU PERMIT NO.: **078**

SAMPLE LOCATION: **Monitoring Wells in Bedrock B Zone (South)**

	RESULTS µg/L	/ µg/L	RESULTS pounds/day	/pounds/day	ANNUAL AVERAGE µg/L	ANNUAL AVERAGE pounds/day
DATE SAMPLED: October 8 and 9, 2025						
24-HOUR FLOW IN MGD	0.000000[1]				0.000000	
BENZENE	110		0.0000		55.0	0.0000
MONOCHLOROBENZENE	309		0.0000		239	0.0000
1,2 - DICHLOROBENZENE	17.0		0.0000		21.2	0.0000
1,3 - DICHLOROBENZENE	83.0		0.0000		63.9	0.0000
1,4 - DICHLOROBENZENE	175		0.0000		125	0.0000
1,2,4 - TRICHLOROBENZENE	0.0		0.0000		0.0	0.0000
1,1 - DICHLOROETHANE	0.0		0.0000		5.3	0.0000
CIS - 1,2 - DICHLOROETHYLENE	0.0		0.0000		0.0	0.0000
ACETONE	0.0		0.0000		0.0	0.0000
TETRACHLOROETHYLENE	0.0		0.0000		0.0	0.0000
TOLUENE	0.0		0.0000		0.0	0.0000
TRICHLOROETHYLENE	0.0		0.0000		0.0	0.0000
VINYL CHLORIDE	0.0		0.0000		0.0	0.0000
MONOCHLOROTOLUENES	163		0.0000		81.5	0.0000
TOTAL PHENOL	14.7		0.0000		7.4	0.0000
						0.0000
ARSENIC	6.0		0.0000		6.4	0.0000
IRON	13,503		0.0000		6,966	0.0000
POTASSIUM	1,633,667		0.0000		1,698,000	0.0000
SODIUM	195,667		0.0000		200,834	0.0000

[1] No discharge to the south in the B-Zone for the reporting period of June 2025 through November 2025.

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **Cascades Containerboard Packaging, Inc. – Frontier Site**

SIU PERMIT NO.: **078**

SAMPLE LOCATION: **Monitoring Wells in Bedrock B Zone (East)**

	RESULTS µg/L	/ µg/L	RESULTS pounds/day	/pounds/day	ANNUAL AVERAGE µg/L	ANNUAL AVERAGE pounds/day
DATE SAMPLED: October 8 and 13, 2025						
24-HOUR FLOW IN MGD	0.00025				0.00026	
BENZENE	0.0		0.0000		0.0	0.0000
MONOCHLOROBENZENE	0.0		0.0000		0.0	0.0000
1,2 - DICHLOROBENZENE	0.0		0.0000		0.0	0.0000
1,3 - DICHLOROBENZENE	0.0		0.0000		0.0	0.0001
1,4 - DICHLOROBENZENE	0.0		0.0000		0.0	0.0000
1,2,4 - TRICHLOROBENZENE	0.0		0.0000		0.0	0.0000
1,1 - DICHLOROETHANE	0.0		0.0000		0.0	0.0000
CIS – 1,2 - DICHLOROETHYLENE	19.0		< 0.0001		12.2	<0.0001
ACETONE	0.0		0.0000		0.0	0.0000
TETRACHLOROETHYLENE	0.0		0.0000		0.0	0.0000
TOLUENE	0.0		0.0000		0.0	0.0000
TRICHLOROETHYLENE	0.0		0.0000		0.0	0.0000
VINYL CHLORIDE	0.0		0.0000		0.0	0.0000
MONOCHLOROTOLUENES	90.0		0.0002		56.8	0.0001
TOTAL PHENOL	0.0		0.0000		0.0	0.0000
ARSENIC	9.3		<0.0001		4.7	<0.0001
IRON	15,140		0.0315		9,255	0.0196
POTASSIUM	1,964,500		4.0907		1,967,750	4.2614
SODIUM	285,000		0.5935		260,000	0.5610

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **Cascades Containerboard Packaging, Inc. – Frontier Site**

SIU PERMIT NO.: **078**

SAMPLE LOCATION: **Total Sum of Bedrock A and B Zones**

	RESULTS µg/L	/ µg/L	RESULTS pounds/day	/pounds/day	ANNUAL AVERAGE µg/L	ANNUAL AVERAGE pounds/day
DATE SAMPLED: October 8 - 13, 2025						
24-HOUR FLOW IN MGD	0.001603				0.001627	
BENZENE			0.0020			0.0018
MONOCHLOROBENZENE			0.0050			0.0059
1,2 - DICHLOROBENZENE			0.0055			0.0035
1,3 - DICHLOROBENZENE			0.0029			0.0032
1,4 - DICHLOROBENZENE			0.0042			0.0039
1,2,4 - TRICHLOROBENZENE			0.0000			0.0000
1,1 - DICHLOROETHANE			0.0005			0.0003
CIS – 1,2 - DICHLOROETHYLENE			0.0034			0.0020
ACETONE			0.0000			0.0000
TETRACHLOROETHYLENE			<0.0001			<0.0001
TOLUENE			0.0000			0.0000
TRICHLOROETHYLENE			<0.0001			<0.0001
VINYL CHLORIDE			0.0014			0.0014
MONOCHLOROTOLUENES			0.0064			0.0052
TOTAL PHENOL			0.0011			0.0007
ARSENIC			0.0003			0.0003
IRON			0.1129			0.0649
POTASSIUM			29.7594			28.3190
SODIUM			3.4781			3.3367

PART II

COMPLIANCE MONITORING

SIU NAME: Cascades Containerboard Packaging, Inc. – Frontier Site

PERMIT NO.: 078

NO VIOLATIONS

VIOLATION PARAMETER	DATE	FLOW [MGD]	SAMPLE POINT LOCATION	ACTUAL* DISCHARGE	PERMIT LIMIT	TYPE** LIMIT VIOLATED

NOTE:

* - Actual discharge – list actual analytical results and appropriate units.

** - Type Limit Violated – List Type:

A.A. = Annual Average

D.M. = Daily Maximum

L.L. = Local Limits (Regulation 1960.5)

ADMIN\WINWORD\PARADISE\SIU\SELF-MONITORING REPORT FORM - BLANK

CHAIN OF CUSTODY RECORD

COC NO.: 61294

PAGE 1 OF 1

Address: 2558 Niagara Falls Blvd Niagara Falls, NY 14304

Phone: (716) 297-6150 **Fax:**

Project No/ Phase/Task Code: 12595539	**Laboratory Name:** Eurofins Buffalo	**Lab Location:** 10 Hazelwood Dr. (716) 691-2600	**SSOW ID:**
Project Name: Cascades	**Lab Contact:** Denise Herkler		**Cooler No:** 1
Project Location: Royal Ave			**Carrier:** Hand Delivered
GHD Chemistry Contact: Sheri Finn			**Airbill No:**
Sampler(s): D. Burr & G. Harlach			**Total # of Containers:** 78-73

Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd//yy)	TIME (hh:mm)	SAMPLE TYPE: Matrix Code (see back of COC)	SAMPLE TYPE: Grab (G) or Comp (C)	SAMPLE TYPE: Filtered (Y/N)	ANALYSIS REQUESTED (See Back of COC for Definitions): SPL VOCs	Phenols	Metals	PFAS	1,4-Dioxane	Total VOCs	Total Containers/sample	MS/MSD Request	COMMENTS/ SPECIAL INSTRUCTIONS:
	PRESERVATION - (SEE BACK OF COC FOR ABBREVIATIONS)						HC	H2	HN	Ice	Ice	HC			
1	TB-12595539-100825	10/8/25	9:00	WG	G	N						X	2		
2	WG-12596539-100825-DB-001	10/8/25	1145	WG	G		X	X	X	X	X		10		
3	WG-12595539-100825-GH-002	10/8/25	1050	WG	G							X	3		
4	WG-12595539-100825-DR-003	10/8/25	1230	WG	G							X	3		
5	WG-12595539-100825-GH-004	10/8/25	1325	WG	G		X	X	X				6		
6	WG-12595539-100825-DB-005	10/8/25	1555	WG	G					X			2		
7	WG-12595539-100825-GH-006	10/8/25	1325	WG	G		X	X	X				6		
8	WG-12595539-100825-DB-007	10/8/25	1635	WG	G		X	X	X	X	X		10		
9	WG-12595539-100825-GH-008	10/8/25	1610	WG	G					X			2		
10	WG-12595539-100925-DB-009	10/09/25	1025	WG	G		X	X	X				18	X	
11	WG-12595539-100825-GH-010	10/08/25	1620	WG	G					X			2		
12	WG-12595539-100925-DB-011	10/9/25	1205	WG	G		X	X	X				6		
13	WG-12595539-100925-GH-012	10/9/25	1345	WG	G						X		2		

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other:

Notes/ Special Requirements:

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
1.				1.			
2.				2.			
3.				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT - ALL FIELDS

CHAIN OF CUSTODY RECORD

COC NO.: 61295

Address: 2055 Niagara Falls Blvd Niagara Falls, NY 14304 PAGE 1 OF 1

Phone: (716) 297-6150 **Fax:**

Project No/ Phase/Task Code: 12595539-	**Laboratory Name:** Eurofins - Buffalo	**Lab Location:**	**SSOW ID:**
Project Name: Cascades	**Lab Contact:** Denise Hechler		**Cooler No:** 1 of 1
Project Location: Royal Ave			**Carrier:** Hand Delivered
GHD Chemistry Contact: Sheri Finn			**Airbill No:**
Sampler(s): D. Burr, G. Hardock			**Total # of Containers:** 44

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Sample Type: Matrix Code (see back of COC)	Grab (G) or Comp (C)	Filtered (Y/N)	Analysis Requested: SSPL VOCs	Metals	Phenols	1,4-Dioxane	Total VOCs	Total Containers/sample	MS/MSD Request	Comments/ Special Instructions:
	PRESERVATION - (SEE BACK OF COC FOR ABBREVIATIONS)													
1	TB-12595539-101325	10/13/25	0845	WG	G	N					X	2		
2	WG-12595539-101325-DR-012	10/13/25	0850				X	X	X	X		8		
3	WG-12595539-101325-GH-014	10/13/25	0915				X	X	X	X		8		
4	WG-12595539-101325-DR-015	10/13/25	0940				X	X	X	X		8		
5	WG-12595539-101325-GH-016	10/13/25	1040				X	X	X			6		
6	WG-12595539-101325-DR-017	10/13/25	1135				X	X	X			6		
7	WG-12595539-101325-GH-018	10/13/25	1335	V	V	V	X	X	X			6		
8														
9														
10														
11														
12														

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other:

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1. D. Burr	GHD	10/13/25		1.			
2.				2.			
3.				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

Attachment C

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Sheri Finn
GHD Services Inc.
2055 Niagara Falls Blvd., Suite 3
Niagara Falls, New York 14304

Generated 10/24/2025 7:18:16 PM

JOB DESCRIPTION

12595539-004 , Cascades

JOB NUMBER

480-233445-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

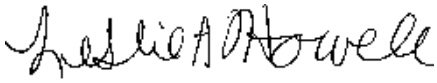
Eurofins Buffalo

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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10/24/2025 7:18:16 PM

Authorized for release by
Leslie Howell, Project Manager I
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Designee for
Denise Heckler, Project Manager II
Denise.Heckler@et.eurofinsus.com
(330)966-9477

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233445-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*5-	Isotope dilution analyte is outside acceptance limits, low biased.
I	Value is EMPC (estimated maximum possible concentration).

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
480-233445-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 10/9/2025 4:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.9°C.

GC/MS VOA
Method 624.1_PREC: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: WG-12595539-100825-GH-004 (480-233445-5) and WG-12595539-100825-GH-006 (480-233445-7). Elevated reporting limits (RLs) are provided.

Method 624.1_PREC: The following sample was diluted to bring the concentration of target analytes within the calibration range: WG-12595539-100825-DB-001 (480-233445-2). Elevated reporting limits (RLs) are provided.

Method 624.1_PREC: The following samples were diluted to bring the concentration of target analytes within the calibration range: WG-12595539-100825-DB-007 (480-233445-8), WG-12595539-100925-DB-009 (480-233445-10), WG-12595539-100925-DB-009 (480-233445-10[MS]), WG-12595539-100925-DB-009 (480-233445-10[MSD]), WG-12595539-100925-DB-011 (480-233445-12) and WG-12595539-100925-GH-012 (480-233445-13). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PFAS
Method 1633_Final: The following samples WG-12595539-100825-DB-001 (480-233445-2), WG-12595539-100825-DB-007 (480-233445-8) and WG-12595539-100825-GH-010 (480-233445-11) were extracted at reduced sample volume due to elevated TSS in the sample matrix. Elevated reporting limits (RLs) are provided. Because the sample was extracted at a reduced volume, the original sample container could not be rinsed.
No project directives received.

Method 1633_Final: The continuing calibration verification (CCV) recovered outside of control limits for IDA compound(s) (flagged). Section 14.3.3 of the finalized EPA 1633 states that the recovery of target analytes for the CCV must be within 70 - 130%, unless the analyte is not of concern for a given project. Since target analyte(s) associated with this IDA are within spec, data is reported. The following samples are impacted: WG-12595539-100825-DB-001 (480-233445-2), WG-12595539-100825-DB-005 (480-233445-6), WG-12595539-100825-DB-007 (480-233445-8), WG-12595539-100825-GH-008 (480-233445-9) and WG-12595539-100825-GH-010 (480-233445-11).

Method 1633_Final: Ion abundance ratios are outside criteria for the following sample: WG-12595539-100825-GH-010 (480-233445-11). Quantitation is based on the theoretical ion abundance ratio; therefore, these analytes have been reported as an estimated maximum possible concentration (EMPC). The affected analytes have been flagged.

Method 1633_Final: The Isotope Dilution Analyte (IDA) recovery associated with the following samples is below the method recommended limit: WG-12595539-100825-DB-007 (480-233445-8) and WG-12595539-100825-GH-010 (480-233445-11). Generally, data quality is not considered affected if the IDA recovery is greater than 5% and signal-to-noise ratio is greater than 20:1, which is achieved for all IDA in the sample(s).

Job ID: 480-233445-1 (Continued) Eurofins Buffalo

Method 1633_Final: The following samples WG-12595539-100825-DB-001 (480-233445-2), WG-12595539-100825-DB-005 (480-233445-6), WG-12595539-100825-DB-007 (480-233445-8) and WG-12595539-100825-GH-010 (480-233445-11) were extracted at reduced sample volume due to elevated TSS in the sample matrix. Elevated reporting limits (RLs) are provided. Because the sample was extracted at a reduced volume, the original sample container could not be rinsed.

Method 1633_Final: Following samples WG-12595539-100825-DB-001 (480-233445-2), WG-12595539-100825-DB-005 (480-233445-6), WG-12595539-100825-DB-007 (480-233445-8), WG-12595539-100825-GH-008 (480-233445-9) and WG-12595539-100825-GH-010 (480-233445-11) were re-extracted due to high PFPeA in LLCS and hit in samples. Laboratory proceeded with re-analysis.

Method 1633_Final: Internal standard recovery of 13C3-PFBA was outside the method recommended limit for the following samples:WG-12595539-100825-DB-005 (480-233445-6), WG-12595539-100825-DB-007 (480-233445-8) and WG-12595539-100825-GH-010 (480-233445-11). Since this was likely due to matrix effects. Samples were analyzed at a dilution and may have elevated RLs.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233445-1

Client Sample ID: TB-12595539-100825 — Lab Sample ID: 480-233445-1

No Detections.

Client Sample ID: WG-12595539-100825-DB-001 — Lab Sample ID: 480-233445-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	140		50		ug/L	10		624.1	Total/NA
Chlorobenzene	340		50		ug/L	10		624.1	Total/NA
2-Chlorotoluene	150		50		ug/L	10		624.1	Total/NA
1,4-Dioxane	19		0.20		ug/L	1		8270D SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	120		6.3		ng/L	1		1633	Total/NA
Perfluorohexanoic acid (PFHxA)	180		3.1		ng/L	1		1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	60		3.1		ng/L	1		1633	Total/NA
Perfluorooctanoic acid (PFOA)	100		3.1		ng/L	1		1633	Total/NA
Perfluorononanoic acid (PFNA)	4.9		3.1		ng/L	1		1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.2		3.1		ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.5		3.1		ng/L	1		1633	Total/NA
6:2 FTS	430		6.3		ng/L	1		1633	Total/NA
8:2 FTS	22		6.3		ng/L	1		1633	Total/NA
Perfluoropentanoic acid (PFPeA) - RE	370		3.1		ng/L	1		1633	Total/NA
Arsenic	0.019		0.015		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	2.6		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	960		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	200		1.0		mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: WG-12595539-100825-GH-002 — Lab Sample ID: 480-233445-3

No Detections.

Client Sample ID: WG-12595539-100825-DB-003 — Lab Sample ID: 480-233445-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	19		5.0		ug/L	1		624.1	Total/NA
Chlorobenzene	9.4		5.0		ug/L	1		624.1	Total/NA

Client Sample ID: WG-12595539-100825-GH-004 — Lab Sample ID: 480-233445-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Iron	0.23		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	3900		5.0		mg/L	10		200.7 Rev 4.4	Total/NA
Sodium	330		1.0		mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: WG-12595539-100825-DB-005 — Lab Sample ID: 480-233445-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	66		1.5		ng/L	1		1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	19		1.5		ng/L	1		1633	Total/NA
Perfluorooctanoic acid (PFOA)	31		1.5		ng/L	1		1633	Total/NA
Perfluorononanoic acid (PFNA)	1.8		1.5		ng/L	1		1633	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.5		1.5		ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.6		1.5		ng/L	1		1633	Total/NA
6:2 FTS	280		3.1		ng/L	1		1633	Total/NA
8:2 FTS	34		3.1		ng/L	1		1633	Total/NA
Perfluorobutanoic acid (PFBA) - RE	44		40		ng/L	1		1633	Total/NA
Perfluoropentanoic acid (PFPeA) - RE	130		20		ng/L	1		1633	Total/NA

This Detection Summary does not include radiochemical test results.

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Detection Summary

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233445-1

Client Sample ID: WG-12595539-100825-GH-006 — Lab Sample ID: 480-233445-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Iron	0.33		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	3900		5.0		mg/L	10		200.7 Rev 4.4	Total/NA
Sodium	330		1.0		mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: WG-12595539-100825-DB-007 — Lab Sample ID: 480-233445-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	250		200		ug/L	40		624.1	Total/NA
1,2-Dichlorobenzene	2400		200		ug/L	40		624.1	Total/NA
1,3-Dichlorobenzene	660		200		ug/L	40		624.1	Total/NA
1,4-Dichlorobenzene	1300		200		ug/L	40		624.1	Total/NA
Benzene	270		200		ug/L	40		624.1	Total/NA
Chlorobenzene	560		200		ug/L	40		624.1	Total/NA
cis-1,2-Dichloroethene	1600		200		ug/L	40		624.1	Total/NA
2-Chlorotoluene	1500		200		ug/L	40		624.1	Total/NA
4-Chlorotoluene	620		200		ug/L	40		624.1	Total/NA
1,4-Dioxane	12		0.20		ug/L	1		8270D SIM ID	Total/NA
Perfluorohexanoic acid (PFHxA)	390		2.8		ng/L	1		1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	160		2.8		ng/L	1		1633	Total/NA
Perfluorooctanoic acid (PFOA)	140		2.8		ng/L	1		1633	Total/NA
Perfluorononanoic acid (PFNA)	5.0		2.8		ng/L	1		1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	5.4		2.8		ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	16		2.8		ng/L	1		1633	Total/NA
8:2 FTS	44		5.6		ng/L	1		1633	Total/NA
Perfluorobutanoic acid (PFBA) - RE	220		65		ng/L	1		1633	Total/NA
Perfluoropentanoic acid (PFPeA) - RE	990		32		ng/L	1		1633	Total/NA
6:2 FTS - RE	1500		65		ng/L	1		1633	Total/NA
Arsenic	0.035		0.015		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	6.3		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	830		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	170		1.0		mg/L	1		200.7 Rev 4.4	Total/NA
Phenolics, Total Recoverable	0.078		0.010		mg/L	1		420.4	Total/NA

Client Sample ID: WG-12595539-100825-GH-008 — Lab Sample ID: 480-233445-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	41		3.1		ng/L	1		1633	Total/NA
Perfluorohexanoic acid (PFHxA)	55		1.5		ng/L	1		1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	15		1.5		ng/L	1		1633	Total/NA
Perfluorooctanoic acid (PFOA)	30		1.5		ng/L	1		1633	Total/NA
Perfluorononanoic acid (PFNA)	5.1		1.5		ng/L	1		1633	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.3		1.5		ng/L	1		1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.3		1.5		ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	21		1.5		ng/L	1		1633	Total/NA
6:2 FTS	54		3.1		ng/L	1		1633	Total/NA
8:2 FTS	5.7		3.1		ng/L	1		1633	Total/NA
Perfluoropentanoic acid (PFPeA) - RE	160		1.3		ng/L	1		1633	Total/NA

Client Sample ID: WG-12595539-100925-DB-009 — Lab Sample ID: 480-233445-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	43		10		ug/L	2		624.1	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample ID: WG-12595539-100925-DB-009 (Continued) — Lab Sample ID: 480-233445-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,3-Dichlorobenzene	97		10		ug/L	2		624.1	Total/NA
1,4-Dichlorobenzene	140		10		ug/L	2		624.1	Total/NA
Chlorobenzene	130		10		ug/L	2		624.1	Total/NA
cis-1,2-Dichloroethene	14		10		ug/L	2		624.1	Total/NA
Tetrachloroethene	11		10		ug/L	2		624.1	Total/NA
Trichloroethene	14		10		ug/L	2		624.1	Total/NA
2-Chlorotoluene	15		10		ug/L	2		624.1	Total/NA
Iron	0.077		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	17		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	44		1.0		mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: WG-12595539-100825-GH-010 — Lab Sample ID: 480-233445-11

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	320		6.3		ng/L	1		1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	91		6.3		ng/L	1		1633	Total/NA
Perfluorooctanoic acid (PFOA)	130		6.3		ng/L	1		1633	Total/NA
Perfluorononanoic acid (PFNA)	6.6		6.3		ng/L	1		1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	15		6.3		ng/L	1		1633	Total/NA
Perfluorooctanesulfonamide (FOSA)	7.5	I	6.3		ng/L	1		1633	Total/NA
6:2 FTS	1500		13		ng/L	1		1633	Total/NA
8:2 FTS	81		13		ng/L	1		1633	Total/NA
Perfluorobutanoic acid (PFBA) - RE	220		65		ng/L	1		1633	Total/NA
Perfluoropentanoic acid (PFPeA) - RE	630		32		ng/L	1		1633	Total/NA

Client Sample ID: WG-12595539-100925-DB-011 — Lab Sample ID: 480-233445-12

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	35		25		ug/L	5		624.1	Total/NA
1,3-Dichlorobenzene	63		25		ug/L	5		624.1	Total/NA
1,4-Dichlorobenzene	110		25		ug/L	5		624.1	Total/NA
Chlorobenzene	270		25		ug/L	5		624.1	Total/NA
Iron	0.23		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	41		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	47		1.0		mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: WG-12595539-100925-GH-012 — Lab Sample ID: 480-233445-13

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,3-Dichlorobenzene	49		20		ug/L	4		624.1	Total/NA
1,4-Dichlorobenzene	100		20		ug/L	4		624.1	Total/NA
Chlorobenzene	170		20		ug/L	4		624.1	Total/NA
2-Chlorotoluene	57		20		ug/L	4		624.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233445-1

Client Sample ID: TB-12595539-100825
Date Collected: 10/08/25 09:00
Date Received: 10/09/25 16:30

Lab Sample ID: 480-233445-1
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			10/10/25 14:50	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			10/10/25 14:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			10/10/25 14:50	1
1,1,2-Trichloroethane	ND		5.0		ug/L			10/10/25 14:50	1
1,1-Dichloroethane	ND		5.0		ug/L			10/10/25 14:50	1
1,1-Dichloroethene	ND		5.0		ug/L			10/10/25 14:50	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/10/25 14:50	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/10/25 14:50	1
1,2-Dichlorobenzene	ND		5.0		ug/L			10/10/25 14:50	1
1,2-Dichloroethane	ND		5.0		ug/L			10/10/25 14:50	1
1,2-Dichloropropane	ND		5.0		ug/L			10/10/25 14:50	1
1,3-Dichlorobenzene	ND		5.0		ug/L			10/10/25 14:50	1
1,4-Dichlorobenzene	ND		5.0		ug/L			10/10/25 14:50	1
2-Butanone (MEK)	ND		25		ug/L			10/10/25 14:50	1
2-Hexanone	ND		25		ug/L			10/10/25 14:50	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			10/10/25 14:50	1
Acetone	ND		25		ug/L			10/10/25 14:50	1
Benzene	ND		5.0		ug/L			10/10/25 14:50	1
Bromoform	ND		5.0		ug/L			10/10/25 14:50	1
Bromomethane	ND		5.0		ug/L			10/10/25 14:50	1
Carbon disulfide	ND		5.0		ug/L			10/10/25 14:50	1
Carbon tetrachloride	ND		5.0		ug/L			10/10/25 14:50	1
Chlorobenzene	ND		5.0		ug/L			10/10/25 14:50	1
Dibromochloromethane	ND		5.0		ug/L			10/10/25 14:50	1
Chloroethane	ND		5.0		ug/L			10/10/25 14:50	1
Chloroform	ND		5.0		ug/L			10/10/25 14:50	1
Chloromethane	ND		5.0		ug/L			10/10/25 14:50	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/10/25 14:50	1
Bromodichloromethane	ND		5.0		ug/L			10/10/25 14:50	1
Dichlorodifluoromethane	ND		5.0		ug/L			10/10/25 14:50	1
Ethylbenzene	ND		5.0		ug/L			10/10/25 14:50	1
1,2-Dibromoethane	ND		5.0		ug/L			10/10/25 14:50	1
Isopropylbenzene	ND		5.0		ug/L			10/10/25 14:50	1
2-Chlorotoluene	ND		5.0		ug/L			10/10/25 14:50	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/10/25 14:50	1
4-Chlorotoluene	ND		5.0		ug/L			10/10/25 14:50	1
Methylene Chloride	ND		5.0		ug/L			10/10/25 14:50	1
3-Chlorotoluene	ND		5.0		ug/L			10/10/25 14:50	1
Tetrachloroethene	ND		5.0		ug/L			10/10/25 14:50	1
Toluene	ND		5.0		ug/L			10/10/25 14:50	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/10/25 14:50	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/10/25 14:50	1
Trichloroethene	ND		5.0		ug/L			10/10/25 14:50	1
Trichlorofluoromethane	ND		5.0		ug/L			10/10/25 14:50	1
Vinyl chloride	ND		5.0		ug/L			10/10/25 14:50	1
Xylenes, Total	ND		10		ug/L			10/10/25 14:50	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/10/25 14:50	1
Styrene	ND		5.0		ug/L			10/10/25 14:50	1

Client Sample ID: TB-12595539-100825

Lab Sample ID: 480-233445-1

Date Collected: 10/08/25 09:00

Matrix: Water

Date Received: 10/09/25 16:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*68 - 130*		*10/10/25 14:50*	*1*
4-Bromofluorobenzene (Surr)	*104*		*76 - 123*		*10/10/25 14:50*	*1*
Toluene-d8 (Surr)	*101*		*77 - 120*		*10/10/25 14:50*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*10/10/25 14:50*	*1*

Client Sample ID: WG-12595539-100825-DB-001

Lab Sample ID: 480-233445-2

Date Collected: 10/08/25 11:15

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		50	ug/L			10/10/25 15:14	10
1,2,4-Trichlorobenzene	ND		50	ug/L			10/10/25 15:14	10
1,2-Dichlorobenzene	ND		50	ug/L			10/10/25 15:14	10
1,3-Dichlorobenzene	ND		50	ug/L			10/10/25 15:14	10
1,4-Dichlorobenzene	**140**		50	ug/L			10/10/25 15:14	10
Acetone	ND		250	ug/L			10/10/25 15:14	10
Benzene	ND		50	ug/L			10/10/25 15:14	10
Chlorobenzene	**340**		50	ug/L			10/10/25 15:14	10
cis-1,2-Dichloroethene	ND		50	ug/L			10/10/25 15:14	10
Tetrachloroethene	ND		50	ug/L			10/10/25 15:14	10
Toluene	ND		50	ug/L			10/10/25 15:14	10
Trichloroethene	ND		50	ug/L			10/10/25 15:14	10
Vinyl chloride	ND		50	ug/L			10/10/25 15:14	10
2-Chlorotoluene	**150**		50	ug/L			10/10/25 15:14	10
4-Chlorotoluene	ND		50	ug/L			10/10/25 15:14	10
3-Chlorotoluene	ND		50	ug/L			10/10/25 15:14	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*68 - 130*		*10/10/25 15:14*	*10*
4-Bromofluorobenzene (Surr)	*101*		*76 - 123*		*10/10/25 15:14*	*10*
Toluene-d8 (Surr)	*103*		*77 - 120*		*10/10/25 15:14*	*10*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*10/10/25 15:14*	*10*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**19**		0.20	ug/L		10/13/25 09:19	10/14/25 20:11	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*15 - 110*	*10/13/25 09:19*	*10/14/25 20:11*	*1*

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**120**		6.3	ng/L		10/15/25 09:21	10/16/25 00:09	1
Perfluorohexanoic acid (PFHxA)	**180**		3.1	ng/L		10/15/25 09:21	10/16/25 00:09	1
Perfluoroheptanoic acid (PFHpA)	**60**		3.1	ng/L		10/15/25 09:21	10/16/25 00:09	1
Perfluorooctanoic acid (PFOA)	**100**		3.1	ng/L		10/15/25 09:21	10/16/25 00:09	1
Perfluorononanoic acid (PFNA)	**4.9**		3.1	ng/L		10/15/25 09:21	10/16/25 00:09	1
Perfluorodecanoic acid (PFDA)	ND		3.1	ng/L		10/15/25 09:21	10/16/25 00:09	1
Perfluoroundecanoic acid (PFUnA)	ND		3.1	ng/L		10/15/25 09:21	10/16/25 00:09	1
Perfluorododecanoic acid (PFDoA)	ND		3.1	ng/L		10/15/25 09:21	10/16/25 00:09	1
Perfluorotridecanoic acid (PFTriA)	ND		3.1	ng/L		10/15/25 09:21	10/16/25 00:09	1

Client Sample ID: WG-12595539-100825-DB-001
Date Collected: 10/08/25 11:15
Date Received: 10/09/25 16:30

Lab Sample ID: 480-233445-2
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotetradecanoic acid (PFTeA)	ND		3.1		ng/L		10/15/25 09:21	10/16/25 00:09	1
Perfluorobutanesulfonic acid (PFBS)	ND		3.1		ng/L		10/15/25 09:21	10/16/25 00:09	1
Perfluorohexanesulfonic acid (PFHxS)	**3.2**		3.1		ng/L		10/15/25 09:21	10/16/25 00:09	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		3.1		ng/L		10/15/25 09:21	10/16/25 00:09	1
Perfluorooctanesulfonic acid (PFOS)	**3.5**		3.1		ng/L		10/15/25 09:21	10/16/25 00:09	1
Perfluorodecanesulfonic acid (PFDS)	ND		3.1		ng/L		10/15/25 09:21	10/16/25 00:09	1
Perfluorooctanesulfonamide (FOSA)	ND		3.1		ng/L		10/15/25 09:21	10/16/25 00:09	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		3.1		ng/L		10/15/25 09:21	10/16/25 00:09	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		3.1		ng/L		10/15/25 09:21	10/16/25 00:09	1
6:2 FTS	**430**		6.3		ng/L		10/15/25 09:21	10/16/25 00:09	1
8:2 FTS	**22**		6.3		ng/L		10/15/25 09:21	10/16/25 00:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*70.4*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:09*	*1*
13C4 PFBA	*91.3*		*5 - 130*	*10/15/25 09:21*	*10/16/25 00:09*	*1*
13C5-PFPeA	*98.6*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:09*	*1*
13C4 PFHpA	*104*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:09*	*1*
13C2 PFTeDA	*60.0*		*10 - 130*	*10/15/25 09:21*	*10/16/25 00:09*	*1*
13C3 PFBS	*89.2*		*40 - 135*	*10/15/25 09:21*	*10/16/25 00:09*	*1*
d3-NMeFOSAA	*69.0*		*40 - 170*	*10/15/25 09:21*	*10/16/25 00:09*	*1*
d5-NEtFOSAA	*61.8*		*25 - 135*	*10/15/25 09:21*	*10/16/25 00:09*	*1*
M2-6:2 FTS	*107*		*40 - 200*	*10/15/25 09:21*	*10/16/25 00:09*	*1*
M2-8:2 FTS	*111*		*40 - 300*	*10/15/25 09:21*	*10/16/25 00:09*	*1*
13C5 PFHxA	*97.6*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:09*	*1*
13C8 PFOA	*96.1*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:09*	*1*
13C9 PFNA	*97.6*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:09*	*1*
13C3 PFHxS	*90.7*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:09*	*1*
13C8 PFOS	*75.4*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:09*	*1*
13C2-PFDoA	*69.5*		*10 - 130*	*10/15/25 09:21*	*10/16/25 00:09*	*1*
13C6 PFDA	*92.1*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:09*	*1*
13C7 PFUnA	*80.2*		*30 - 130*	*10/15/25 09:21*	*10/16/25 00:09*	*1*

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RE

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPeA)	**370**		3.1		ng/L		10/17/25 11:21	10/17/25 19:55	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*84.2*		*40 - 130*	*10/17/25 11:21*	*10/17/25 19:55*	*1*
13C4 PFBA	*96.7*		*5 - 130*	*10/17/25 11:21*	*10/17/25 19:55*	*1*
13C5-PFPeA	*80.6*		*40 - 130*	*10/17/25 11:21*	*10/17/25 19:55*	*1*
13C4 PFHpA	*86.5*		*40 - 130*	*10/17/25 11:21*	*10/17/25 19:55*	*1*
13C2 PFTeDA	*49.4*		*10 - 130*	*10/17/25 11:21*	*10/17/25 19:55*	*1*
13C3 PFBS	*103*		*40 - 135*	*10/17/25 11:21*	*10/17/25 19:55*	*1*
d3-NMeFOSAA	*85.5*		*40 - 170*	*10/17/25 11:21*	*10/17/25 19:55*	*1*
d5-NEtFOSAA	*97.7*		*25 - 135*	*10/17/25 11:21*	*10/17/25 19:55*	*1*
M2-6:2 FTS	*103*		*40 - 200*	*10/17/25 11:21*	*10/17/25 19:55*	*1*
M2-8:2 FTS	*97.4*		*40 - 300*	*10/17/25 11:21*	*10/17/25 19:55*	*1*

Client Sample ID: WG-12595539-100825-DB-001

Lab Sample ID: 480-233445-2

Date Collected: 10/08/25 11:15

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RE (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C5 PFHxA	*88.0*		*40 - 130*	*10/17/25 11:21*	*10/17/25 19:55*	*1*
13C8 PFOA	*96.9*		*40 - 130*	*10/17/25 11:21*	*10/17/25 19:55*	*1*
13C9 PFNA	*99.5*		*40 - 130*	*10/17/25 11:21*	*10/17/25 19:55*	*1*
13C3 PFHxS	*92.8*		*40 - 130*	*10/17/25 11:21*	*10/17/25 19:55*	*1*
13C8 PFOS	*88.9*		*40 - 130*	*10/17/25 11:21*	*10/17/25 19:55*	*1*
13C2-PFDoA	*73.6*		*10 - 130*	*10/17/25 11:21*	*10/17/25 19:55*	*1*
13C6 PFDA	*94.0*		*40 - 130*	*10/17/25 11:21*	*10/17/25 19:55*	*1*
13C7 PFUnA	*87.7*		*30 - 130*	*10/17/25 11:21*	*10/17/25 19:55*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.019**		0.015	mg/L		10/13/25 08:46	10/13/25 15:03	1
Iron	**2.6**		0.050	mg/L		10/13/25 08:46	10/13/25 15:03	1
Potassium	**960**		2.5	mg/L		10/13/25 08:46	10/14/25 16:14	5
Sodium	**200**		1.0	mg/L		10/13/25 08:46	10/13/25 15:03	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010	mg/L			10/12/25 17:26	1

Client Sample ID: WG-12595539-100825-GH-002

Lab Sample ID: 480-233445-3

Date Collected: 10/08/25 10:50

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	ug/L			10/13/25 15:36	1
1,1,2,2-Tetrachloroethane	ND		5.0	ug/L			10/13/25 15:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			10/13/25 15:36	1
1,1,2-Trichloroethane	ND		5.0	ug/L			10/13/25 15:36	1
1,1-Dichloroethane	ND		5.0	ug/L			10/13/25 15:36	1
1,1-Dichloroethene	ND		5.0	ug/L			10/13/25 15:36	1
1,2,4-Trichlorobenzene	ND		5.0	ug/L			10/13/25 15:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			10/13/25 15:36	1
1,2-Dichlorobenzene	ND		5.0	ug/L			10/13/25 15:36	1
1,2-Dichloroethane	ND		5.0	ug/L			10/13/25 15:36	1
1,2-Dichloropropane	ND		5.0	ug/L			10/13/25 15:36	1
1,3-Dichlorobenzene	ND		5.0	ug/L			10/13/25 15:36	1
1,4-Dichlorobenzene	ND		5.0	ug/L			10/13/25 15:36	1
2-Butanone (MEK)	ND		25	ug/L			10/13/25 15:36	1
2-Hexanone	ND		25	ug/L			10/13/25 15:36	1
4-Methyl-2-pentanone (MIBK)	ND		25	ug/L			10/13/25 15:36	1
Acetone	ND		25	ug/L			10/13/25 15:36	1
Benzene	ND		5.0	ug/L			10/13/25 15:36	1
Bromoform	ND		5.0	ug/L			10/13/25 15:36	1
Bromomethane	ND		5.0	ug/L			10/13/25 15:36	1
Carbon disulfide	ND		5.0	ug/L			10/13/25 15:36	1
Carbon tetrachloride	ND		5.0	ug/L			10/13/25 15:36	1
Chlorobenzene	ND		5.0	ug/L			10/13/25 15:36	1
Dibromochloromethane	ND		5.0	ug/L			10/13/25 15:36	1

Client Sample ID: WG-12595539-100825-GH-002

Lab Sample ID: 480-233445-3

Date Collected: 10/08/25 10:50

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		5.0		ug/L			10/13/25 15:36	1
Chloroform	ND		5.0		ug/L			10/13/25 15:36	1
Chloromethane	ND		5.0		ug/L			10/13/25 15:36	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/13/25 15:36	1
Bromodichloromethane	ND		5.0		ug/L			10/13/25 15:36	1
Dichlorodifluoromethane	ND		5.0		ug/L			10/13/25 15:36	1
Ethylbenzene	ND		5.0		ug/L			10/13/25 15:36	1
1,2-Dibromoethane	ND		5.0		ug/L			10/13/25 15:36	1
Isopropylbenzene	ND		5.0		ug/L			10/13/25 15:36	1
2-Chlorotoluene	ND		5.0		ug/L			10/13/25 15:36	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/13/25 15:36	1
4-Chlorotoluene	ND		5.0		ug/L			10/13/25 15:36	1
Methylene Chloride	ND		5.0		ug/L			10/13/25 15:36	1
3-Chlorotoluene	ND		5.0		ug/L			10/13/25 15:36	1
Tetrachloroethene	ND		5.0		ug/L			10/13/25 15:36	1
Toluene	ND		5.0		ug/L			10/13/25 15:36	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/13/25 15:36	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/13/25 15:36	1
Trichloroethene	ND		5.0		ug/L			10/13/25 15:36	1
Trichlorofluoromethane	ND		5.0		ug/L			10/13/25 15:36	1
Vinyl chloride	ND		5.0		ug/L			10/13/25 15:36	1
Xylenes, Total	ND		10		ug/L			10/13/25 15:36	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/13/25 15:36	1
Styrene	ND		5.0		ug/L			10/13/25 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*68 - 130*		*10/13/25 15:36*	*1*
4-Bromofluorobenzene (Surr)	*106*		*76 - 123*		*10/13/25 15:36*	*1*
Toluene-d8 (Surr)	*107*		*77 - 120*		*10/13/25 15:36*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*10/13/25 15:36*	*1*

Client Sample ID: WG-12595539-100825-DB-003

Lab Sample ID: 480-233445-4

Date Collected: 10/08/25 13:30

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			10/13/25 16:01	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			10/13/25 16:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			10/13/25 16:01	1
1,1,2-Trichloroethane	ND		5.0		ug/L			10/13/25 16:01	1
1,1-Dichloroethane	ND		5.0		ug/L			10/13/25 16:01	1
1,1-Dichloroethene	ND		5.0		ug/L			10/13/25 16:01	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/13/25 16:01	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/13/25 16:01	1
1,2-Dichlorobenzene	ND		5.0		ug/L			10/13/25 16:01	1
1,2-Dichloroethane	ND		5.0		ug/L			10/13/25 16:01	1
1,2-Dichloropropane	ND		5.0		ug/L			10/13/25 16:01	1
1,3-Dichlorobenzene	ND		5.0		ug/L			10/13/25 16:01	1
1,4-Dichlorobenzene	**19**		5.0		ug/L			10/13/25 16:01	1

Client Sample ID: WG-12595539-100825-DB-003

Lab Sample ID: 480-233445-4

Date Collected: 10/08/25 13:30

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		25		ug/L			10/13/25 16:01	1
2-Hexanone	ND		25		ug/L			10/13/25 16:01	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			10/13/25 16:01	1
Acetone	ND		25		ug/L			10/13/25 16:01	1
Benzene	ND		5.0		ug/L			10/13/25 16:01	1
Bromoform	ND		5.0		ug/L			10/13/25 16:01	1
Bromomethane	ND		5.0		ug/L			10/13/25 16:01	1
Carbon disulfide	ND		5.0		ug/L			10/13/25 16:01	1
Carbon tetrachloride	ND		5.0		ug/L			10/13/25 16:01	1
Chlorobenzene	**9.4**		5.0		ug/L			10/13/25 16:01	1
Dibromochloromethane	ND		5.0		ug/L			10/13/25 16:01	1
Chloroethane	ND		5.0		ug/L			10/13/25 16:01	1
Chloroform	ND		5.0		ug/L			10/13/25 16:01	1
Chloromethane	ND		5.0		ug/L			10/13/25 16:01	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/13/25 16:01	1
Bromodichloromethane	ND		5.0		ug/L			10/13/25 16:01	1
Dichlorodifluoromethane	ND		5.0		ug/L			10/13/25 16:01	1
Ethylbenzene	ND		5.0		ug/L			10/13/25 16:01	1
1,2-Dibromoethane	ND		5.0		ug/L			10/13/25 16:01	1
Isopropylbenzene	ND		5.0		ug/L			10/13/25 16:01	1
2-Chlorotoluene	ND		5.0		ug/L			10/13/25 16:01	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/13/25 16:01	1
4-Chlorotoluene	ND		5.0		ug/L			10/13/25 16:01	1
Methylene Chloride	ND		5.0		ug/L			10/13/25 16:01	1
3-Chlorotoluene	ND		5.0		ug/L			10/13/25 16:01	1
Tetrachloroethene	ND		5.0		ug/L			10/13/25 16:01	1
Toluene	ND		5.0		ug/L			10/13/25 16:01	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/13/25 16:01	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/13/25 16:01	1
Trichloroethene	ND		5.0		ug/L			10/13/25 16:01	1
Trichlorofluoromethane	ND		5.0		ug/L			10/13/25 16:01	1
Vinyl chloride	ND		5.0		ug/L			10/13/25 16:01	1
Xylenes, Total	ND		10		ug/L			10/13/25 16:01	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/13/25 16:01	1
Styrene	ND		5.0		ug/L			10/13/25 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*68 - 130*		*10/13/25 16:01*	*1*
4-Bromofluorobenzene (Surr)	*109*		*76 - 123*		*10/13/25 16:01*	*1*
Toluene-d8 (Surr)	*102*		*77 - 120*		*10/13/25 16:01*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*10/13/25 16:01*	*1*

Client Sample ID: WG-12595539-100825-GH-004

Lab Sample ID: 480-233445-5

Date Collected: 10/08/25 13:25

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		100		ug/L			10/10/25 16:26	20
1,2,4-Trichlorobenzene	ND		100		ug/L			10/10/25 16:26	20

Client Sample ID: WG-12595539-100825-GH-004

Lab Sample ID: 480-233445-5

Date Collected: 10/08/25 13:25

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		100		ug/L			10/10/25 16:26	20
1,3-Dichlorobenzene	ND		100		ug/L			10/10/25 16:26	20
1,4-Dichlorobenzene	ND		100		ug/L			10/10/25 16:26	20
Acetone	ND		500		ug/L			10/10/25 16:26	20
Benzene	ND		100		ug/L			10/10/25 16:26	20
Chlorobenzene	ND		100		ug/L			10/10/25 16:26	20
cis-1,2-Dichloroethene	ND		100		ug/L			10/10/25 16:26	20
Tetrachloroethene	ND		100		ug/L			10/10/25 16:26	20
Toluene	ND		100		ug/L			10/10/25 16:26	20
Trichloroethene	ND		100		ug/L			10/10/25 16:26	20
Vinyl chloride	ND		100		ug/L			10/10/25 16:26	20
2-Chlorotoluene	ND		100		ug/L			10/10/25 16:26	20
4-Chlorotoluene	ND		100		ug/L			10/10/25 16:26	20
3-Chlorotoluene	ND		100		ug/L			10/10/25 16:26	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*68 - 130*		*10/10/25 16:26*	*20*
4-Bromofluorobenzene (Surr)	*102*		*76 - 123*		*10/10/25 16:26*	*20*
Toluene-d8 (Surr)	*106*		*77 - 120*		*10/10/25 16:26*	*20*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*10/10/25 16:26*	*20*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015		mg/L		10/13/25 08:46	10/13/25 15:10	1
Iron	**0.23**		0.050		mg/L		10/13/25 08:46	10/13/25 15:10	1
Potassium	**3900**		5.0		mg/L		10/13/25 08:46	10/14/25 16:16	10
Sodium	**330**		1.0		mg/L		10/13/25 08:46	10/13/25 15:10	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010		mg/L			10/12/25 17:30	1

Client Sample ID: WG-12595539-100825-DB-005

Lab Sample ID: 480-233445-6

Date Collected: 10/08/25 15:55

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	**66**		1.5		ng/L		10/15/25 09:21	10/16/25 00:59	1
Perfluoroheptanoic acid (PFHpA)	**19**		1.5		ng/L		10/15/25 09:21	10/16/25 00:59	1
Perfluorooctanoic acid (PFOA)	**31**		1.5		ng/L		10/15/25 09:21	10/16/25 00:59	1
Perfluorononanoic acid (PFNA)	**1.8**		1.5		ng/L		10/15/25 09:21	10/16/25 00:59	1
Perfluorodecanoic acid (PFDA)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 00:59	1
Perfluoroundecanoic acid (PFUnA)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 00:59	1
Perfluorododecanoic acid (PFDoA)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 00:59	1
Perfluorotridecanoic acid (PFTriA)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 00:59	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 00:59	1
Perfluorobutanesulfonic acid (PFBS)	**1.5**		1.5		ng/L		10/15/25 09:21	10/16/25 00:59	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 00:59	1

Client Sample ID: WG-12595539-100825-DB-005

Date Collected: 10/08/25 15:55
Date Received: 10/09/25 16:30

Lab Sample ID: 480-233445-6

Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 00:59	1
Perfluorooctanesulfonic acid (PFOS)	**2.6**		1.5		ng/L		10/15/25 09:21	10/16/25 00:59	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 00:59	1
Perfluorooctanesulfonamide (FOSA)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 00:59	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 00:59	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 00:59	1
6:2 FTS	**280**		3.1		ng/L		10/15/25 09:21	10/16/25 00:59	1
8:2 FTS	**34**		3.1		ng/L		10/15/25 09:21	10/16/25 00:59	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*75.7*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:59*	*1*
13C5-PFPeA	*92.1*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:59*	*1*
13C4 PFHpA	*103*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:59*	*1*
13C2 PFTeDA	*60.2*		*10 - 130*	*10/15/25 09:21*	*10/16/25 00:59*	*1*
13C3 PFBS	*90.7*		*40 - 135*	*10/15/25 09:21*	*10/16/25 00:59*	*1*
d3-NMeFOSAA	*75.3*		*40 - 170*	*10/15/25 09:21*	*10/16/25 00:59*	*1*
d5-NEtFOSAA	*71.1*		*25 - 135*	*10/15/25 09:21*	*10/16/25 00:59*	*1*
M2-6:2 FTS	*108*		*40 - 200*	*10/15/25 09:21*	*10/16/25 00:59*	*1*
M2-8:2 FTS	*118*		*40 - 300*	*10/15/25 09:21*	*10/16/25 00:59*	*1*
13C2-PFDoA	*75.0*		*10 - 130*	*10/15/25 09:21*	*10/16/25 00:59*	*1*
13C5 PFHxA	*97.6*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:59*	*1*
13C8 PFOA	*98.1*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:59*	*1*
13C9 PFNA	*101*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:59*	*1*
13C3 PFHxS	*93.1*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:59*	*1*
13C8 PFOS	*81.5*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:59*	*1*
13C6 PFDA	*98.3*		*40 - 130*	*10/15/25 09:21*	*10/16/25 00:59*	*1*
13C7 PFUnA	*86.1*		*30 - 130*	*10/15/25 09:21*	*10/16/25 00:59*	*1*

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RE

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**44**		40		ng/L		10/17/25 11:21	10/17/25 20:12	1
Perfluoropentanoic acid (PFPeA)	**130**		20		ng/L		10/17/25 11:21	10/17/25 20:12	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*83.9*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:12*	*1*
13C4 PFBA	*91.3*		*5 - 130*	*10/17/25 11:21*	*10/17/25 20:12*	*1*
13C5-PFPeA	*100*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:12*	*1*
13C4 PFHpA	*95.8*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:12*	*1*
13C2 PFTeDA	*77.8*		*10 - 130*	*10/17/25 11:21*	*10/17/25 20:12*	*1*
13C3 PFBS	*93.8*		*40 - 135*	*10/17/25 11:21*	*10/17/25 20:12*	*1*
d3-NMeFOSAA	*80.4*		*40 - 170*	*10/17/25 11:21*	*10/17/25 20:12*	*1*
d5-NEtFOSAA	*113*		*25 - 135*	*10/17/25 11:21*	*10/17/25 20:12*	*1*
M2-6:2 FTS	*93.9*		*40 - 200*	*10/17/25 11:21*	*10/17/25 20:12*	*1*
M2-8:2 FTS	*93.0*		*40 - 300*	*10/17/25 11:21*	*10/17/25 20:12*	*1*
13C2-PFDoA	*83.5*		*10 - 130*	*10/17/25 11:21*	*10/17/25 20:12*	*1*
13C5 PFHxA	*94.5*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:12*	*1*
13C8 PFOA	*89.9*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:12*	*1*
13C9 PFNA	*94.4*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:12*	*1*

Client Sample ID: WG-12595539-100825-DB-005

Lab Sample ID: 480-233445-6
Date Collected: 10/08/25 15:55
Matrix: Water
Date Received: 10/09/25 16:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RE (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 PFHxS	*88.6*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:12*	*1*
13C8 PFOS	*83.9*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:12*	*1*
13C6 PFDA	*88.0*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:12*	*1*
13C7 PFUnA	*86.1*		*30 - 130*	*10/17/25 11:21*	*10/17/25 20:12*	*1*

Client Sample ID: WG-12595539-100825-GH-006

Lab Sample ID: 480-233445-7
Date Collected: 10/08/25 13:25
Matrix: Water
Date Received: 10/09/25 16:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		20		ug/L			10/10/25 16:51	4
1,2,4-Trichlorobenzene	ND		20		ug/L			10/10/25 16:51	4
1,2-Dichlorobenzene	ND		20		ug/L			10/10/25 16:51	4
1,3-Dichlorobenzene	ND		20		ug/L			10/10/25 16:51	4
1,4-Dichlorobenzene	ND		20		ug/L			10/10/25 16:51	4
Acetone	ND		100		ug/L			10/10/25 16:51	4
Benzene	ND		20		ug/L			10/10/25 16:51	4
Chlorobenzene	ND		20		ug/L			10/10/25 16:51	4
cis-1,2-Dichloroethene	ND		20		ug/L			10/10/25 16:51	4
Tetrachloroethene	ND		20		ug/L			10/10/25 16:51	4
Toluene	ND		20		ug/L			10/10/25 16:51	4
Trichloroethene	ND		20		ug/L			10/10/25 16:51	4
Vinyl chloride	ND		20		ug/L			10/10/25 16:51	4
2-Chlorotoluene	ND		20		ug/L			10/10/25 16:51	4
4-Chlorotoluene	ND		20		ug/L			10/10/25 16:51	4
3-Chlorotoluene	ND		20		ug/L			10/10/25 16:51	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*68 - 130*		*10/10/25 16:51*	*4*
4-Bromofluorobenzene (Surr)	*103*		*76 - 123*		*10/10/25 16:51*	*4*
Toluene-d8 (Surr)	*106*		*77 - 120*		*10/10/25 16:51*	*4*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*10/10/25 16:51*	*4*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015		mg/L		10/13/25 08:46	10/13/25 15:12	1
Iron	**0.33**		0.050		mg/L		10/13/25 08:46	10/13/25 15:12	1
Potassium	**3900**		5.0		mg/L		10/13/25 08:46	10/14/25 16:18	10
Sodium	**330**		1.0		mg/L		10/13/25 08:46	10/13/25 15:12	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010		mg/L			10/12/25 17:33	1

Client Sample ID: WG-12595539-100825-DB-007
Date Collected: 10/08/25 16:35
Date Received: 10/09/25 16:30

Lab Sample ID: 480-233445-8
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**250**		200		ug/L			10/13/25 16:26	40
1,2,4-Trichlorobenzene	ND		200		ug/L			10/13/25 16:26	40
1,2-Dichlorobenzene	**2400**		200		ug/L			10/13/25 16:26	40
1,3-Dichlorobenzene	**660**		200		ug/L			10/13/25 16:26	40
1,4-Dichlorobenzene	**1300**		200		ug/L			10/13/25 16:26	40
Acetone	ND		1000		ug/L			10/13/25 16:26	40
Benzene	**270**		200		ug/L			10/13/25 16:26	40
Chlorobenzene	**560**		200		ug/L			10/13/25 16:26	40
cis-1,2-Dichloroethene	**1600**		200		ug/L			10/13/25 16:26	40
Tetrachloroethene	ND		200		ug/L			10/13/25 16:26	40
Toluene	ND		200		ug/L			10/13/25 16:26	40
Trichloroethene	ND		200		ug/L			10/13/25 16:26	40
Vinyl chloride	ND		200		ug/L			10/13/25 16:26	40
2-Chlorotoluene	**1500**		200		ug/L			10/13/25 16:26	40
4-Chlorotoluene	**620**		200		ug/L			10/13/25 16:26	40
3-Chlorotoluene	ND		200		ug/L			10/13/25 16:26	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*68 - 130*		*10/13/25 16:26*	*40*
4-Bromofluorobenzene (Surr)	*103*		*76 - 123*		*10/13/25 16:26*	*40*
Toluene-d8 (Surr)	*106*		*77 - 120*		*10/13/25 16:26*	*40*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*10/13/25 16:26*	*40*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**12**		0.20		ug/L		10/13/25 09:19	10/14/25 20:33	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*42*		*15 - 110*	*10/13/25 09:19*	*10/14/25 20:33*	*1*

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	**390**		2.8		ng/L		10/15/25 09:21	10/16/25 01:15	1
Perfluoroheptanoic acid (PFHpA)	**160**		2.8		ng/L		10/15/25 09:21	10/16/25 01:15	1
Perfluorooctanoic acid (PFOA)	**140**		2.8		ng/L		10/15/25 09:21	10/16/25 01:15	1
Perfluorononanoic acid (PFNA)	**5.0**		2.8		ng/L		10/15/25 09:21	10/16/25 01:15	1
Perfluorodecanoic acid (PFDA)	ND		2.8		ng/L		10/15/25 09:21	10/16/25 01:15	1
Perfluoroundecanoic acid (PFUnA)	ND		2.8		ng/L		10/15/25 09:21	10/16/25 01:15	1
Perfluorododecanoic acid (PFDoA)	ND		2.8		ng/L		10/15/25 09:21	10/16/25 01:15	1
Perfluorotridecanoic acid (PFTriA)	ND		2.8		ng/L		10/15/25 09:21	10/16/25 01:15	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.8		ng/L		10/15/25 09:21	10/16/25 01:15	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.8		ng/L		10/15/25 09:21	10/16/25 01:15	1
Perfluorohexanesulfonic acid (PFHxS)	**5.4**		2.8		ng/L		10/15/25 09:21	10/16/25 01:15	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.8		ng/L		10/15/25 09:21	10/16/25 01:15	1
Perfluorooctanesulfonic acid (PFOS)	**16**		2.8		ng/L		10/15/25 09:21	10/16/25 01:15	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.8		ng/L		10/15/25 09:21	10/16/25 01:15	1
Perfluorooctanesulfonamide (FOSA)	ND		2.8		ng/L		10/15/25 09:21	10/16/25 01:15	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.8		ng/L		10/15/25 09:21	10/16/25 01:15	1

Client Sample ID: WG-12595539-100825-DB-007

Date Collected: 10/08/25 16:35
Date Received: 10/09/25 16:30

Lab Sample ID: 480-233445-8

Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.8		ng/L		10/15/25 09:21	10/16/25 01:15	1
8:2 FTS	**44**		5.6		ng/L		10/15/25 09:21	10/16/25 01:15	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*72.4*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:15*	*1*
13C5-PFPeA	*19.6*	*5-	*40 - 130*	*10/15/25 09:21*	*10/16/25 01:15*	*1*
13C4 PFHpA	*106*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:15*	*1*
13C2 PFTeDA	*53.4*		*10 - 130*	*10/15/25 09:21*	*10/16/25 01:15*	*1*
13C3 PFBS	*84.0*		*40 - 135*	*10/15/25 09:21*	*10/16/25 01:15*	*1*
d3-NMeFOSAA	*62.9*		*40 - 170*	*10/15/25 09:21*	*10/16/25 01:15*	*1*
d5-NEtFOSAA	*56.7*		*25 - 135*	*10/15/25 09:21*	*10/16/25 01:15*	*1*
M2-6:2 FTS	*93.2*		*40 - 200*	*10/15/25 09:21*	*10/16/25 01:15*	*1*
M2-8:2 FTS	*103*		*40 - 300*	*10/15/25 09:21*	*10/16/25 01:15*	*1*
13C5 PFHxA	*94.9*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:15*	*1*
13C8 PFOA	*93.3*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:15*	*1*
13C9 PFNA	*95.8*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:15*	*1*
13C3 PFHxS	*89.9*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:15*	*1*
13C8 PFOS	*71.9*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:15*	*1*
13C2-PFDoA	*62.5*		*10 - 130*	*10/15/25 09:21*	*10/16/25 01:15*	*1*
13C6 PFDA	*88.6*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:15*	*1*
13C7 PFUnA	*72.7*		*30 - 130*	*10/15/25 09:21*	*10/16/25 01:15*	*1*

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RE

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**220**		65		ng/L		10/17/25 11:21	10/17/25 20:28	1
Perfluoropentanoic acid (PFPeA)	**990**		32		ng/L		10/17/25 11:21	10/17/25 20:28	1
6:2 FTS	**1500**		65		ng/L		10/17/25 11:21	10/17/25 20:28	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*91.6*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:28*	*1*
13C4 PFBA	*95.9*		*5 - 130*	*10/17/25 11:21*	*10/17/25 20:28*	*1*
13C5-PFPeA	*102*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:28*	*1*
13C4 PFHpA	*99.4*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:28*	*1*
13C2 PFTeDA	*75.9*		*10 - 130*	*10/17/25 11:21*	*10/17/25 20:28*	*1*
13C3 PFBS	*98.9*		*40 - 135*	*10/17/25 11:21*	*10/17/25 20:28*	*1*
d3-NMeFOSAA	*87.4*		*40 - 170*	*10/17/25 11:21*	*10/17/25 20:28*	*1*
d5-NEtFOSAA	*104*		*25 - 135*	*10/17/25 11:21*	*10/17/25 20:28*	*1*
M2-6:2 FTS	*101*		*40 - 200*	*10/17/25 11:21*	*10/17/25 20:28*	*1*
M2-8:2 FTS	*98.8*		*40 - 300*	*10/17/25 11:21*	*10/17/25 20:28*	*1*
13C5 PFHxA	*101*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:28*	*1*
13C8 PFOA	*96.3*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:28*	*1*
13C9 PFNA	*98.4*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:28*	*1*
13C3 PFHxS	*92.8*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:28*	*1*
13C8 PFOS	*91.4*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:28*	*1*
13C2-PFDoA	*86.0*		*10 - 130*	*10/17/25 11:21*	*10/17/25 20:28*	*1*
13C6 PFDA	*93.4*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:28*	*1*
13C7 PFUnA	*92.3*		*30 - 130*	*10/17/25 11:21*	*10/17/25 20:28*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.035**		0.015		mg/L		10/13/25 08:46	10/13/25 15:14	1

Client Sample ID: WG-12595539-100825-DB-007

Lab Sample ID: 480-233445-8

Date Collected: 10/08/25 16:35

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 200.7 Rev 4.4 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Iron	6.3		0.050		mg/L		10/13/25 08:46	10/13/25 15:14	1
Potassium	830		2.5		mg/L		10/13/25 08:46	10/14/25 16:20	5
Sodium	170		1.0		mg/L		10/13/25 08:46	10/13/25 15:14	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable (EPA 420.4)	0.078		0.010		mg/L			10/12/25 17:37	1

Client Sample ID: WG-12595539-100825-GH-008

Lab Sample ID: 480-233445-9

Date Collected: 10/08/25 16:10

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	41		3.1		ng/L		10/15/25 09:21	10/16/25 01:32	1
Perfluorohexanoic acid (PFHxA)	55		1.5		ng/L		10/15/25 09:21	10/16/25 01:32	1
Perfluoroheptanoic acid (PFHpA)	15		1.5		ng/L		10/15/25 09:21	10/16/25 01:32	1
Perfluorooctanoic acid (PFOA)	30		1.5		ng/L		10/15/25 09:21	10/16/25 01:32	1
Perfluorononanoic acid (PFNA)	5.1		1.5		ng/L		10/15/25 09:21	10/16/25 01:32	1
Perfluorodecanoic acid (PFDA)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 01:32	1
Perfluoroundecanoic acid (PFUnA)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 01:32	1
Perfluorododecanoic acid (PFDoA)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 01:32	1
Perfluorotridecanoic acid (PFTriA)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 01:32	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 01:32	1
Perfluorobutanesulfonic acid (PFBS)	2.3		1.5		ng/L		10/15/25 09:21	10/16/25 01:32	1
Perfluorohexanesulfonic acid (PFHxS)	2.3		1.5		ng/L		10/15/25 09:21	10/16/25 01:32	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 01:32	1
Perfluorooctanesulfonic acid (PFOS)	21		1.5		ng/L		10/15/25 09:21	10/16/25 01:32	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 01:32	1
Perfluorooctanesulfonamide (FOSA)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 01:32	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 01:32	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.5		ng/L		10/15/25 09:21	10/16/25 01:32	1
6:2 FTS	54		3.1		ng/L		10/15/25 09:21	10/16/25 01:32	1
8:2 FTS	5.7		3.1		ng/L		10/15/25 09:21	10/16/25 01:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*59.5*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:32*	*1*
13C4 PFBA	*88.0*		*5 - 130*	*10/15/25 09:21*	*10/16/25 01:32*	*1*
13C5-PFPeA	*92.0*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:32*	*1*
13C4 PFHpA	*90.0*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:32*	*1*
13C2 PFTeDA	*72.6*		*10 - 130*	*10/15/25 09:21*	*10/16/25 01:32*	*1*
13C3 PFBS	*72.0*		*40 - 135*	*10/15/25 09:21*	*10/16/25 01:32*	*1*
d3-NMeFOSAA	*59.7*		*40 - 170*	*10/15/25 09:21*	*10/16/25 01:32*	*1*
d5-NEtFOSAA	*54.8*		*25 - 135*	*10/15/25 09:21*	*10/16/25 01:32*	*1*
M2-6:2 FTS	*100*		*40 - 200*	*10/15/25 09:21*	*10/16/25 01:32*	*1*
M2-8:2 FTS	*92.2*		*40 - 300*	*10/15/25 09:21*	*10/16/25 01:32*	*1*

Client Sample ID: WG-12595539-100825-GH-008

Lab Sample ID: 480-233445-9

Date Collected: 10/08/25 16:10

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2-PFDoA	*69.0*		*10 - 130*	*10/15/25 09:21*	*10/16/25 01:32*	*1*
13C5 PFHxA	*84.1*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:32*	*1*
13C8 PFOA	*80.0*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:32*	*1*
13C9 PFNA	*80.8*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:32*	*1*
13C3 PFHxS	*75.1*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:32*	*1*
13C8 PFOS	*66.1*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:32*	*1*
13C6 PFDA	*77.4*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:32*	*1*
13C7 PFUnA	*69.3*		*30 - 130*	*10/15/25 09:21*	*10/16/25 01:32*	*1*

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RE

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPeA)	**160**		1.3	ng/L		10/17/25 11:21	10/17/25 20:45	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*72.5*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:45*	*1*
13C4 PFBA	*98.2*		*5 - 130*	*10/17/25 11:21*	*10/17/25 20:45*	*1*
13C5-PFPeA	*86.3*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:45*	*1*
13C4 PFHpA	*85.5*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:45*	*1*
13C2 PFTeDA	*56.7*		*10 - 130*	*10/17/25 11:21*	*10/17/25 20:45*	*1*
13C3 PFBS	*102*		*40 - 135*	*10/17/25 11:21*	*10/17/25 20:45*	*1*
d3-NMeFOSAA	*68.8*		*40 - 170*	*10/17/25 11:21*	*10/17/25 20:45*	*1*
d5-NEtFOSAA	*82.0*		*25 - 135*	*10/17/25 11:21*	*10/17/25 20:45*	*1*
M2-6:2 FTS	*99.7*		*40 - 200*	*10/17/25 11:21*	*10/17/25 20:45*	*1*
M2-8:2 FTS	*82.7*		*40 - 300*	*10/17/25 11:21*	*10/17/25 20:45*	*1*
13C2-PFDoA	*62.3*		*10 - 130*	*10/17/25 11:21*	*10/17/25 20:45*	*1*
13C5 PFHxA	*88.2*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:45*	*1*
13C8 PFOA	*88.6*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:45*	*1*
13C9 PFNA	*89.2*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:45*	*1*
13C3 PFHxS	*87.4*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:45*	*1*
13C8 PFOS	*77.5*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:45*	*1*
13C6 PFDA	*77.4*		*40 - 130*	*10/17/25 11:21*	*10/17/25 20:45*	*1*
13C7 PFUnA	*69.0*		*30 - 130*	*10/17/25 11:21*	*10/17/25 20:45*	*1*

Client Sample ID: WG-12595539-100925-DB-009

Lab Sample ID: 480-233445-10

Date Collected: 10/09/25 10:25

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		10	ug/L			10/13/25 16:50	2
1,2,4-Trichlorobenzene	ND		10	ug/L			10/13/25 16:50	2
1,2-Dichlorobenzene	**43**		10	ug/L			10/13/25 16:50	2
1,3-Dichlorobenzene	**97**		10	ug/L			10/13/25 16:50	2
1,4-Dichlorobenzene	**140**		10	ug/L			10/13/25 16:50	2
Acetone	ND		50	ug/L			10/13/25 16:50	2
Benzene	ND		10	ug/L			10/13/25 16:50	2
Chlorobenzene	**130**		10	ug/L			10/13/25 16:50	2
cis-1,2-Dichloroethene	**14**		10	ug/L			10/13/25 16:50	2
Tetrachloroethene	**11**		10	ug/L			10/13/25 16:50	2
Toluene	ND		10	ug/L			10/13/25 16:50	2
Trichloroethene	**14**		10	ug/L			10/13/25 16:50	2

Client Sample ID: WG-12595539-100925-DB-009

Lab Sample ID: 480-233445-10

Date Collected: 10/09/25 10:25

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		10		ug/L			10/13/25 16:50	2
2-Chlorotoluene	**15**		10		ug/L			10/13/25 16:50	2
4-Chlorotoluene	ND		10		ug/L			10/13/25 16:50	2
3-Chlorotoluene	ND		10		ug/L			10/13/25 16:50	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*68 - 130*		*10/13/25 16:50*	*2*
4-Bromofluorobenzene (Surr)	*106*		*76 - 123*		*10/13/25 16:50*	*2*
Toluene-d8 (Surr)	*107*		*77 - 120*		*10/13/25 16:50*	*2*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*10/13/25 16:50*	*2*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015		mg/L		10/13/25 08:46	10/13/25 15:16	1
Iron	**0.077**		0.050		mg/L		10/13/25 08:46	10/13/25 15:16	1
Potassium	**17**		0.50		mg/L		10/13/25 08:46	10/13/25 15:16	1
Sodium	**44**		1.0		mg/L		10/13/25 08:46	10/13/25 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010		mg/L			10/12/25 17:01	1

Client Sample ID: WG-12595539-100825-GH-010

Lab Sample ID: 480-233445-11

Date Collected: 10/08/25 16:20

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	**320**		6.3		ng/L		10/15/25 09:21	10/16/25 01:49	1
Perfluoroheptanoic acid (PFHpA)	**91**		6.3		ng/L		10/15/25 09:21	10/16/25 01:49	1
Perfluorooctanoic acid (PFOA)	**130**		6.3		ng/L		10/15/25 09:21	10/16/25 01:49	1
Perfluorononanoic acid (PFNA)	**6.6**		6.3		ng/L		10/15/25 09:21	10/16/25 01:49	1
Perfluorododecanoic acid (PFDoA)	ND		6.3		ng/L		10/15/25 09:21	10/16/25 01:49	1
Perfluorobutanesulfonic acid (PFBS)	ND		6.3		ng/L		10/15/25 09:21	10/16/25 01:49	1
Perfluorohexanesulfonic acid (PFHxS)	**15**		6.3		ng/L		10/15/25 09:21	10/16/25 01:49	1
Perfluorooctanesulfonamide (FOSA)	**7.5**	**I**	6.3		ng/L		10/15/25 09:21	10/16/25 01:49	1
6:2 FTS	**1500**		13		ng/L		10/15/25 09:21	10/16/25 01:49	1
8:2 FTS	**81**		13		ng/L		10/15/25 09:21	10/16/25 01:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*11.7*	**5-*	*40 - 130*	*10/15/25 09:21*	*10/16/25 01:49*	*1*
13C5-PFPeA	*94.6*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:49*	*1*
13C4 PFHpA	*104*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:49*	*1*
13C3 PFBS	*83.5*		*40 - 135*	*10/15/25 09:21*	*10/16/25 01:49*	*1*
M2-6:2 FTS	*90.1*		*40 - 200*	*10/15/25 09:21*	*10/16/25 01:49*	*1*
M2-8:2 FTS	*5.20*	**5-*	*40 - 300*	*10/15/25 09:21*	*10/16/25 01:49*	*1*
13C5 PFHxA	*92.5*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:49*	*1*
13C8 PFOA	*87.0*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:49*	*1*
13C9 PFNA	*45.2*		*40 - 130*	*10/15/25 09:21*	*10/16/25 01:49*	*1*

Client Sample ID: WG-12595539-100825-GH-010

Lab Sample ID: 480-233445-11

Date Collected: 10/08/25 16:20

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFHxS	80.6		40 - 130	10/15/25 09:21	10/16/25 01:49	1
13C6 PFDA	6.60	*5-	40 - 130	10/15/25 09:21	10/16/25 01:49	1

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RE

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**220**		65	ng/L		10/17/25 11:21	10/17/25 21:02	1
Perfluoropentanoic acid (PFPeA)	**630**		32	ng/L		10/17/25 11:21	10/17/25 21:02	1
Perfluorodecanoic acid (PFDA)	ND		32	ng/L		10/17/25 11:21	10/17/25 21:02	1
Perfluoroundecanoic acid (PFUnA)	ND		32	ng/L		10/17/25 11:21	10/17/25 21:02	1
Perfluorotridecanoic acid (PFTriA)	ND		32	ng/L		10/17/25 11:21	10/17/25 21:02	1
Perfluorotetradecanoic acid (PFTeA)	ND		32	ng/L		10/17/25 11:21	10/17/25 21:02	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		32	ng/L		10/17/25 11:21	10/17/25 21:02	1
Perfluorooctanesulfonic acid (PFOS)	ND		32	ng/L		10/17/25 11:21	10/17/25 21:02	1
Perfluorodecanesulfonic acid (PFDS)	ND		32	ng/L		10/17/25 11:21	10/17/25 21:02	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		32	ng/L		10/17/25 11:21	10/17/25 21:02	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		32	ng/L		10/17/25 11:21	10/17/25 21:02	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	81.7		40 - 130	10/17/25 11:21	10/17/25 21:02	1
13C4 PFBA	95.4		5 - 130	10/17/25 11:21	10/17/25 21:02	1
13C5-PFPeA	96.9		40 - 130	10/17/25 11:21	10/17/25 21:02	1
13C4 PFHpA	89.0		40 - 130	10/17/25 11:21	10/17/25 21:02	1
13C2 PFTeDA	68.1		10 - 130	10/17/25 11:21	10/17/25 21:02	1
13C3 PFBS	95.2		40 - 135	10/17/25 11:21	10/17/25 21:02	1
d3-NMeFOSAA	74.7		40 - 170	10/17/25 11:21	10/17/25 21:02	1
d5-NEtFOSAA	92.2		25 - 135	10/17/25 11:21	10/17/25 21:02	1
M2-6:2 FTS	90.2		40 - 200	10/17/25 11:21	10/17/25 21:02	1
M2-8:2 FTS	86.6		40 - 300	10/17/25 11:21	10/17/25 21:02	1
13C2-PFDoA	74.8		10 - 130	10/17/25 11:21	10/17/25 21:02	1
13C5 PFHxA	92.9		40 - 130	10/17/25 11:21	10/17/25 21:02	1
13C8 PFOA	89.1		40 - 130	10/17/25 11:21	10/17/25 21:02	1
13C9 PFNA	91.6		40 - 130	10/17/25 11:21	10/17/25 21:02	1
13C3 PFHxS	85.4		40 - 130	10/17/25 11:21	10/17/25 21:02	1
13C8 PFOS	81.3		40 - 130	10/17/25 11:21	10/17/25 21:02	1
13C6 PFDA	83.8		40 - 130	10/17/25 11:21	10/17/25 21:02	1
13C7 PFUnA	81.4		30 - 130	10/17/25 11:21	10/17/25 21:02	1

Client Sample ID: WG-12595539-100925-DB-011

Lab Sample ID: 480-233445-12

Date Collected: 10/09/25 12:05

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		25	ug/L			10/13/25 17:15	5
1,2,4-Trichlorobenzene	ND		25	ug/L			10/13/25 17:15	5
1,2-Dichlorobenzene	**35**		25	ug/L			10/13/25 17:15	5
1,3-Dichlorobenzene	**63**		25	ug/L			10/13/25 17:15	5
1,4-Dichlorobenzene	**110**		25	ug/L			10/13/25 17:15	5
Acetone	ND		130	ug/L			10/13/25 17:15	5

Client Sample ID: WG-12595539-100925-DB-011

Lab Sample ID: 480-233445-12

Date Collected: 10/09/25 12:05

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		25		ug/L			10/13/25 17:15	5
Chlorobenzene	**270**		25		ug/L			10/13/25 17:15	5
cis-1,2-Dichloroethene	ND		25		ug/L			10/13/25 17:15	5
Tetrachloroethene	ND		25		ug/L			10/13/25 17:15	5
Toluene	ND		25		ug/L			10/13/25 17:15	5
Trichloroethene	ND		25		ug/L			10/13/25 17:15	5
Vinyl chloride	ND		25		ug/L			10/13/25 17:15	5
2-Chlorotoluene	ND		25		ug/L			10/13/25 17:15	5
4-Chlorotoluene	ND		25		ug/L			10/13/25 17:15	5
3-Chlorotoluene	ND		25		ug/L			10/13/25 17:15	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*68 - 130*		*10/13/25 17:15*	*5*
4-Bromofluorobenzene (Surr)	*104*		*76 - 123*		*10/13/25 17:15*	*5*
Toluene-d8 (Surr)	*106*		*77 - 120*		*10/13/25 17:15*	*5*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*10/13/25 17:15*	*5*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015		mg/L		10/13/25 08:46	10/13/25 15:22	1
Iron	**0.23**		0.050		mg/L		10/13/25 08:46	10/13/25 15:22	1
Potassium	**41**		0.50		mg/L		10/13/25 08:46	10/13/25 15:22	1
Sodium	**47**		1.0		mg/L		10/13/25 08:46	10/13/25 15:22	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010		mg/L			10/12/25 18:02	1

Client Sample ID: WG-12595539-100925-GH-012

Lab Sample ID: 480-233445-13

Date Collected: 10/09/25 13:45

Matrix: Water

Date Received: 10/09/25 16:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		20		ug/L			10/13/25 17:38	4
1,1,2,2-Tetrachloroethane	ND		20		ug/L			10/13/25 17:38	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20		ug/L			10/13/25 17:38	4
1,1,2-Trichloroethane	ND		20		ug/L			10/13/25 17:38	4
1,1-Dichloroethane	ND		20		ug/L			10/13/25 17:38	4
1,1-Dichloroethene	ND		20		ug/L			10/13/25 17:38	4
1,2,4-Trichlorobenzene	ND		20		ug/L			10/13/25 17:38	4
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			10/13/25 17:38	4
1,2-Dichlorobenzene	ND		20		ug/L			10/13/25 17:38	4
1,2-Dichloroethane	ND		20		ug/L			10/13/25 17:38	4
1,2-Dichloropropane	ND		20		ug/L			10/13/25 17:38	4
1,3-Dichlorobenzene	**49**		20		ug/L			10/13/25 17:38	4
1,4-Dichlorobenzene	**100**		20		ug/L			10/13/25 17:38	4
2-Butanone (MEK)	ND		100		ug/L			10/13/25 17:38	4
2-Hexanone	ND		100		ug/L			10/13/25 17:38	4
4-Methyl-2-pentanone (MIBK)	ND		100		ug/L			10/13/25 17:38	4

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233445-1

Client Sample ID: WG-12595539-100925-GH-012
Date Collected: 10/09/25 13:45
Date Received: 10/09/25 16:30

Lab Sample ID: 480-233445-13
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		100		ug/L			10/13/25 17:38	4
Benzene	ND		20		ug/L			10/13/25 17:38	4
Bromoform	ND		20		ug/L			10/13/25 17:38	4
Bromomethane	ND		20		ug/L			10/13/25 17:38	4
Carbon disulfide	ND		20		ug/L			10/13/25 17:38	4
Carbon tetrachloride	ND		20		ug/L			10/13/25 17:38	4
Chlorobenzene	**170**		20		ug/L			10/13/25 17:38	4
Dibromochloromethane	ND		20		ug/L			10/13/25 17:38	4
Chloroethane	ND		20		ug/L			10/13/25 17:38	4
Chloroform	ND		20		ug/L			10/13/25 17:38	4
Chloromethane	ND		20		ug/L			10/13/25 17:38	4
cis-1,2-Dichloroethene	ND		20		ug/L			10/13/25 17:38	4
Bromodichloromethane	ND		20		ug/L			10/13/25 17:38	4
Dichlorodifluoromethane	ND		20		ug/L			10/13/25 17:38	4
Ethylbenzene	ND		20		ug/L			10/13/25 17:38	4
1,2-Dibromoethane	ND		20		ug/L			10/13/25 17:38	4
Isopropylbenzene	ND		20		ug/L			10/13/25 17:38	4
2-Chlorotoluene	**57**		20		ug/L			10/13/25 17:38	4
Methyl tert-butyl ether	ND		20		ug/L			10/13/25 17:38	4
4-Chlorotoluene	ND		20		ug/L			10/13/25 17:38	4
Methylene Chloride	ND		20		ug/L			10/13/25 17:38	4
3-Chlorotoluene	ND		20		ug/L			10/13/25 17:38	4
Tetrachloroethene	ND		20		ug/L			10/13/25 17:38	4
Toluene	ND		20		ug/L			10/13/25 17:38	4
trans-1,2-Dichloroethene	ND		20		ug/L			10/13/25 17:38	4
trans-1,3-Dichloropropene	ND		20		ug/L			10/13/25 17:38	4
Trichloroethene	ND		20		ug/L			10/13/25 17:38	4
Trichlorofluoromethane	ND		20		ug/L			10/13/25 17:38	4
Vinyl chloride	ND		20		ug/L			10/13/25 17:38	4
Xylenes, Total	ND		40		ug/L			10/13/25 17:38	4
cis-1,3-Dichloropropene	ND		20		ug/L			10/13/25 17:38	4
Styrene	ND		20		ug/L			10/13/25 17:38	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*68 - 130*		*10/13/25 17:38*	*4*
4-Bromofluorobenzene (Surr)	*104*		*76 - 123*		*10/13/25 17:38*	*4*
Toluene-d8 (Surr)	*106*		*77 - 120*		*10/13/25 17:38*	*4*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*10/13/25 17:38*	*4*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233445-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-233445-1	TB-12595539-100825	115	104	101	99
480-233445-2	WG-12595539-100825-DB-001	117	101	103	104
480-233445-3	WG-12595539-100825-GH-002	117	106	107	107
480-233445-4	WG-12595539-100825-DB-003	114	109	102	104
480-233445-5	WG-12595539-100825-GH-004	122	102	106	110
480-233445-7	WG-12595539-100825-GH-006	120	103	106	103
480-233445-8	WG-12595539-100825-DB-007	113	103	106	105
480-233445-10	WG-12595539-100925-DB-009	116	106	107	107
480-233445-10 MS	WG-12595539-100925-DB-009	123	109	105	106
480-233445-10 MSD	WG-12595539-100925-DB-009	122	108	105	106
480-233445-12	WG-12595539-100925-DB-011	114	104	106	106
480-233445-13	WG-12595539-100925-GH-012	120	104	106	110
LCS 480-759303/6	Lab Control Sample	110	97	100	107
LCS 480-759445/6	Lab Control Sample	115	106	106	104
MB 480-759303/8	Method Blank	109	100	102	101
MB 480-759445/8	Method Blank	115	106	108	105

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233445-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DXE (15-110)							
480-233445-2	WG-12595539-100825-DB-001	35							
480-233445-8	WG-12595539-100825-DB-007	42							
LCS 480-759427/2-A	Lab Control Sample	33							
MB 480-759427/1-A	Method Blank	32							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFOSA (40-130)	PFBA (5-130)	PFPeA (40-130)	C4PFHA (40-130)	PFTDA (10-130)	C3PFBS (40-135)	d3NMFOS (40-170)	d5NEFOS (25-135)
480-233445-2	WG-12595539-100825-DB-001	70.4	91.3	98.6	104	60.0	89.2	69.0	61.8
480-233445-2 - RE	WG-12595539-100825-DB-001	84.2	96.7	80.6	86.5	49.4	103	85.5	97.7
480-233445-6	WG-12595539-100825-DB-005	75.7		92.1	103	60.2	90.7	75.3	71.1
480-233445-6 - RE	WG-12595539-100825-DB-005	83.9	91.3	100	95.8	77.8	93.8	80.4	113
480-233445-8	WG-12595539-100825-DB-007	72.4		19.6 *5-	106	53.4	84.0	62.9	56.7
480-233445-8 - RE	WG-12595539-100825-DB-007	91.6	95.9	102	99.4	75.9	98.9	87.4	104
480-233445-9	WG-12595539-100825-GH-008	59.5	88.0	92.0	90.0	72.6	72.0	59.7	54.8
480-233445-9 - RE	WG-12595539-100825-GH-008	72.5	98.2	86.3	85.5	56.7	102	68.8	82.0
480-233445-11	WG-12595539-100825-GH-010	11.7 *5-		94.6	104		83.5		
480-233445-11 - RE	WG-12595539-100825-GH-010	81.7	95.4	96.9	89.0	68.1	95.2	74.7	92.2
LCS 240-676099/3-A	Lab Control Sample	76.3	94.1	100	115	81.4	83.6	80.3	74.7
LCS 240-676544/3-A	Lab Control Sample	88.3	93.7	103	101	72.3	96.6	85.6	114
LLCS 240-676099/2-A	Lab Control Sample	71.2	94.1	101	114	72.6	83.0	72.2	68.5
LLCS 240-676544/2-A	Lab Control Sample	90.3	92.9	99.6	96.4	80.5	99.5	88.1	122
MB 240-676099/1-A	Method Blank	69.1	90.4	93.9	100	71.0	79.0	70.4	64.1
MB 240-676544/1-A	Method Blank	92.4	96.6	105	104	89.9	103	89.4	133

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M262FTS (40-200)	M282FTS (40-300)	PFDoDA (10-130)	13C5PHA (40-130)	C8PFOA (40-130)	C9PFNA (40-130)	C3PFHS (40-130)	C8PFOS (40-130)
480-233445-2	WG-12595539-100825-DB-001	107	111	69.5	97.6	96.1	97.6	90.7	75.4
480-233445-2 - RE	WG-12595539-100825-DB-001	103	97.4	73.6	88.0	96.9	99.5	92.8	88.9
480-233445-6	WG-12595539-100825-DB-005	108	118	75.0	97.6	98.1	101	93.1	81.5
480-233445-6 - RE	WG-12595539-100825-DB-005	93.9	93.0	83.5	94.5	89.9	94.4	88.6	83.9
480-233445-8	WG-12595539-100825-DB-007	93.2	103	62.5	94.9	93.3	95.8	89.9	71.9
480-233445-8 - RE	WG-12595539-100825-DB-007	101	98.8	86.0	101	96.3	98.4	92.8	91.4
480-233445-9	WG-12595539-100825-GH-008	100	92.2	69.0	84.1	80.0	80.8	75.1	66.1
480-233445-9 - RE	WG-12595539-100825-GH-008	99.7	82.7	62.3	88.2	88.6	89.2	87.4	77.5
480-233445-11	WG-12595539-100825-GH-010	90.1	5.20 *5-		92.5	87.0	45.2	80.6	
480-233445-11 - RE	WG-12595539-100825-GH-010	90.2	86.6	74.8	92.9	89.1	91.6	85.4	81.3
LCS 240-676099/3-A	Lab Control Sample	115	116	84.4	102	96.6	102	92.2	83.4
LCS 240-676544/3-A	Lab Control Sample	93.9	94.8	85.4	97.1	95.7	99.3	91.5	90.3
LLCS 240-676099/2-A	Lab Control Sample	115	115	79.6	101	95.0	101	89.6	81.9
LLCS 240-676544/2-A	Lab Control Sample	99.5	98.0	87.8	97.5	95.7	99.2	93.3	90.2
MB 240-676099/1-A	Method Blank	107	105	73.2	91.0	90.8	93.3	84.1	72.6
MB 240-676544/1-A	Method Blank	103	100	91.7	104	97.7	102	97.7	93.3

Isotope Dilution Summary

Client: GHD Services Inc. Job ID: 480-233445-1
Project/Site: 12595539-004 , Cascades

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	C6PFDA (40-130)	13C7PUA (30-130)								
480-233445-2	WG-12595539-100825-DB-001	92.1	80.2								
480-233445-2 - RE	WG-12595539-100825-DB-001	94.0	87.7								
480-233445-6	WG-12595539-100825-DB-005	98.3	86.1								
480-233445-6 - RE	WG-12595539-100825-DB-005	88.0	86.1								
480-233445-8	WG-12595539-100825-DB-007	88.6	72.7								
480-233445-8 - RE	WG-12595539-100825-DB-007	93.4	92.3								
480-233445-9	WG-12595539-100825-GH-008	77.4	69.3								
480-233445-9 - RE	WG-12595539-100825-GH-008	77.4	69.0								
480-233445-11	WG-12595539-100825-GH-010	6.60 *5-									
480-233445-11 - RE	WG-12595539-100825-GH-010	83.8	81.4								
LCS 240-676099/3-A	Lab Control Sample	98.1	89.1								
LCS 240-676544/3-A	Lab Control Sample	91.4	89.7								
LLCS 240-676099/2-A	Lab Control Sample	96.4	86.1								
LLCS 240-676544/2-A	Lab Control Sample	93.0	92.0								
MB 240-676099/1-A	Method Blank	89.1	80.2								
MB 240-676544/1-A	Method Blank	96.6	94.8								

Surrogate Legend

PFOSA = 13C8 FOSA
PFBA = 13C4 PFBA
PFPeA = 13C5-PFPeA
C4PFHA = 13C4 PFHpA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
PFDoDA = 13C2-PFDoA
13C5PHA = 13C5 PFHxA
C8PFOA = 13C8 PFOA
C9PFNA = 13C9 PFNA
C3PFHS = 13C3 PFHxS
C8PFOS = 13C8 PFOS
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-759303/8
Matrix: Water
Analysis Batch: 759303

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			10/10/25 14:25	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			10/10/25 14:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			10/10/25 14:25	1
1,1,2-Trichloroethane	ND		5.0		ug/L			10/10/25 14:25	1
1,1-Dichloroethane	ND		5.0		ug/L			10/10/25 14:25	1
1,1-Dichloroethene	ND		5.0		ug/L			10/10/25 14:25	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/10/25 14:25	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/10/25 14:25	1
1,2-Dichlorobenzene	ND		5.0		ug/L			10/10/25 14:25	1
1,2-Dichloroethane	ND		5.0		ug/L			10/10/25 14:25	1
1,2-Dichloropropane	ND		5.0		ug/L			10/10/25 14:25	1
1,3-Dichlorobenzene	ND		5.0		ug/L			10/10/25 14:25	1
1,4-Dichlorobenzene	ND		5.0		ug/L			10/10/25 14:25	1
2-Butanone (MEK)	ND		25		ug/L			10/10/25 14:25	1
2-Hexanone	ND		25		ug/L			10/10/25 14:25	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			10/10/25 14:25	1
Acetone	ND		25		ug/L			10/10/25 14:25	1
Benzene	ND		5.0		ug/L			10/10/25 14:25	1
Bromoform	ND		5.0		ug/L			10/10/25 14:25	1
Bromomethane	ND		5.0		ug/L			10/10/25 14:25	1
Carbon disulfide	ND		5.0		ug/L			10/10/25 14:25	1
Carbon tetrachloride	ND		5.0		ug/L			10/10/25 14:25	1
Chlorobenzene	ND		5.0		ug/L			10/10/25 14:25	1
Dibromochloromethane	ND		5.0		ug/L			10/10/25 14:25	1
Chloroethane	ND		5.0		ug/L			10/10/25 14:25	1
Chloroform	ND		5.0		ug/L			10/10/25 14:25	1
Chloromethane	ND		5.0		ug/L			10/10/25 14:25	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/10/25 14:25	1
Bromodichloromethane	ND		5.0		ug/L			10/10/25 14:25	1
Dichlorodifluoromethane	ND		5.0		ug/L			10/10/25 14:25	1
Ethylbenzene	ND		5.0		ug/L			10/10/25 14:25	1
1,2-Dibromoethane	ND		5.0		ug/L			10/10/25 14:25	1
Isopropylbenzene	ND		5.0		ug/L			10/10/25 14:25	1
2-Chlorotoluene	ND		5.0		ug/L			10/10/25 14:25	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/10/25 14:25	1
4-Chlorotoluene	ND		5.0		ug/L			10/10/25 14:25	1
Methylene Chloride	ND		5.0		ug/L			10/10/25 14:25	1
3-Chlorotoluene	ND		5.0		ug/L			10/10/25 14:25	1
Tetrachloroethene	ND		5.0		ug/L			10/10/25 14:25	1
Toluene	ND		5.0		ug/L			10/10/25 14:25	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/10/25 14:25	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/10/25 14:25	1
Trichloroethene	ND		5.0		ug/L			10/10/25 14:25	1
Trichlorofluoromethane	ND		5.0		ug/L			10/10/25 14:25	1
Vinyl chloride	ND		5.0		ug/L			10/10/25 14:25	1
Xylenes, Total	ND		10		ug/L			10/10/25 14:25	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/10/25 14:25	1
Styrene	ND		5.0		ug/L			10/10/25 14:25	1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-759303/8
Matrix: Water
Analysis Batch: 759303

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*109*		*68 - 130*		*10/10/25 14:25*	*1*
4-Bromofluorobenzene (Surr)	*100*		*76 - 123*		*10/10/25 14:25*	*1*
Toluene-d8 (Surr)	*102*		*77 - 120*		*10/10/25 14:25*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*10/10/25 14:25*	*1*

Lab Sample ID: LCS 480-759303/6
Matrix: Water
Analysis Batch: 759303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	22.9		ug/L		114	52 - 162
1,1,2,2-Tetrachloroethane	20.0	19.3		ug/L		96	46 - 157
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	21.8		ug/L		109	50 - 150
1,1,2-Trichloroethane	20.0	18.2		ug/L		91	52 - 150
1,1-Dichloroethane	20.0	21.1		ug/L		106	59 - 155
1,1-Dichloroethene	20.0	21.4		ug/L		107	1 - 234
1,2,4-Trichlorobenzene	20.0	19.2		ug/L		96	56 - 128
1,2-Dibromo-3-Chloropropane	20.0	20.5		ug/L		102	44 - 138
1,2-Dichlorobenzene	20.0	19.2		ug/L		96	18 - 190
1,2-Dichloroethane	20.0	21.8		ug/L		109	49 - 155
1,2-Dichloropropane	20.0	19.3		ug/L		96	1 - 210
1,3-Dichlorobenzene	20.0	19.2		ug/L		96	59 - 156
1,4-Dichlorobenzene	20.0	19.2		ug/L		96	18 - 190
2-Butanone (MEK)	100	111		ug/L		111	57 - 140
2-Hexanone	100	109		ug/L		109	50 - 150
4-Methyl-2-pentanone (MIBK)	100	108		ug/L		108	50 - 150
Acetone	100	114		ug/L		114	21 - 161
Benzene	20.0	19.7		ug/L		99	37 - 151
Bromoform	20.0	20.9		ug/L		105	45 - 169
Bromomethane	20.0	20.4		ug/L		102	1 - 242
Carbon disulfide	20.0	23.3		ug/L		116	49 - 145
Carbon tetrachloride	20.0	24.9		ug/L		124	70 - 140
Chlorobenzene	20.0	18.8		ug/L		94	37 - 160
Dibromochloromethane	20.0	20.6		ug/L		103	53 - 149
Chloroethane	20.0	21.5		ug/L		107	14 - 230
Chloroform	20.0	20.6		ug/L		103	51 - 138
Chloromethane	20.0	25.5		ug/L		128	1 - 273
cis-1,2-Dichloroethene	20.0	20.2		ug/L		101	50 - 150
Bromodichloromethane	20.0	21.0		ug/L		105	35 - 155
Dichlorodifluoromethane	20.0	22.1		ug/L		110	59 - 135
Ethylbenzene	20.0	19.5		ug/L		98	37 - 162
1,2-Dibromoethane	20.0	18.9		ug/L		95	77 - 124
Isopropylbenzene	20.0	20.1		ug/L		101	68 - 133
2-Chlorotoluene	20.0	20.1		ug/L		101	72 - 126
Methyl tert-butyl ether	20.0	21.1		ug/L		105	78 - 118
4-Chlorotoluene	20.0	19.1		ug/L		96	76 - 120
Methylene Chloride	20.0	20.6		ug/L		103	1 - 221
Tetrachloroethene	20.0	19.8		ug/L		99	64 - 148

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-759303/6
Matrix: Water
Analysis Batch: 759303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	20.0	19.1		ug/L		96	47 - 150
trans-1,2-Dichloroethene	20.0	20.6		ug/L		103	54 - 156
trans-1,3-Dichloropropene	20.0	20.0		ug/L		100	17 - 183
Trichloroethene	20.0	20.1		ug/L		100	71 - 157
Trichlorofluoromethane	20.0	24.8		ug/L		124	17 - 181
Vinyl chloride	20.0	21.0		ug/L		105	1 - 251
cis-1,3-Dichloropropene	20.0	19.6		ug/L		98	1 - 227
Styrene	20.0	18.9		ug/L		95	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*68 - 130*
4-Bromofluorobenzene (Surr)	*97*		*76 - 123*
Toluene-d8 (Surr)	*100*		*77 - 120*
Dibromofluoromethane (Surr)	*107*		*75 - 123*

Lab Sample ID: MB 480-759445/8
Matrix: Water
Analysis Batch: 759445

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	ug/L			10/13/25 14:05	1
1,1,2,2-Tetrachloroethane	ND		5.0	ug/L			10/13/25 14:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			10/13/25 14:05	1
1,1,2-Trichloroethane	ND		5.0	ug/L			10/13/25 14:05	1
1,1-Dichloroethane	ND		5.0	ug/L			10/13/25 14:05	1
1,1-Dichloroethene	ND		5.0	ug/L			10/13/25 14:05	1
1,2,4-Trichlorobenzene	ND		5.0	ug/L			10/13/25 14:05	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			10/13/25 14:05	1
1,2-Dichlorobenzene	ND		5.0	ug/L			10/13/25 14:05	1
1,2-Dichloroethane	ND		5.0	ug/L			10/13/25 14:05	1
1,2-Dichloropropane	ND		5.0	ug/L			10/13/25 14:05	1
1,3-Dichlorobenzene	ND		5.0	ug/L			10/13/25 14:05	1
1,4-Dichlorobenzene	ND		5.0	ug/L			10/13/25 14:05	1
2-Butanone (MEK)	ND		25	ug/L			10/13/25 14:05	1
2-Hexanone	ND		25	ug/L			10/13/25 14:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	ug/L			10/13/25 14:05	1
Acetone	ND		25	ug/L			10/13/25 14:05	1
Benzene	ND		5.0	ug/L			10/13/25 14:05	1
Bromoform	ND		5.0	ug/L			10/13/25 14:05	1
Bromomethane	ND		5.0	ug/L			10/13/25 14:05	1
Carbon disulfide	ND		5.0	ug/L			10/13/25 14:05	1
Carbon tetrachloride	ND		5.0	ug/L			10/13/25 14:05	1
Chlorobenzene	ND		5.0	ug/L			10/13/25 14:05	1
Dibromochloromethane	ND		5.0	ug/L			10/13/25 14:05	1
Chloroethane	ND		5.0	ug/L			10/13/25 14:05	1
Chloroform	ND		5.0	ug/L			10/13/25 14:05	1
Chloromethane	ND		5.0	ug/L			10/13/25 14:05	1
cis-1,2-Dichloroethene	ND		5.0	ug/L			10/13/25 14:05	1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-759445/8
Matrix: Water
Analysis Batch: 759445

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		5.0		ug/L			10/13/25 14:05	1
Dichlorodifluoromethane	ND		5.0		ug/L			10/13/25 14:05	1
Ethylbenzene	ND		5.0		ug/L			10/13/25 14:05	1
1,2-Dibromoethane	ND		5.0		ug/L			10/13/25 14:05	1
Isopropylbenzene	ND		5.0		ug/L			10/13/25 14:05	1
2-Chlorotoluene	ND		5.0		ug/L			10/13/25 14:05	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/13/25 14:05	1
4-Chlorotoluene	ND		5.0		ug/L			10/13/25 14:05	1
Methylene Chloride	ND		5.0		ug/L			10/13/25 14:05	1
3-Chlorotoluene	ND		5.0		ug/L			10/13/25 14:05	1
Tetrachloroethene	ND		5.0		ug/L			10/13/25 14:05	1
Toluene	ND		5.0		ug/L			10/13/25 14:05	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/13/25 14:05	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/13/25 14:05	1
Trichloroethene	ND		5.0		ug/L			10/13/25 14:05	1
Trichlorofluoromethane	ND		5.0		ug/L			10/13/25 14:05	1
Vinyl chloride	ND		5.0		ug/L			10/13/25 14:05	1
Xylenes, Total	ND		10		ug/L			10/13/25 14:05	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/13/25 14:05	1
Styrene	ND		5.0		ug/L			10/13/25 14:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*68 - 130*		*10/13/25 14:05*	*1*
4-Bromofluorobenzene (Surr)	*106*		*76 - 123*		*10/13/25 14:05*	*1*
Toluene-d8 (Surr)	*108*		*77 - 120*		*10/13/25 14:05*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*10/13/25 14:05*	*1*

Lab Sample ID: LCS 480-759445/6
Matrix: Water
Analysis Batch: 759445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	24.5		ug/L		123	52 - 162
1,1,2,2-Tetrachloroethane	20.0	20.6		ug/L		103	46 - 157
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	23.6		ug/L		118	50 - 150
1,1,2-Trichloroethane	20.0	21.4		ug/L		107	52 - 150
1,1-Dichloroethane	20.0	22.0		ug/L		110	59 - 155
1,1-Dichloroethene	20.0	23.4		ug/L		117	1 - 234
1,2,4-Trichlorobenzene	20.0	19.9		ug/L		100	56 - 128
1,2-Dibromo-3-Chloropropane	20.0	23.2		ug/L		116	44 - 138
1,2-Dichlorobenzene	20.0	20.8		ug/L		104	18 - 190
1,2-Dichloroethane	20.0	23.7		ug/L		119	49 - 155
1,2-Dichloropropane	20.0	22.3		ug/L		111	1 - 210
1,3-Dichlorobenzene	20.0	21.7		ug/L		109	59 - 156
1,4-Dichlorobenzene	20.0	21.6		ug/L		108	18 - 190
2-Butanone (MEK)	100	135		ug/L		135	57 - 140
2-Hexanone	100	143		ug/L		143	50 - 150
4-Methyl-2-pentanone (MIBK)	100	126		ug/L		126	50 - 150

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-759445/6
Matrix: Water
Analysis Batch: 759445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	100	116		ug/L		116	21 - 161
Benzene	20.0	21.8		ug/L		109	37 - 151
Bromoform	20.0	23.2		ug/L		116	45 - 169
Bromomethane	20.0	21.8		ug/L		109	1 - 242
Carbon disulfide	20.0	23.7		ug/L		118	49 - 145
Carbon tetrachloride	20.0	25.5		ug/L		128	70 - 140
Chlorobenzene	20.0	21.5		ug/L		108	37 - 160
Dibromochloromethane	20.0	22.6		ug/L		113	53 - 149
Chloroethane	20.0	22.7		ug/L		113	14 - 230
Chloroform	20.0	21.6		ug/L		108	51 - 138
Chloromethane	20.0	24.6		ug/L		123	1 - 273
cis-1,2-Dichloroethene	20.0	21.2		ug/L		106	50 - 150
Bromodichloromethane	20.0	23.6		ug/L		118	35 - 155
Dichlorodifluoromethane	20.0	20.8		ug/L		104	59 - 135
Ethylbenzene	20.0	21.8		ug/L		109	37 - 162
1,2-Dibromoethane	20.0	22.7		ug/L		113	77 - 124
Isopropylbenzene	20.0	21.2		ug/L		106	68 - 133
2-Chlorotoluene	20.0	21.2		ug/L		106	72 - 126
Methyl tert-butyl ether	20.0	21.1		ug/L		106	78 - 118
4-Chlorotoluene	20.0	21.8		ug/L		109	76 - 120
Methylene Chloride	20.0	21.5		ug/L		108	1 - 221
Tetrachloroethene	20.0	22.5		ug/L		112	64 - 148
Toluene	20.0	21.4		ug/L		107	47 - 150
trans-1,2-Dichloroethene	20.0	21.4		ug/L		107	54 - 156
trans-1,3-Dichloropropene	20.0	23.7		ug/L		119	17 - 183
Trichloroethene	20.0	22.1		ug/L		111	71 - 157
Trichlorofluoromethane	20.0	25.3		ug/L		127	17 - 181
Vinyl chloride	20.0	23.4		ug/L		117	1 - 251
cis-1,3-Dichloropropene	20.0	23.4		ug/L		117	1 - 227
Styrene	20.0	21.6		ug/L		108	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*68 - 130*
4-Bromofluorobenzene (Surr)	*106*		*76 - 123*
Toluene-d8 (Surr)	*106*		*77 - 120*
Dibromofluoromethane (Surr)	*104*		*75 - 123*

Lab Sample ID: 480-233445-10 MS
Matrix: Water
Analysis Batch: 759445

Client Sample ID: WG-12595539-100925-DB-009
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	ND		40.0	44.7		ug/L		112	59 - 155
1,2,4-Trichlorobenzene	ND		40.0	38.6		ug/L		97	56 - 128
1,2-Dichlorobenzene	43		40.0	79.0		ug/L		91	18 - 190
1,3-Dichlorobenzene	97		40.0	128		ug/L		79	59 - 156
1,4-Dichlorobenzene	140		40.0	164		ug/L		64	18 - 190
Acetone	ND		200	243		ug/L		122	21 - 161

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-233445-10 MS
Matrix: Water
Analysis Batch: 759445

Client Sample ID: WG-12595539-100925-DB-009
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		40.0	47.5		ug/L		111	37 - 151
Chlorobenzene	130		40.0	157		ug/L		71	37 - 160
cis-1,2-Dichloroethene	14		40.0	55.3		ug/L		103	50 - 150
Tetrachloroethene	11		40.0	53.9		ug/L		108	64 - 148
Toluene	ND		40.0	42.5		ug/L		106	47 - 150
Trichloroethene	14		40.0	58.6		ug/L		112	71 - 157
Vinyl chloride	ND		40.0	49.2		ug/L		115	1 - 251
2-Chlorotoluene	15		40.0	54.7		ug/L		100	72 - 126
4-Chlorotoluene	ND		40.0	47.5		ug/L		106	76 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*123*		*68 - 130*
4-Bromofluorobenzene (Surr)	*109*		*76 - 123*
Toluene-d8 (Surr)	*105*		*77 - 120*
Dibromofluoromethane (Surr)	*106*		*75 - 123*

Lab Sample ID: 480-233445-10 MSD
Matrix: Water
Analysis Batch: 759445

Client Sample ID: WG-12595539-100925-DB-009
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethane	ND		40.0	45.3		ug/L		113	59 - 155	1	15
1,2,4-Trichlorobenzene	ND		40.0	39.8		ug/L		99	56 - 128	3	43
1,2-Dichlorobenzene	43		40.0	81.1		ug/L		96	18 - 190	3	15
1,3-Dichlorobenzene	97		40.0	129		ug/L		81	59 - 156	1	15
1,4-Dichlorobenzene	140		40.0	166		ug/L		69	18 - 190	1	15
Acetone	ND		200	237		ug/L		119	21 - 161	2	15
Benzene	ND		40.0	49.7		ug/L		116	37 - 151	4	15
Chlorobenzene	130		40.0	160		ug/L		78	37 - 160	2	15
cis-1,2-Dichloroethene	14		40.0	56.6		ug/L		106	50 - 150	2	15
Tetrachloroethene	11		40.0	55.7		ug/L		113	64 - 148	3	15
Toluene	ND		40.0	44.0		ug/L		110	47 - 150	3	15
Trichloroethene	14		40.0	58.7		ug/L		113	71 - 157	0	15
Vinyl chloride	ND		40.0	51.6		ug/L		121	1 - 251	5	15
2-Chlorotoluene	15		40.0	56.5		ug/L		104	72 - 126	3	15
4-Chlorotoluene	ND		40.0	48.1		ug/L		108	76 - 120	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*122*		*68 - 130*
4-Bromofluorobenzene (Surr)	*108*		*76 - 123*
Toluene-d8 (Surr)	*105*		*77 - 120*
Dibromofluoromethane (Surr)	*106*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-759427/1-A
Matrix: Water
Analysis Batch: 759538

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 759427

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		10/13/25 09:19	10/14/25 14:03	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*32*		*15 - 110*	*10/13/25 09:19*	*10/14/25 14:03*	*1*

Lab Sample ID: LCS 480-759427/2-A
Matrix: Water
Analysis Batch: 759538

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 759427

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			2.00	2.26		ug/L		113	40 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*33*		*15 - 110*

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 240-676099/1-A
Matrix: Water
Analysis Batch: 676180

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 676099

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
Perfluoropentanoic acid (PFPeA)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
Perfluorohexanoic acid (PFHxA)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
Perfluorooctanoic acid (PFOA)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
Perfluorodecanoic acid (PFDA)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
Perfluorododecanoic acid (PFDoA)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
6:2 FTS	ND		4.0		ng/L		10/15/25 09:21	10/15/25 21:39	1
8:2 FTS	ND		4.0		ng/L		10/15/25 09:21	10/15/25 21:39	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*69.1*		*40 - 130*	*10/15/25 09:21*	*10/15/25 21:39*	*1*
13C4 PFBA	*90.4*		*5 - 130*	*10/15/25 09:21*	*10/15/25 21:39*	*1*

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 240-676099/1-A
Matrix: Water
Analysis Batch: 676180

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 676099

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5-PFPeA	93.9		40 - 130	10/15/25 09:21	10/15/25 21:39	1
13C4 PFHpA	100		40 - 130	10/15/25 09:21	10/15/25 21:39	1
13C2 PFTeDA	71.0		10 - 130	10/15/25 09:21	10/15/25 21:39	1
13C3 PFBS	79.0		40 - 135	10/15/25 09:21	10/15/25 21:39	1
d3-NMeFOSAA	70.4		40 - 170	10/15/25 09:21	10/15/25 21:39	1
d5-NEtFOSAA	64.1		25 - 135	10/15/25 09:21	10/15/25 21:39	1
M2-6:2 FTS	107		40 - 200	10/15/25 09:21	10/15/25 21:39	1
M2-8:2 FTS	105		40 - 300	10/15/25 09:21	10/15/25 21:39	1
13C5 PFHxA	91.0		40 - 130	10/15/25 09:21	10/15/25 21:39	1
13C8 PFOA	90.8		40 - 130	10/15/25 09:21	10/15/25 21:39	1
13C9 PFNA	93.3		40 - 130	10/15/25 09:21	10/15/25 21:39	1
13C3 PFHxS	84.1		40 - 130	10/15/25 09:21	10/15/25 21:39	1
13C8 PFOS	72.6		40 - 130	10/15/25 09:21	10/15/25 21:39	1
13C2-PFDoA	73.2		10 - 130	10/15/25 09:21	10/15/25 21:39	1
13C6 PFDA	89.1		40 - 130	10/15/25 09:21	10/15/25 21:39	1
13C7 PFUnA	80.2		30 - 130	10/15/25 09:21	10/15/25 21:39	1

Lab Sample ID: LCS 240-676099/3-A
Matrix: Water
Analysis Batch: 676180

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 676099

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	80.0	87.8		ng/L		110	70 - 140
Perfluoropentanoic acid (PFPeA)	40.0	45.3		ng/L		113	65 - 135
Perfluorohexanoic acid (PFHxA)	40.0	39.3		ng/L		98	70 - 145
Perfluoroheptanoic acid (PFHpA)	40.0	40.8		ng/L		102	70 - 150
Perfluorooctanoic acid (PFOA)	40.0	43.8		ng/L		109	70 - 150
Perfluorononanoic acid (PFNA)	40.0	42.4		ng/L		106	70 - 150
Perfluorodecanoic acid (PFDA)	40.0	40.3		ng/L		101	70 - 140
Perfluoroundecanoic acid (PFUnA)	40.0	41.9		ng/L		105	70 - 145
Perfluorododecanoic acid (PFDoA)	40.0	42.8		ng/L		107	70 - 140
Perfluorotridecanoic acid (PFTriA)	40.0	44.4		ng/L		111	65 - 140
Perfluorotetradecanoic acid (PFTeA)	40.0	44.0		ng/L		110	60 - 140
Perfluorobutanesulfonic acid (PFBS)	35.5	40.3		ng/L		114	60 - 145
Perfluorohexanesulfonic acid (PFHxS)	36.5	41.0		ng/L		112	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	38.2	41.2		ng/L		108	70 - 150
Perfluorooctanesulfonic acid (PFOS)	37.2	34.7		ng/L		93	55 - 150
Perfluorodecanesulfonic acid (PFDS)	38.6	38.0		ng/L		99	60 - 145
Perfluorooctanesulfonamide (FOSA)	40.0	45.2		ng/L		113	70 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	43.0		ng/L		107	50 - 140

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-676099/3-A
Matrix: Water
Analysis Batch: 676180

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 676099

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			40.0	41.5		ng/L		104	70 - 145		
6:2 FTS			76.2	77.5		ng/L		102	65 - 155		
8:2 FTS			76.8	69.3		ng/L		90	60 - 150		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C8 FOSA	*76.3*		*40 - 130*
13C4 PFBA	*94.1*		*5 - 130*
13C5-PFPeA	*100*		*40 - 130*
13C4 PFHpA	*115*		*40 - 130*
13C2 PFTeDA	*81.4*		*10 - 130*
13C3 PFBS	*83.6*		*40 - 135*
d3-NMeFOSAA	*80.3*		*40 - 170*
d5-NEtFOSAA	*74.7*		*25 - 135*
M2-6:2 FTS	*115*		*40 - 200*
M2-8:2 FTS	*116*		*40 - 300*
13C5 PFHxA	*102*		*40 - 130*
13C8 PFOA	*96.6*		*40 - 130*
13C9 PFNA	*102*		*40 - 130*
13C3 PFHxS	*92.2*		*40 - 130*
13C8 PFOS	*83.4*		*40 - 130*
13C2-PFDoA	*84.4*		*10 - 130*
13C6 PFDA	*98.1*		*40 - 130*
13C7 PFUnA	*89.1*		*30 - 130*

Lab Sample ID: LLCS 240-676099/2-A
Matrix: Water
Analysis Batch: 676180

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 676099

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluorobutanoic acid (PFBA)			8.00	10.1		ng/L		127	70 - 140		
Perfluoropentanoic acid (PFPeA)			4.00	5.45	*+	ng/L		136	65 - 135		
Perfluorohexanoic acid (PFHxA)			4.00	4.57		ng/L		114	70 - 145		
Perfluoroheptanoic acid (PFHpA)			4.00	4.72		ng/L		118	70 - 150		
Perfluorooctanoic acid (PFOA)			4.00	5.20		ng/L		130	70 - 150		
Perfluorononanoic acid (PFNA)			4.00	4.93		ng/L		123	70 - 150		
Perfluorodecanoic acid (PFDA)			4.00	5.12		ng/L		128	70 - 140		
Perfluoroundecanoic acid (PFUnA)			4.00	4.76		ng/L		119	70 - 145		
Perfluorododecanoic acid (PFDoA)			4.00	4.85		ng/L		121	70 - 140		
Perfluorotridecanoic acid (PFTriA)			4.00	5.32		ng/L		133	65 - 140		
Perfluorotetradecanoic acid (PFTeA)			4.00	5.21		ng/L		130	60 - 140		
Perfluorobutanesulfonic acid (PFBS)			3.55	4.72		ng/L		133	60 - 145		
Perfluorohexanesulfonic acid (PFHxS)			3.65	4.95		ng/L		136	65 - 145		
Perfluoroheptanesulfonic acid (PFHpS)			3.82	4.40		ng/L		115	70 - 150		

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-676099/2-A
Matrix: Water
Analysis Batch: 676180

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 676099

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluorooctanesulfonic acid (PFOS)			3.72	5.11		ng/L		137	55 - 150		
Perfluorodecanesulfonic acid (PFDS)			3.86	4.17		ng/L		108	60 - 145		
Perfluorooctanesulfonamide (FOSA)			4.00	4.82		ng/L		121	70 - 145		
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			4.00	4.93		ng/L		123	50 - 140		
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			4.00	4.55		ng/L		114	70 - 145		
6:2 FTS			7.62	8.56		ng/L		112	65 - 155		
8:2 FTS			7.68	8.47		ng/L		110	60 - 150		

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C8 FOSA	*71.2*		*40 - 130*
13C4 PFBA	*94.1*		*5 - 130*
13C5-PFPeA	*101*		*40 - 130*
13C4 PFHpA	*114*		*40 - 130*
13C2 PFTeDA	*72.6*		*10 - 130*
13C3 PFBS	*83.0*		*40 - 135*
d3-NMeFOSAA	*72.2*		*40 - 170*
d5-NEtFOSAA	*68.5*		*25 - 135*
M2-6:2 FTS	*115*		*40 - 200*
M2-8:2 FTS	*115*		*40 - 300*
13C5 PFHxA	*101*		*40 - 130*
13C8 PFOA	*95.0*		*40 - 130*
13C9 PFNA	*101*		*40 - 130*
13C3 PFHxS	*89.6*		*40 - 130*
13C8 PFOS	*81.9*		*40 - 130*
13C2-PFDoA	*79.6*		*10 - 130*
13C6 PFDA	*96.4*		*40 - 130*
13C7 PFUnA	*86.1*		*30 - 130*

Lab Sample ID: MB 240-676544/1-A
Matrix: Water
Analysis Batch: 676588

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 676544

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
Perfluoropentanoic acid (PFPeA)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
Perfluorohexanoic acid (PFHxA)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
Perfluorooctanoic acid (PFOA)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
Perfluorononanoic acid (PFNA)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
Perfluorodecanoic acid (PFDA)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
Perfluorododecanoic acid (PFDoA)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 240-676544/1-A
Matrix: Water
Analysis Batch: 676588

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 676544

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
6:2 FTS	ND		4.0		ng/L		10/17/25 11:21	10/17/25 18:32	1
8:2 FTS	ND		4.0		ng/L		10/17/25 11:21	10/17/25 18:32	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*92.4*		*40 - 130*	*10/17/25 11:21*	*10/17/25 18:32*	*1*
13C4 PFBA	*96.6*		*5 - 130*	*10/17/25 11:21*	*10/17/25 18:32*	*1*
13C5-PFPeA	*105*		*40 - 130*	*10/17/25 11:21*	*10/17/25 18:32*	*1*
13C4 PFHpA	*104*		*40 - 130*	*10/17/25 11:21*	*10/17/25 18:32*	*1*
13C2 PFTeDA	*89.9*		*10 - 130*	*10/17/25 11:21*	*10/17/25 18:32*	*1*
13C3 PFBS	*103*		*40 - 135*	*10/17/25 11:21*	*10/17/25 18:32*	*1*
d3-NMeFOSAA	*89.4*		*40 - 170*	*10/17/25 11:21*	*10/17/25 18:32*	*1*
d5-NEtFOSAA	*133*		*25 - 135*	*10/17/25 11:21*	*10/17/25 18:32*	*1*
M2-6:2 FTS	*103*		*40 - 200*	*10/17/25 11:21*	*10/17/25 18:32*	*1*
M2-8:2 FTS	*100*		*40 - 300*	*10/17/25 11:21*	*10/17/25 18:32*	*1*
13C5 PFHxA	*104*		*40 - 130*	*10/17/25 11:21*	*10/17/25 18:32*	*1*
13C8 PFOA	*97.7*		*40 - 130*	*10/17/25 11:21*	*10/17/25 18:32*	*1*
13C9 PFNA	*102*		*40 - 130*	*10/17/25 11:21*	*10/17/25 18:32*	*1*
13C3 PFHxS	*97.7*		*40 - 130*	*10/17/25 11:21*	*10/17/25 18:32*	*1*
13C8 PFOS	*93.3*		*40 - 130*	*10/17/25 11:21*	*10/17/25 18:32*	*1*
13C2-PFDoA	*91.7*		*10 - 130*	*10/17/25 11:21*	*10/17/25 18:32*	*1*
13C6 PFDA	*96.6*		*40 - 130*	*10/17/25 11:21*	*10/17/25 18:32*	*1*
13C7 PFUnA	*94.8*		*30 - 130*	*10/17/25 11:21*	*10/17/25 18:32*	*1*

Lab Sample ID: LCS 240-676544/3-A
Matrix: Water
Analysis Batch: 676588

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 676544

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	80.0	83.8		ng/L		105	70 - 140
Perfluoropentanoic acid (PFPeA)	40.0	41.2		ng/L		103	65 - 135
Perfluorohexanoic acid (PFHxA)	40.0	41.6		ng/L		104	70 - 145
Perfluoroheptanoic acid (PFHpA)	40.0	40.9		ng/L		102	70 - 150
Perfluorooctanoic acid (PFOA)	40.0	40.2		ng/L		101	70 - 150
Perfluorononanoic acid (PFNA)	40.0	40.4		ng/L		101	70 - 150
Perfluorodecanoic acid (PFDA)	40.0	35.3		ng/L		88	70 - 140
Perfluoroundecanoic acid (PFUnA)	40.0	40.7		ng/L		102	70 - 145
Perfluorododecanoic acid (PFDoA)	40.0	39.1		ng/L		98	70 - 140

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-676544/3-A
Matrix: Water
Analysis Batch: 676588

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 676544

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluorotridecanoic acid (PFTriA)			40.0	36.6		ng/L		91	65 - 140		
Perfluorotetradecanoic acid (PFTeA)			40.0	40.3		ng/L		101	60 - 140		
Perfluorobutanesulfonic acid (PFBS)			35.5	35.1		ng/L		99	60 - 145		
Perfluorohexanesulfonic acid (PFHxS)			36.5	36.6		ng/L		100	65 - 145		
Perfluoroheptanesulfonic acid (PFHpS)			38.2	40.1		ng/L		105	70 - 150		
Perfluorooctanesulfonic acid (PFOS)			37.2	30.9		ng/L		83	55 - 150		
Perfluorodecanesulfonic acid (PFDS)			38.6	37.0		ng/L		96	60 - 145		
Perfluorooctanesulfonamide (FOSA)			40.0	44.7		ng/L		112	70 - 145		
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			40.0	39.7		ng/L		99	50 - 140		
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			40.0	38.8		ng/L		97	70 - 145		
6:2 FTS			76.2	83.1		ng/L		109	65 - 155		
8:2 FTS			76.8	72.6		ng/L		95	60 - 150		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C8 FOSA	*88.3*		*40 - 130*
13C4 PFBA	*93.7*		*5 - 130*
13C5-PFPeA	*103*		*40 - 130*
13C4 PFHpA	*101*		*40 - 130*
13C2 PFTeDA	*72.3*		*10 - 130*
13C3 PFBS	*96.6*		*40 - 135*
d3-NMeFOSAA	*85.6*		*40 - 170*
d5-NEtFOSAA	*114*		*25 - 135*
M2-6:2 FTS	*93.9*		*40 - 200*
M2-8:2 FTS	*94.8*		*40 - 300*
13C5 PFHxA	*97.1*		*40 - 130*
13C8 PFOA	*95.7*		*40 - 130*
13C9 PFNA	*99.3*		*40 - 130*
13C3 PFHxS	*91.5*		*40 - 130*
13C8 PFOS	*90.3*		*40 - 130*
13C2-PFDoA	*85.4*		*10 - 130*
13C6 PFDA	*91.4*		*40 - 130*
13C7 PFUnA	*89.7*		*30 - 130*

Lab Sample ID: LLCS 240-676544/2-A
Matrix: Water
Analysis Batch: 676588

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 676544

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluorobutanoic acid (PFBA)			8.00	8.09		ng/L		101	70 - 140		
Perfluoropentanoic acid (PFPeA)			4.00	4.09		ng/L		102	65 - 135		
Perfluorohexanoic acid (PFHxA)			4.00	4.00		ng/L		100	70 - 145		

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-676544/2-A
Matrix: Water
Analysis Batch: 676588

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 676544

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroheptanoic acid (PFHpA)	4.00	4.05		ng/L		101	70 - 150
Perfluorooctanoic acid (PFOA)	4.00	3.96		ng/L		99	70 - 150
Perfluorononanoic acid (PFNA)	4.00	4.06		ng/L		101	70 - 150
Perfluorodecanoic acid (PFDA)	4.00	3.55		ng/L		89	70 - 140
Perfluoroundecanoic acid (PFUnA)	4.00	4.05		ng/L		101	70 - 145
Perfluorododecanoic acid (PFDoA)	4.00	3.86		ng/L		97	70 - 140
Perfluorotridecanoic acid (PFTriA)	4.00	3.77		ng/L		94	65 - 140
Perfluorotetradecanoic acid (PFTeA)	4.00	3.93		ng/L		98	60 - 140
Perfluorobutanesulfonic acid (PFBS)	3.55	3.27		ng/L		92	60 - 145
Perfluorohexanesulfonic acid (PFHxS)	3.65	3.81		ng/L		104	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	3.82	3.64		ng/L		95	70 - 150
Perfluorooctanesulfonic acid (PFOS)	3.72	3.21		ng/L		86	55 - 150
Perfluorodecanesulfonic acid (PFDS)	3.86	3.66		ng/L		95	60 - 145
Perfluorooctanesulfonamide (FOSA)	4.00	4.27		ng/L		107	70 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	4.00	3.71		ng/L		93	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	4.00	3.63		ng/L		91	70 - 145
6:2 FTS	7.62	7.95		ng/L		104	65 - 155
8:2 FTS	7.68	7.13		ng/L		93	60 - 150

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C8 FOSA	*90.3*		*40 - 130*
13C4 PFBA	*92.9*		*5 - 130*
13C5-PFPeA	*99.6*		*40 - 130*
13C4 PFHpA	*96.4*		*40 - 130*
13C2 PFTeDA	*80.5*		*10 - 130*
13C3 PFBS	*99.5*		*40 - 135*
d3-NMeFOSAA	*88.1*		*40 - 170*
d5-NEtFOSAA	*122*		*25 - 135*
M2-6:2 FTS	*99.5*		*40 - 200*
M2-8:2 FTS	*98.0*		*40 - 300*
13C5 PFHxA	*97.5*		*40 - 130*
13C8 PFOA	*95.7*		*40 - 130*
13C9 PFNA	*99.2*		*40 - 130*
13C3 PFHxS	*93.3*		*40 - 130*
13C8 PFOS	*90.2*		*40 - 130*
13C2-PFDoA	*87.8*		*10 - 130*
13C6 PFDA	*93.0*		*40 - 130*
13C7 PFUnA	*92.0*		*30 - 130*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-759339/1-A
Matrix: Water
Analysis Batch: 759490

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 759339

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015		mg/L		10/13/25 08:46	10/13/25 14:47	1
Iron	ND		0.050		mg/L		10/13/25 08:46	10/13/25 14:47	1
Potassium	ND		0.50		mg/L		10/13/25 08:46	10/13/25 14:47	1
Sodium	ND		1.0		mg/L		10/13/25 08:46	10/13/25 14:47	1

Lab Sample ID: LCS 480-759339/2-A
Matrix: Water
Analysis Batch: 759490

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 759339

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic			1.00	1.04		mg/L		104	85 - 115		
Iron			5.10	5.67		mg/L		111	85 - 115		
Potassium			25.0	24.3		mg/L		97	85 - 115		
Sodium			25.0	25.4		mg/L		102	85 - 115		

Lab Sample ID: 480-233445-10 MS
Matrix: Water
Analysis Batch: 759490

Client Sample ID: WG-12595539-100925-DB-009
Prep Type: Total/NA
Prep Batch: 759339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic	ND		1.00	1.06		mg/L		106	70 - 130		
Iron	0.077		5.10	5.84		mg/L		113	70 - 130		
Potassium	17		25.0	41.2		mg/L		96	70 - 130		
Sodium	44		25.0	70.3		mg/L		107	70 - 130		

Lab Sample ID: 480-233445-10 MSD
Matrix: Water
Analysis Batch: 759490

Client Sample ID: WG-12595539-100925-DB-009
Prep Type: Total/NA
Prep Batch: 759339

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.06		mg/L		106	70 - 130	0	20
Iron	0.077		5.10	5.82		mg/L		113	70 - 130	0	20
Potassium	17		25.0	41.4		mg/L		97	70 - 130	1	20
Sodium	44		25.0	69.7		mg/L		104	70 - 130	1	20

Method: 420.4 - Phenolics, Total Recoverable

Lab Sample ID: MB 480-759388/45
Matrix: Water
Analysis Batch: 759388

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		0.010		mg/L			10/12/25 16:10	1

Lab Sample ID: MB 480-759388/73
Matrix: Water
Analysis Batch: 759388

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		0.010		mg/L			10/12/25 17:56	1

Method: 420.4 - Phenolics, Total Recoverable

Lab Sample ID: LCS 480-759388/46
Matrix: Water
Analysis Batch: 759388

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	0.100	0.0931		mg/L		93	90 - 110

Lab Sample ID: LCS 480-759388/74
Matrix: Water
Analysis Batch: 759388

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	0.100	0.0953		mg/L		95	90 - 110

Lab Sample ID: 480-233445-10 MS
Matrix: Water
Analysis Batch: 759388

Client Sample ID: WG-12595539-100925-DB-009
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	ND		0.100	0.0996		mg/L		100	90 - 110

Lab Sample ID: 480-233445-10 MSD
Matrix: Water
Analysis Batch: 759388

Client Sample ID: WG-12595539-100925-DB-009
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenolics, Total Recoverable	ND		0.100	0.101		mg/L		101	90 - 110	1	20

Lab Sample ID: 480-233445-12 DU
Matrix: Water
Analysis Batch: 759388

Client Sample ID: WG-12595539-100925-DB-011
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Phenolics, Total Recoverable	ND		ND		mg/L		NC	20

GC/MS VOA

Analysis Batch: 759303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233445-1	TB-12595539-100825	Total/NA	Water	624.1	
480-233445-2	WG-12595539-100825-DB-001	Total/NA	Water	624.1	
480-233445-5	WG-12595539-100825-GH-004	Total/NA	Water	624.1	
480-233445-7	WG-12595539-100825-GH-006	Total/NA	Water	624.1	
MB 480-759303/8	Method Blank	Total/NA	Water	624.1	
LCS 480-759303/6	Lab Control Sample	Total/NA	Water	624.1	

Analysis Batch: 759445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233445-3	WG-12595539-100825-GH-002	Total/NA	Water	624.1	
480-233445-4	WG-12595539-100825-DB-003	Total/NA	Water	624.1	
480-233445-8	WG-12595539-100825-DB-007	Total/NA	Water	624.1	
480-233445-10	WG-12595539-100925-DB-009	Total/NA	Water	624.1	
480-233445-12	WG-12595539-100925-DB-011	Total/NA	Water	624.1	
480-233445-13	WG-12595539-100925-GH-012	Total/NA	Water	624.1	
MB 480-759445/8	Method Blank	Total/NA	Water	624.1	
LCS 480-759445/6	Lab Control Sample	Total/NA	Water	624.1	
480-233445-10 MS	WG-12595539-100925-DB-009	Total/NA	Water	624.1	
480-233445-10 MSD	WG-12595539-100925-DB-009	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 759427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233445-2	WG-12595539-100825-DB-001	Total/NA	Water	3510C	
480-233445-8	WG-12595539-100825-DB-007	Total/NA	Water	3510C	
MB 480-759427/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-759427/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 759538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233445-2	WG-12595539-100825-DB-001	Total/NA	Water	8270D SIM ID	759427
480-233445-8	WG-12595539-100825-DB-007	Total/NA	Water	8270D SIM ID	759427
MB 480-759427/1-A	Method Blank	Total/NA	Water	8270D SIM ID	759427
LCS 480-759427/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	759427

LCMS

Prep Batch: 676099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233445-2	WG-12595539-100825-DB-001	Total/NA	Water	1633	
480-233445-6	WG-12595539-100825-DB-005	Total/NA	Water	1633	
480-233445-8	WG-12595539-100825-DB-007	Total/NA	Water	1633	
480-233445-9	WG-12595539-100825-GH-008	Total/NA	Water	1633	
480-233445-11	WG-12595539-100825-GH-010	Total/NA	Water	1633	
MB 240-676099/1-A	Method Blank	Total/NA	Water	1633	
LCS 240-676099/3-A	Lab Control Sample	Total/NA	Water	1633	
LLCS 240-676099/2-A	Lab Control Sample	Total/NA	Water	1633	

Analysis Batch: 676180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233445-2	WG-12595539-100825-DB-001	Total/NA	Water	1633	676099

LCMS (Continued)

Analysis Batch: 676180 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233445-6	WG-12595539-100825-DB-005	Total/NA	Water	1633	676099
480-233445-8	WG-12595539-100825-DB-007	Total/NA	Water	1633	676099
480-233445-9	WG-12595539-100825-GH-008	Total/NA	Water	1633	676099
480-233445-11	WG-12595539-100825-GH-010	Total/NA	Water	1633	676099
MB 240-676099/1-A	Method Blank	Total/NA	Water	1633	676099
LCS 240-676099/3-A	Lab Control Sample	Total/NA	Water	1633	676099
LLCS 240-676099/2-A	Lab Control Sample	Total/NA	Water	1633	676099

Prep Batch: 676544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233445-2 - RE	WG-12595539-100825-DB-001	Total/NA	Water	1633	
480-233445-6 - RE	WG-12595539-100825-DB-005	Total/NA	Water	1633	
480-233445-8 - RE	WG-12595539-100825-DB-007	Total/NA	Water	1633	
480-233445-9 - RE	WG-12595539-100825-GH-008	Total/NA	Water	1633	
480-233445-11 - RE	WG-12595539-100825-GH-010	Total/NA	Water	1633	
MB 240-676544/1-A	Method Blank	Total/NA	Water	1633	
LCS 240-676544/3-A	Lab Control Sample	Total/NA	Water	1633	
LLCS 240-676544/2-A	Lab Control Sample	Total/NA	Water	1633	

Analysis Batch: 676588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233445-2 - RE	WG-12595539-100825-DB-001	Total/NA	Water	1633	676544
480-233445-6 - RE	WG-12595539-100825-DB-005	Total/NA	Water	1633	676544
480-233445-8 - RE	WG-12595539-100825-DB-007	Total/NA	Water	1633	676544
480-233445-9 - RE	WG-12595539-100825-GH-008	Total/NA	Water	1633	676544
480-233445-11 - RE	WG-12595539-100825-GH-010	Total/NA	Water	1633	676544
MB 240-676544/1-A	Method Blank	Total/NA	Water	1633	676544
LCS 240-676544/3-A	Lab Control Sample	Total/NA	Water	1633	676544
LLCS 240-676544/2-A	Lab Control Sample	Total/NA	Water	1633	676544

Metals

Prep Batch: 759339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233445-2	WG-12595539-100825-DB-001	Total/NA	Water	200.7	
480-233445-5	WG-12595539-100825-GH-004	Total/NA	Water	200.7	
480-233445-7	WG-12595539-100825-GH-006	Total/NA	Water	200.7	
480-233445-8	WG-12595539-100825-DB-007	Total/NA	Water	200.7	
480-233445-10	WG-12595539-100925-DB-009	Total/NA	Water	200.7	
480-233445-12	WG-12595539-100925-DB-011	Total/NA	Water	200.7	
MB 480-759339/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-759339/2-A	Lab Control Sample	Total/NA	Water	200.7	
480-233445-10 MS	WG-12595539-100925-DB-009	Total/NA	Water	200.7	
480-233445-10 MSD	WG-12595539-100925-DB-009	Total/NA	Water	200.7	

Analysis Batch: 759490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233445-2	WG-12595539-100825-DB-001	Total/NA	Water	200.7 Rev 4.4	759339
480-233445-5	WG-12595539-100825-GH-004	Total/NA	Water	200.7 Rev 4.4	759339
480-233445-7	WG-12595539-100825-GH-006	Total/NA	Water	200.7 Rev 4.4	759339
480-233445-8	WG-12595539-100825-DB-007	Total/NA	Water	200.7 Rev 4.4	759339

Metals (Continued)

Analysis Batch: 759490 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233445-10	WG-12595539-100925-DB-009	Total/NA	Water	200.7 Rev 4.4	759339
480-233445-12	WG-12595539-100925-DB-011	Total/NA	Water	200.7 Rev 4.4	759339
MB 480-759339/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	759339
LCS 480-759339/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	759339
480-233445-10 MS	WG-12595539-100925-DB-009	Total/NA	Water	200.7 Rev 4.4	759339
480-233445-10 MSD	WG-12595539-100925-DB-009	Total/NA	Water	200.7 Rev 4.4	759339

Analysis Batch: 759591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233445-2	WG-12595539-100825-DB-001	Total/NA	Water	200.7 Rev 4.4	759339
480-233445-5	WG-12595539-100825-GH-004	Total/NA	Water	200.7 Rev 4.4	759339
480-233445-7	WG-12595539-100825-GH-006	Total/NA	Water	200.7 Rev 4.4	759339
480-233445-8	WG-12595539-100825-DB-007	Total/NA	Water	200.7 Rev 4.4	759339

General Chemistry

Analysis Batch: 759388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233445-2	WG-12595539-100825-DB-001	Total/NA	Water	420.4	
480-233445-5	WG-12595539-100825-GH-004	Total/NA	Water	420.4	
480-233445-7	WG-12595539-100825-GH-006	Total/NA	Water	420.4	
480-233445-8	WG-12595539-100825-DB-007	Total/NA	Water	420.4	
480-233445-10	WG-12595539-100925-DB-009	Total/NA	Water	420.4	
480-233445-12	WG-12595539-100925-DB-011	Total/NA	Water	420.4	
MB 480-759388/45	Method Blank	Total/NA	Water	420.4	
MB 480-759388/73	Method Blank	Total/NA	Water	420.4	
LCS 480-759388/46	Lab Control Sample	Total/NA	Water	420.4	
LCS 480-759388/74	Lab Control Sample	Total/NA	Water	420.4	
480-233445-10 MS	WG-12595539-100925-DB-009	Total/NA	Water	420.4	
480-233445-10 MSD	WG-12595539-100925-DB-009	Total/NA	Water	420.4	
480-233445-12 DU	WG-12595539-100925-DB-011	Total/NA	Water	420.4	

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233445-1

Client Sample ID: TB-12595539-100825
Lab Sample ID: 480-233445-1
Date Collected: 10/08/25 09:00
Matrix: Water
Date Received: 10/09/25 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	759303	AXK	EET BUF	10/10/25 14:50

Client Sample ID: WG-12595539-100825-DB-001
Lab Sample ID: 480-233445-2
Date Collected: 10/08/25 11:15
Matrix: Water
Date Received: 10/09/25 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		10	759303	AXK	EET BUF	10/10/25 15:14
Total/NA	Prep	3510C			759427	JMP	EET BUF	10/13/25 09:19
Total/NA	Analysis	8270D SIM ID		1	759538	JMM	EET BUF	10/14/25 20:11
Total/NA	Prep	1633	RE		676544	E6JD	EET CLE	10/17/25 11:21
Total/NA	Analysis	1633	RE	1	676588	LD	EET CLE	10/17/25 19:55
Total/NA	Prep	1633			676099	JVB4	EET CLE	10/15/25 09:21
Total/NA	Analysis	1633		1	676180	DSH	EET CLE	10/16/25 00:09
Total/NA	Prep	200.7			759339	EMO	EET BUF	10/13/25 08:46
Total/NA	Analysis	200.7 Rev 4.4		1	759490	MP	EET BUF	10/13/25 15:03
Total/NA	Prep	200.7			759339	EMO	EET BUF	10/13/25 08:46
Total/NA	Analysis	200.7 Rev 4.4		5	759591	MP	EET BUF	10/14/25 16:14
Total/NA	Analysis	420.4		1	759388	GW	EET BUF	10/12/25 17:26

Client Sample ID: WG-12595539-100825-GH-002
Lab Sample ID: 480-233445-3
Date Collected: 10/08/25 10:50
Matrix: Water
Date Received: 10/09/25 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	759445	AXK	EET BUF	10/13/25 15:36

Client Sample ID: WG-12595539-100825-DB-003
Lab Sample ID: 480-233445-4
Date Collected: 10/08/25 13:30
Matrix: Water
Date Received: 10/09/25 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	759445	AXK	EET BUF	10/13/25 16:01

Client Sample ID: WG-12595539-100825-GH-004
Lab Sample ID: 480-233445-5
Date Collected: 10/08/25 13:25
Matrix: Water
Date Received: 10/09/25 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		20	759303	AXK	EET BUF	10/10/25 16:26
Total/NA	Prep	200.7			759339	EMO	EET BUF	10/13/25 08:46
Total/NA	Analysis	200.7 Rev 4.4		1	759490	MP	EET BUF	10/13/25 15:10
Total/NA	Prep	200.7			759339	EMO	EET BUF	10/13/25 08:46
Total/NA	Analysis	200.7 Rev 4.4		10	759591	MP	EET BUF	10/14/25 16:16
Total/NA	Analysis	420.4		1	759388	GW	EET BUF	10/12/25 17:30

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233445-1

Client Sample ID: WG-12595539-100825-DB-005
Lab Sample ID: 480-233445-6
Date Collected: 10/08/25 15:55
Matrix: Water
Date Received: 10/09/25 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633	RE		676544	E6JD	EET CLE	10/17/25 11:21
Total/NA	Analysis	1633	RE	1	676588	LD	EET CLE	10/17/25 20:12
Total/NA	Prep	1633			676099	JVB4	EET CLE	10/15/25 09:21
Total/NA	Analysis	1633		1	676180	DSH	EET CLE	10/16/25 00:59

Client Sample ID: WG-12595539-100825-GH-006
Lab Sample ID: 480-233445-7
Date Collected: 10/08/25 13:25
Matrix: Water
Date Received: 10/09/25 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		4	759303	AXK	EET BUF	10/10/25 16:51
Total/NA	Prep	200.7			759339	EMO	EET BUF	10/13/25 08:46
Total/NA	Analysis	200.7 Rev 4.4		1	759490	MP	EET BUF	10/13/25 15:12
Total/NA	Prep	200.7			759339	EMO	EET BUF	10/13/25 08:46
Total/NA	Analysis	200.7 Rev 4.4		10	759591	MP	EET BUF	10/14/25 16:18
Total/NA	Analysis	420.4		1	759388	GW	EET BUF	10/12/25 17:33

Client Sample ID: WG-12595539-100825-DB-007
Lab Sample ID: 480-233445-8
Date Collected: 10/08/25 16:35
Matrix: Water
Date Received: 10/09/25 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		40	759445	AXK	EET BUF	10/13/25 16:26
Total/NA	Prep	3510C			759427	JMP	EET BUF	10/13/25 09:19
Total/NA	Analysis	8270D SIM ID		1	759538	JMM	EET BUF	10/14/25 20:33
Total/NA	Prep	1633	RE		676544	E6JD	EET CLE	10/17/25 11:21
Total/NA	Analysis	1633	RE	1	676588	LD	EET CLE	10/17/25 20:28
Total/NA	Prep	1633			676099	JVB4	EET CLE	10/15/25 09:21
Total/NA	Analysis	1633		1	676180	DSH	EET CLE	10/16/25 01:15
Total/NA	Prep	200.7			759339	EMO	EET BUF	10/13/25 08:46
Total/NA	Analysis	200.7 Rev 4.4		1	759490	MP	EET BUF	10/13/25 15:14
Total/NA	Prep	200.7			759339	EMO	EET BUF	10/13/25 08:46
Total/NA	Analysis	200.7 Rev 4.4		5	759591	MP	EET BUF	10/14/25 16:20
Total/NA	Analysis	420.4		1	759388	GW	EET BUF	10/12/25 17:37

Client Sample ID: WG-12595539-100825-GH-008
Lab Sample ID: 480-233445-9
Date Collected: 10/08/25 16:10
Matrix: Water
Date Received: 10/09/25 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633	RE		676544	E6JD	EET CLE	10/17/25 11:21
Total/NA	Analysis	1633	RE	1	676588	LD	EET CLE	10/17/25 20:45
Total/NA	Prep	1633			676099	JVB4	EET CLE	10/15/25 09:21
Total/NA	Analysis	1633		1	676180	DSH	EET CLE	10/16/25 01:32

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233445-1

Client Sample ID: WG-12595539-100925-DB-009
Lab Sample ID: 480-233445-10
Date Collected: 10/09/25 10:25
Matrix: Water
Date Received: 10/09/25 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		2	759445	AXK	EET BUF	10/13/25 16:50
Total/NA	Prep	200.7			759339	EMO	EET BUF	10/13/25 08:46
Total/NA	Analysis	200.7 Rev 4.4		1	759490	MP	EET BUF	10/13/25 15:16
Total/NA	Analysis	420.4		1	759388	GW	EET BUF	10/12/25 17:01

Client Sample ID: WG-12595539-100825-GH-010
Lab Sample ID: 480-233445-11
Date Collected: 10/08/25 16:20
Matrix: Water
Date Received: 10/09/25 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633	RE		676544	E6JD	EET CLE	10/17/25 11:21
Total/NA	Analysis	1633	RE	1	676588	LD	EET CLE	10/17/25 21:02
Total/NA	Prep	1633			676099	JVB4	EET CLE	10/15/25 09:21
Total/NA	Analysis	1633		1	676180	DSH	EET CLE	10/16/25 01:49

Client Sample ID: WG-12595539-100925-DB-011
Lab Sample ID: 480-233445-12
Date Collected: 10/09/25 12:05
Matrix: Water
Date Received: 10/09/25 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		5	759445	AXK	EET BUF	10/13/25 17:15
Total/NA	Prep	200.7			759339	EMO	EET BUF	10/13/25 08:46
Total/NA	Analysis	200.7 Rev 4.4		1	759490	MP	EET BUF	10/13/25 15:22
Total/NA	Analysis	420.4		1	759388	GW	EET BUF	10/12/25 18:02

Client Sample ID: WG-12595539-100925-GH-012
Lab Sample ID: 480-233445-13
Date Collected: 10/09/25 13:45
Matrix: Water
Date Received: 10/09/25 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		4	759445	AXK	EET BUF	10/13/25 17:38

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Job ID: 480-233445-1
Project/Site: 12595539-004 , Cascades

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00686	07-06-25 *
Connecticut	State	PH-0807	03-31-26
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-26
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	01-31-26
Kentucky (UST)	State	108092	03-31-26
Kentucky (WW)	State	KY90029	12-31-25
Maine	State	NY00044	04-21-27
Maryland	State	294	06-30-26
Massachusetts	State	M-NY044	06-30-26
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-25
New Jersey	NELAP	NY455	06-30-26
New York	NELAP	10026	10-15-25
Pennsylvania	NELAP	68-00281	08-30-26
Rhode Island	State	LAO00378	12-30-25
USDA	US Federal Programs	P330-18-00039	02-16-27
Virginia	NELAP	460185	09-14-26
Washington	State	C784	02-10-26
Wisconsin	State	998310390	08-31-26

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	2250	09-30-26
New Jersey	NELAP	OH001	06-30-26
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-26
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-26
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233445-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	EET CLE
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
420.4	Phenolics, Total Recoverable	EPA	EET BUF
1633	Solid-Phase Extraction (SPE)	EPA	EET CLE
200.7	Preparation, Total Metals	EPA	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233445-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
480-233445-1	TB-12595539-100825	Water	10/08/25 09:00	10/09/25 16:30	New York
480-233445-2	WG-12595539-100825-DB-001	Water	10/08/25 11:15	10/09/25 16:30	New York
480-233445-3	WG-12595539-100825-GH-002	Water	10/08/25 10:50	10/09/25 16:30	New York
480-233445-4	WG-12595539-100825-DB-003	Water	10/08/25 13:30	10/09/25 16:30	New York
480-233445-5	WG-12595539-100825-GH-004	Water	10/08/25 13:25	10/09/25 16:30	New York
480-233445-6	WG-12595539-100825-DB-005	Water	10/08/25 15:55	10/09/25 16:30	New York
480-233445-7	WG-12595539-100825-GH-006	Water	10/08/25 13:25	10/09/25 16:30	New York
480-233445-8	WG-12595539-100825-DB-007	Water	10/08/25 16:35	10/09/25 16:30	New York
480-233445-9	WG-12595539-100825-GH-008	Water	10/08/25 16:10	10/09/25 16:30	New York
480-233445-10	WG-12595539-100925-DB-009	Water	10/09/25 10:25	10/09/25 16:30	New York
480-233445-11	WG-12595539-100825-GH-010	Water	10/08/25 16:20	10/09/25 16:30	New York
480-233445-12	WG-12595539-100925-DB-011	Water	10/09/25 12:05	10/09/25 16:30	New York
480-233445-13	WG-12595539-100925-GH-012	Water	10/09/25 13:45	10/09/25 16:30	New York

CHAIN OF CUSTODY RECORD

COC NO.: 61294

Address: 2055 Niagara Falls Blvd Niagara Falls, NY 14304 PAGE 1 OF 1

Phone: (716) 297-6150 Fax:

Project No/ Phase/Task Code: 12595539	Laboratory Name: Eurofins Buffalo	Lab Location: 10 Hazelwood Dr.	SSOW ID:
Project Name: Cascades	Lab Contact: Denise Heckler	(716) 691-2600	Cooler No: 1
Project Location: Royal Ave.			Carrier: Hand Delivered
GHD Chemistry Contact: Sheri Finn			Airbill No:
Sampler(s): D. Burr & G. Harbach			Total # of Containers: ~~78~~ 73

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Filtered (Y/N)	SSPL VOCs	Phenols	Metals	PFAS	1,4-Dioxane	Total VOCs							Total Containers/sample	MS/MSD Request	Comments/ Special Instructions:
	PRESERVATION - (SEE BACK OF COC FOR ABBREVIATIONS)						HC	H2	HN	None	None	HC									
1	TB-12595539-100825	10/8/25	9:00	WG	G	N						X							2		
2	WG-12596539-100825-DB-001	10/8/25	1115	WG	G		X	X	X	X	X								10		
3	WG-12595539-100825-GH-002	10/8/25	1050	WG	G							X							3		
4	WG-12595539-100825-DB-003	10/8/25	1330	WG	G							X							3		
5	WG-12595539-100825-GH-004	10/8/25	1325	WG	G		X	X	X										6		
6	WG-12595539-100825-DB-005	10/8/25	1555	WG	G					X									2		
7	WG-12595539-100825-GH-006	10/8/25	1325	WG	G		X	X	X										6		
8	WG-12595539-100825-DB-007	10/8/25	1635	WG	G		X	X	X	X	X								10		
9	WG-12595539-100825-GH-008	10/8/25	1610	WG	G					X									2		
10	WG-12595539-100925-DB-009	10/09/25	1025	WG	G		X	X	X										18	X	
11	WG-12595539-100825-GH-010	10/08/25	1620	WG	G					X									2		
12	WG-12595539-100926-DB-011	10/9/25	1205	WG	G		X	X	X										6		
13	WG-12595539-100925-GH-012	10/9/25	1345	WG	G							X							3		

480-233445 Chain of Custody

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other:

Notes/ Special Requirements: 2, 9 IR #5c

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
				1. C Walker	GHD	10/9/25	16.30
				2.			
				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

10/24/2025

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691 7991

Chain of Custody Record

eurofins Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Heckler Denise D	Carrier Tracking No(s): N/A	COC No: 480-95299.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Denise.Heckler@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP New York		Job #: 480-233445-1
Address: 180 S. Van Buren Avenue,	Due Date Requested: 10/23/2025			Preservation Codes:
City: Barberton	TAT Requested (days): N/A			
State, Zip: OH, 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: 12595539 12615780 Cascades	Project #: 48017427			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1633_Final/1633_SPEPFAS, Standard List (21 Analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						PFAS R087-0600
WG-12595539-100825-DB-001 (480-233445-2)	10/8/25	11:15 Eastern	G	Water			X	2	
WG-12595539-100825-DB-005 (480-233445-6)	10/8/25	15:55 Eastern	G	Water			X	2	
WG-12595539-100825-DB-007 (480-233445-8)	10/8/25	16:35 Eastern	G	Water			X	2	
WG-12595539-100825-GH-008 (480-233445-9)	10/8/25	16:10 Eastern	G	Water			X	2	
WG-12595539-100825-GH-010 (480-233445-11)	10/8/25	16:20 Eastern	G	Water			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. *This sample shipment is forwarded under chain-of-custody.* If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested. I II III, IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	VS	10-10-25 1400		Martin	10/11/25 1015	EUR
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Eur. Buffalo Site Name _____ Cooler unpacked by IMartin

Cooler Received on 10/11/25 Opened on 10/13/25

FedEx: 1st Grd (Exp) UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT (Wet Ice) Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 13 (CF +0.6 °C) Observed Cooler Temp 3.3 °C Corrected Cooler Temp 3.9 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes) No	**Tests that are not checked for pH by Receiving**
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes) No NA	
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes (No)	**VOAs**
-Were tamper/custody seals intact and uncompromised?	(Yes) No NA	**Oil and Grease**
3 Shippers' packing slip attached to the cooler(s)?	(Yes) No	**TOC**
4 Did custody papers accompany the sample(s)?	(Yes) No	
5 Were the custody papers relinquished & signed in the appropriate place?	(Yes) No	
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes (No)	
7 Did all bottles arrive in good condition (Unbroken)?	(Yes) No	
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes) No	
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N) and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	(Yes) No	
11 Sufficient quantity received to perform indicated analyses?	(Yes) No	
12 Are these work share samples and all listed on the COC?	(Yes) No	
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes No NA	pH Strip Lot# HC567196
14 Were VOAs on the COC?	Yes No	
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes No NA	
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes No	
17 Was a LL Hg or Me Hg trip blank present? _____	Yes No	

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation Date/Time VOAs Frozen _____

TRK# 0201 4666 1687 6577

XO CAKA

SATURDAY 12:00P
PRIORITY OVERNIGHT

44203
CLE
OH-US

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 480-233445-1

Login Number: 233445
List Number: 1
Creator: Wallace, Cameron

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Sheri Finn
GHD Services Inc.
2055 Niagara Falls Blvd., Suite 3
Niagara Falls, New York 14304

Generated 10/27/2025 1:19:20 PM

JOB DESCRIPTION

12595539-004 , Cascades

JOB NUMBER

480-233507-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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10/27/2025 1:19:20 PM

Authorized for release by
Denise Heckler, Project Manager II
Denise.Heckler@et.eurofinsus.com
(330)966-9477

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233507-1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-233507-1 — Eurofins Buffalo

Job Narrative
480-233507-1

Receipt
The samples were received on 10/13/2025 3:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.9°C.

GC/MS VOA
Method 624.1_PREC: The following samples were diluted to bring the concentration of target analytes within the calibration range: WG-12595539-101325-DB-013 (480-233507-2), WG-12595539-101325-GH-014 (480-233507-3), WG-12595539-101325-DB-015 (480-233507-4), WG-12595539-101325-GH-016 (480-233507-5), WG-12595539-101325-DB-017 (480-233507-6) and WG-12595539-101325-GH-018 (480-233507-7). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 200.7: The continuing calibration verification (CCV) associated with batch 480-759776 recovered above the upper control limit for total Arsenic. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233507-1

Client Sample ID: TB-12595539-101325 — Lab Sample ID: 480-233507-1

No Detections.

Client Sample ID: WG-12595539-101325-DB-013 — Lab Sample ID: 480-233507-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,3-Dichlorobenzene	180		100		ug/L	20		624.1	Total/NA
1,4-Dichlorobenzene	410		100		ug/L	20		624.1	Total/NA
Benzene	320		100		ug/L	20		624.1	Total/NA
Chlorobenzene	650		100		ug/L	20		624.1	Total/NA
2-Chlorotoluene	460		100		ug/L	20		624.1	Total/NA
1,4-Dioxane	12		0.20		ug/L	1		8270D SIM ID	Total/NA
Arsenic	0.015		0.015		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	40		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	960		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	210		1.0		mg/L	1		200.7 Rev 4.4	Total/NA
Phenolics, Total Recoverable	0.042		0.010		mg/L	1		420.4	Total/NA

Client Sample ID: WG-12595539-101325-GH-014 — Lab Sample ID: 480-233507-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	67		50		ug/L	10		624.1	Total/NA
1,3-Dichlorobenzene	220		50		ug/L	10		624.1	Total/NA
1,4-Dichlorobenzene	170		50		ug/L	10		624.1	Total/NA
Benzene	220		50		ug/L	10		624.1	Total/NA
Chlorobenzene	490		50		ug/L	10		624.1	Total/NA
Vinyl chloride	210		50		ug/L	10		624.1	Total/NA
2-Chlorotoluene	160		50		ug/L	10		624.1	Total/NA
4-Chlorotoluene	70		50		ug/L	10		624.1	Total/NA
1,4-Dioxane	6.6		0.20		ug/L	1		8270D SIM ID	Total/NA
Arsenic	0.018		0.015		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	10		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	3500		5.0		mg/L	10		200.7 Rev 4.4	Total/NA
Sodium	340		1.0		mg/L	1		200.7 Rev 4.4	Total/NA
Phenolics, Total Recoverable	0.14		0.010		mg/L	1		420.4	Total/NA

Client Sample ID: WG-12595539-101325-DB-015 — Lab Sample ID: 480-233507-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	32		20		ug/L	4		624.1	Total/NA
2-Chlorotoluene	170		20		ug/L	4		624.1	Total/NA
1,4-Dioxane	1.0		0.20		ug/L	1		8270D SIM ID	Total/NA
Iron	30		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	29		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	240		1.0		mg/L	1		200.7 Rev 4.4	Total/NA
Phenolics, Total Recoverable	0.017		0.010		mg/L	1		420.4	Total/NA

Client Sample ID: WG-12595539-101325-GH-016 — Lab Sample ID: 480-233507-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	41000		10000		ug/L	2000		624.1	Total/NA
Tetrachloroethene	82000		10000		ug/L	2000		624.1	Total/NA
Trichloroethene	120000		10000		ug/L	2000		624.1	Total/NA
Arsenic	0.048		0.015		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.21		0.050		mg/L	1		200.7 Rev 4.4	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Detection Summary

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233507-1

Client Sample ID: WG-12595539-101325-GH-016 (Continued) — Lab Sample ID: 480-233507-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Potassium	820		2.5		mg/L	5		200.7 Rev 4.4	Total/NA
Sodium	260		1.0		mg/L	1		200.7 Rev 4.4	Total/NA
Phenolics, Total Recoverable	0.043		0.020		mg/L	2		420.4	Total/NA

Client Sample ID: WG-12595539-101325-DB-017 — Lab Sample ID: 480-233507-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,3-Dichlorobenzene	86		50		ug/L	10		624.1	Total/NA
1,4-Dichlorobenzene	340		50		ug/L	10		624.1	Total/NA
Chlorobenzene	560		50		ug/L	10		624.1	Total/NA
Trichloroethene	53		50		ug/L	10		624.1	Total/NA
2-Chlorotoluene	540		50		ug/L	10		624.1	Total/NA
Iron	1.5		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	70		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	130		1.0		mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: WG-12595539-101325-GH-018 — Lab Sample ID: 480-233507-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	38		25		ug/L	5		624.1	Total/NA
cis-1,2-Dichloroethene	67		25		ug/L	5		624.1	Total/NA
Vinyl chloride	410		25		ug/L	5		624.1	Total/NA
Iron	21		0.050		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	320		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	160		1.0		mg/L	1		200.7 Rev 4.4	Total/NA

This Detection Summary does not include radiochemical test results.

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233507-1

Client Sample ID: TB-12595539-101325
Date Collected: 10/13/25 08:45
Date Received: 10/13/25 15:30

Lab Sample ID: 480-233507-1
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			10/15/25 16:07	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			10/15/25 16:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			10/15/25 16:07	1
1,1,2-Trichloroethane	ND		5.0		ug/L			10/15/25 16:07	1
1,1-Dichloroethane	ND		5.0		ug/L			10/15/25 16:07	1
1,1-Dichloroethene	ND		5.0		ug/L			10/15/25 16:07	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/15/25 16:07	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/15/25 16:07	1
1,2-Dichlorobenzene	ND		5.0		ug/L			10/15/25 16:07	1
1,2-Dichloroethane	ND		5.0		ug/L			10/15/25 16:07	1
1,2-Dichloropropane	ND		5.0		ug/L			10/15/25 16:07	1
1,3-Dichlorobenzene	ND		5.0		ug/L			10/15/25 16:07	1
1,4-Dichlorobenzene	ND		5.0		ug/L			10/15/25 16:07	1
2-Butanone (MEK)	ND		25		ug/L			10/15/25 16:07	1
2-Hexanone	ND		25		ug/L			10/15/25 16:07	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			10/15/25 16:07	1
Acetone	ND		25		ug/L			10/15/25 16:07	1
Benzene	ND		5.0		ug/L			10/15/25 16:07	1
Bromoform	ND		5.0		ug/L			10/15/25 16:07	1
Bromomethane	ND		5.0		ug/L			10/15/25 16:07	1
Carbon disulfide	ND		5.0		ug/L			10/15/25 16:07	1
Carbon tetrachloride	ND		5.0		ug/L			10/15/25 16:07	1
Chlorobenzene	ND		5.0		ug/L			10/15/25 16:07	1
Dibromochloromethane	ND		5.0		ug/L			10/15/25 16:07	1
Chloroethane	ND		5.0		ug/L			10/15/25 16:07	1
Chloroform	ND		5.0		ug/L			10/15/25 16:07	1
Chloromethane	ND		5.0		ug/L			10/15/25 16:07	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/15/25 16:07	1
Bromodichloromethane	ND		5.0		ug/L			10/15/25 16:07	1
Dichlorodifluoromethane	ND		5.0		ug/L			10/15/25 16:07	1
Ethylbenzene	ND		5.0		ug/L			10/15/25 16:07	1
1,2-Dibromoethane	ND		5.0		ug/L			10/15/25 16:07	1
Isopropylbenzene	ND		5.0		ug/L			10/15/25 16:07	1
2-Chlorotoluene	ND		5.0		ug/L			10/15/25 16:07	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/15/25 16:07	1
4-Chlorotoluene	ND		5.0		ug/L			10/15/25 16:07	1
Methylene Chloride	ND		5.0		ug/L			10/15/25 16:07	1
3-Chlorotoluene	ND		5.0		ug/L			10/15/25 16:07	1
Tetrachloroethene	ND		5.0		ug/L			10/15/25 16:07	1
Toluene	ND		5.0		ug/L			10/15/25 16:07	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/15/25 16:07	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/15/25 16:07	1
Trichloroethene	ND		5.0		ug/L			10/15/25 16:07	1
Trichlorofluoromethane	ND		5.0		ug/L			10/15/25 16:07	1
Vinyl chloride	ND		5.0		ug/L			10/15/25 16:07	1
Xylenes, Total	ND		10		ug/L			10/15/25 16:07	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/15/25 16:07	1
Styrene	ND		5.0		ug/L			10/15/25 16:07	1

Client Sample ID: TB-12595539-101325

Lab Sample ID: 480-233507-1

Date Collected: 10/13/25 08:45

Matrix: Water

Date Received: 10/13/25 15:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*68 - 130*		*10/15/25 16:07*	*1*
4-Bromofluorobenzene (Surr)	*104*		*76 - 123*		*10/15/25 16:07*	*1*
Toluene-d8 (Surr)	*105*		*77 - 120*		*10/15/25 16:07*	*1*
Dibromofluoromethane (Surr)	*113*		*75 - 123*		*10/15/25 16:07*	*1*

Client Sample ID: WG-12595539-101325-DB-013

Lab Sample ID: 480-233507-2

Date Collected: 10/13/25 08:50

Matrix: Water

Date Received: 10/13/25 15:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		100	ug/L			10/15/25 19:20	20
1,2,4-Trichlorobenzene	ND		100	ug/L			10/15/25 19:20	20
1,2-Dichlorobenzene	ND		100	ug/L			10/15/25 19:20	20
1,3-Dichlorobenzene	**180**		100	ug/L			10/15/25 19:20	20
1,4-Dichlorobenzene	**410**		100	ug/L			10/15/25 19:20	20
Acetone	ND		500	ug/L			10/15/25 19:20	20
Benzene	**320**		100	ug/L			10/15/25 19:20	20
Chlorobenzene	**650**		100	ug/L			10/15/25 19:20	20
cis-1,2-Dichloroethene	ND		100	ug/L			10/15/25 19:20	20
Tetrachloroethene	ND		100	ug/L			10/15/25 19:20	20
Toluene	ND		100	ug/L			10/15/25 19:20	20
Trichloroethene	ND		100	ug/L			10/15/25 19:20	20
Vinyl chloride	ND		100	ug/L			10/15/25 19:20	20
2-Chlorotoluene	**460**		100	ug/L			10/15/25 19:20	20
4-Chlorotoluene	ND		100	ug/L			10/15/25 19:20	20
3-Chlorotoluene	ND		100	ug/L			10/15/25 19:20	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*68 - 130*		*10/15/25 19:20*	*20*
4-Bromofluorobenzene (Surr)	*102*		*76 - 123*		*10/15/25 19:20*	*20*
Toluene-d8 (Surr)	*105*		*77 - 120*		*10/15/25 19:20*	*20*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*10/15/25 19:20*	*20*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**12**		0.20	ug/L		10/16/25 09:10	10/20/25 15:34	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*15 - 110*	*10/16/25 09:10*	*10/20/25 15:34*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.015**		0.015	mg/L		10/16/25 08:25	10/16/25 13:53	1
Iron	**40**		0.050	mg/L		10/16/25 08:25	10/16/25 13:53	1
Potassium	**960**		2.5	mg/L		10/16/25 08:25	10/16/25 20:38	5
Sodium	**210**		1.0	mg/L		10/16/25 08:25	10/16/25 13:53	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable (EPA 420.4)	**0.042**		0.010	mg/L			10/15/25 21:59	1

Client Sample ID: WG-12595539-101325-GH-014

Lab Sample ID: 480-233507-3

Date Collected: 10/13/25 09:15
Date Received: 10/13/25 15:30

Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		50		ug/L			10/15/25 19:45	10
1,2,4-Trichlorobenzene	ND		50		ug/L			10/15/25 19:45	10
1,2-Dichlorobenzene	**67**		50		ug/L			10/15/25 19:45	10
1,3-Dichlorobenzene	**220**		50		ug/L			10/15/25 19:45	10
1,4-Dichlorobenzene	**170**		50		ug/L			10/15/25 19:45	10
Acetone	ND		250		ug/L			10/15/25 19:45	10
Benzene	**220**		50		ug/L			10/15/25 19:45	10
Chlorobenzene	**490**		50		ug/L			10/15/25 19:45	10
cis-1,2-Dichloroethene	ND		50		ug/L			10/15/25 19:45	10
Tetrachloroethene	ND		50		ug/L			10/15/25 19:45	10
Toluene	ND		50		ug/L			10/15/25 19:45	10
Trichloroethene	ND		50		ug/L			10/15/25 19:45	10
Vinyl chloride	**210**		50		ug/L			10/15/25 19:45	10
2-Chlorotoluene	**160**		50		ug/L			10/15/25 19:45	10
4-Chlorotoluene	**70**		50		ug/L			10/15/25 19:45	10
3-Chlorotoluene	ND		50		ug/L			10/15/25 19:45	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*68 - 130*		*10/15/25 19:45*	*10*
4-Bromofluorobenzene (Surr)	*108*		*76 - 123*		*10/15/25 19:45*	*10*
Toluene-d8 (Surr)	*104*		*77 - 120*		*10/15/25 19:45*	*10*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*10/15/25 19:45*	*10*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.6**		0.20		ug/L		10/16/25 09:10	10/20/25 15:54	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*34*		*15 - 110*	*10/16/25 09:10*	*10/20/25 15:54*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.018**		0.015		mg/L		10/16/25 08:25	10/16/25 13:55	1
Iron	**10**		0.050		mg/L		10/16/25 08:25	10/16/25 13:55	1
Potassium	**3500**		5.0		mg/L		10/16/25 08:25	10/16/25 20:40	10
Sodium	**340**		1.0		mg/L		10/16/25 08:25	10/16/25 13:55	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable (EPA 420.4)	**0.14**		0.010		mg/L			10/15/25 22:03	1

Client Sample ID: WG-12595539-101325-DB-015

Lab Sample ID: 480-233507-4

Date Collected: 10/13/25 09:40
Date Received: 10/13/25 15:30

Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		20		ug/L			10/15/25 20:09	4
1,2,4-Trichlorobenzene	ND		20		ug/L			10/15/25 20:09	4
1,2-Dichlorobenzene	ND		20		ug/L			10/15/25 20:09	4
1,3-Dichlorobenzene	ND		20		ug/L			10/15/25 20:09	4

Client Sample ID: WG-12595539-101325-DB-015

Lab Sample ID: 480-233507-4

Date Collected: 10/13/25 09:40

Matrix: Water

Date Received: 10/13/25 15:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		20		ug/L			10/15/25 20:09	4
Acetone	ND		100		ug/L			10/15/25 20:09	4
Benzene	ND		20		ug/L			10/15/25 20:09	4
Chlorobenzene	ND		20		ug/L			10/15/25 20:09	4
cis-1,2-Dichloroethene	**32**		20		ug/L			10/15/25 20:09	4
Tetrachloroethene	ND		20		ug/L			10/15/25 20:09	4
Toluene	ND		20		ug/L			10/15/25 20:09	4
Trichloroethene	ND		20		ug/L			10/15/25 20:09	4
Vinyl chloride	ND		20		ug/L			10/15/25 20:09	4
2-Chlorotoluene	**170**		20		ug/L			10/15/25 20:09	4
4-Chlorotoluene	ND		20		ug/L			10/15/25 20:09	4
3-Chlorotoluene	ND		20		ug/L			10/15/25 20:09	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*124*		*68 - 130*		*10/15/25 20:09*	*4*
4-Bromofluorobenzene (Surr)	*105*		*76 - 123*		*10/15/25 20:09*	*4*
Toluene-d8 (Surr)	*107*		*77 - 120*		*10/15/25 20:09*	*4*
Dibromofluoromethane (Surr)	*112*		*75 - 123*		*10/15/25 20:09*	*4*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.0**		0.20		ug/L		10/16/25 09:10	10/20/25 16:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*31*		*15 - 110*	*10/16/25 09:10*	*10/20/25 16:14*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015		mg/L		10/15/25 08:27	10/15/25 15:21	1
Iron	**30**		0.050		mg/L		10/15/25 08:27	10/15/25 15:21	1
Potassium	**29**		0.50		mg/L		10/15/25 08:27	10/15/25 15:21	1
Sodium	**240**		1.0		mg/L		10/15/25 08:27	10/15/25 15:21	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable (EPA 420.4)	**0.017**		0.010		mg/L			10/15/25 22:07	1

Client Sample ID: WG-12595539-101325-GH-016

Lab Sample ID: 480-233507-5

Date Collected: 10/13/25 10:40

Matrix: Water

Date Received: 10/13/25 15:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		10000		ug/L			10/15/25 20:34	2000
1,2,4-Trichlorobenzene	ND		10000		ug/L			10/15/25 20:34	2000
1,2-Dichlorobenzene	ND		10000		ug/L			10/15/25 20:34	2000
1,3-Dichlorobenzene	ND		10000		ug/L			10/15/25 20:34	2000
1,4-Dichlorobenzene	ND		10000		ug/L			10/15/25 20:34	2000
Acetone	ND		50000		ug/L			10/15/25 20:34	2000
Benzene	ND		10000		ug/L			10/15/25 20:34	2000
Chlorobenzene	ND		10000		ug/L			10/15/25 20:34	2000

Client Sample ID: WG-12595539-101325-GH-016

Lab Sample ID: 480-233507-5

Date Collected: 10/13/25 10:40

Matrix: Water

Date Received: 10/13/25 15:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**41000**		10000		ug/L			10/15/25 20:34	2000
Tetrachloroethene	**82000**		10000		ug/L			10/15/25 20:34	2000
Toluene	ND		10000		ug/L			10/15/25 20:34	2000
Trichloroethene	**120000**		10000		ug/L			10/15/25 20:34	2000
Vinyl chloride	ND		10000		ug/L			10/15/25 20:34	2000
2-Chlorotoluene	ND		10000		ug/L			10/15/25 20:34	2000
4-Chlorotoluene	ND		10000		ug/L			10/15/25 20:34	2000
3-Chlorotoluene	ND		10000		ug/L			10/15/25 20:34	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*68 - 130*		*10/15/25 20:34*	*2000*
4-Bromofluorobenzene (Surr)	*103*		*76 - 123*		*10/15/25 20:34*	*2000*
Toluene-d8 (Surr)	*106*		*77 - 120*		*10/15/25 20:34*	*2000*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*10/15/25 20:34*	*2000*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.048**		0.015		mg/L		10/15/25 08:27	10/15/25 15:23	1
Iron	**0.21**		0.050		mg/L		10/15/25 08:27	10/15/25 15:23	1
Potassium	**820**		2.5		mg/L		10/15/25 08:27	10/16/25 11:46	5
Sodium	**260**		1.0		mg/L		10/15/25 08:27	10/15/25 15:23	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable (EPA 420.4)	**0.043**		0.020		mg/L			10/21/25 18:06	2

Client Sample ID: WG-12595539-101325-DB-017

Lab Sample ID: 480-233507-6

Date Collected: 10/13/25 11:35

Matrix: Water

Date Received: 10/13/25 15:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		50		ug/L			10/15/25 20:58	10
1,2,4-Trichlorobenzene	ND		50		ug/L			10/15/25 20:58	10
1,2-Dichlorobenzene	ND		50		ug/L			10/15/25 20:58	10
1,3-Dichlorobenzene	**86**		50		ug/L			10/15/25 20:58	10
1,4-Dichlorobenzene	**340**		50		ug/L			10/15/25 20:58	10
Acetone	ND		250		ug/L			10/15/25 20:58	10
Benzene	ND		50		ug/L			10/15/25 20:58	10
Chlorobenzene	**560**		50		ug/L			10/15/25 20:58	10
cis-1,2-Dichloroethene	ND		50		ug/L			10/15/25 20:58	10
Tetrachloroethene	ND		50		ug/L			10/15/25 20:58	10
Toluene	ND		50		ug/L			10/15/25 20:58	10
Trichloroethene	**53**		50		ug/L			10/15/25 20:58	10
Vinyl chloride	ND		50		ug/L			10/15/25 20:58	10
2-Chlorotoluene	**540**		50		ug/L			10/15/25 20:58	10
4-Chlorotoluene	ND		50		ug/L			10/15/25 20:58	10
3-Chlorotoluene	ND		50		ug/L			10/15/25 20:58	10

Client Sample ID: WG-12595539-101325-DB-017

Lab Sample ID: 480-233507-6
Date Collected: 10/13/25 11:35
Matrix: Water
Date Received: 10/13/25 15:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*68 - 130*		*10/15/25 20:58*	*10*
4-Bromofluorobenzene (Surr)	*106*		*76 - 123*		*10/15/25 20:58*	*10*
Toluene-d8 (Surr)	*97*		*77 - 120*		*10/15/25 20:58*	*10*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*10/15/25 20:58*	*10*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	mg/L		10/15/25 08:27	10/16/25 11:48	1
Iron	**1.5**		0.050	mg/L		10/15/25 08:27	10/15/25 15:25	1
Potassium	**70**		0.50	mg/L		10/15/25 08:27	10/15/25 15:25	1
Sodium	**130**		1.0	mg/L		10/15/25 08:27	10/15/25 15:25	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010	mg/L			10/15/25 22:36	1

Client Sample ID: WG-12595539-101325-GH-018

Lab Sample ID: 480-233507-7
Date Collected: 10/13/25 13:35
Matrix: Water
Date Received: 10/13/25 15:30

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**38**		25	ug/L			10/15/25 18:33	5
1,2,4-Trichlorobenzene	ND		25	ug/L			10/15/25 18:33	5
1,2-Dichlorobenzene	ND		25	ug/L			10/15/25 18:33	5
1,3-Dichlorobenzene	ND		25	ug/L			10/15/25 18:33	5
1,4-Dichlorobenzene	ND		25	ug/L			10/15/25 18:33	5
Acetone	ND		130	ug/L			10/15/25 18:33	5
Benzene	ND		25	ug/L			10/15/25 18:33	5
Chlorobenzene	ND		25	ug/L			10/15/25 18:33	5
cis-1,2-Dichloroethene	**67**		25	ug/L			10/15/25 18:33	5
Tetrachloroethene	ND		25	ug/L			10/15/25 18:33	5
Toluene	ND		25	ug/L			10/15/25 18:33	5
Trichloroethene	ND		25	ug/L			10/15/25 18:33	5
Vinyl chloride	**410**		25	ug/L			10/15/25 18:33	5
2-Chlorotoluene	ND		25	ug/L			10/15/25 18:33	5
4-Chlorotoluene	ND		25	ug/L			10/15/25 18:33	5
3-Chlorotoluene	ND		25	ug/L			10/15/25 18:33	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*68 - 130*		*10/15/25 18:33*	*5*
4-Bromofluorobenzene (Surr)	*104*		*76 - 123*		*10/15/25 18:33*	*5*
Toluene-d8 (Surr)	*106*		*77 - 120*		*10/15/25 18:33*	*5*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*10/15/25 18:33*	*5*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	^+	0.015	mg/L		10/15/25 08:27	10/15/25 16:14	1
Iron	**21**		0.050	mg/L		10/15/25 08:27	10/15/25 16:14	1
Potassium	**320**		0.50	mg/L		10/15/25 08:27	10/15/25 16:14	1
Sodium	**160**		1.0	mg/L		10/15/25 08:27	10/15/25 16:14	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233507-1

Client Sample ID: WG-12595539-101325-GH-018
Date Collected: 10/13/25 13:35
Date Received: 10/13/25 15:30

Lab Sample ID: 480-233507-7
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable (EPA 420.4)	ND		0.010		mg/L			10/15/25 22:43	1

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233507-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-233507-1	TB-12595539-101325	120	104	105	113
480-233507-2	WG-12595539-101325-DB-013	118	102	105	106
480-233507-3	WG-12595539-101325-GH-014	118	108	104	107
480-233507-4	WG-12595539-101325-DB-015	124	105	107	112
480-233507-5	WG-12595539-101325-GH-016	122	103	106	110
480-233507-6	WG-12595539-101325-DB-017	120	106	97	110
480-233507-7	WG-12595539-101325-GH-018	115	104	106	106
LCS 480-759691/6	Lab Control Sample	115	104	107	105
MB 480-759691/8	Method Blank	116	105	106	107

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233507-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)
		DXE
Lab Sample ID	Client Sample ID	(15-110)
480-233507-2	WG-12595539-101325-DB-013	35
480-233507-3	WG-12595539-101325-GH-014	34
480-233507-4	WG-12595539-101325-DB-015	31
LCS 480-759801/2-A	Lab Control Sample	37
MB 480-759801/1-A	Method Blank	35

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-759691/8
Matrix: Water
Analysis Batch: 759691

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			10/15/25 15:17	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			10/15/25 15:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			10/15/25 15:17	1
1,1,2-Trichloroethane	ND		5.0		ug/L			10/15/25 15:17	1
1,1-Dichloroethane	ND		5.0		ug/L			10/15/25 15:17	1
1,1-Dichloroethene	ND		5.0		ug/L			10/15/25 15:17	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/15/25 15:17	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/15/25 15:17	1
1,2-Dichlorobenzene	ND		5.0		ug/L			10/15/25 15:17	1
1,2-Dichloroethane	ND		5.0		ug/L			10/15/25 15:17	1
1,2-Dichloropropane	ND		5.0		ug/L			10/15/25 15:17	1
1,3-Dichlorobenzene	ND		5.0		ug/L			10/15/25 15:17	1
1,4-Dichlorobenzene	ND		5.0		ug/L			10/15/25 15:17	1
2-Butanone (MEK)	ND		25		ug/L			10/15/25 15:17	1
2-Hexanone	ND		25		ug/L			10/15/25 15:17	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			10/15/25 15:17	1
Acetone	ND		25		ug/L			10/15/25 15:17	1
Benzene	ND		5.0		ug/L			10/15/25 15:17	1
Bromoform	ND		5.0		ug/L			10/15/25 15:17	1
Bromomethane	ND		5.0		ug/L			10/15/25 15:17	1
Carbon disulfide	ND		5.0		ug/L			10/15/25 15:17	1
Carbon tetrachloride	ND		5.0		ug/L			10/15/25 15:17	1
Chlorobenzene	ND		5.0		ug/L			10/15/25 15:17	1
Dibromochloromethane	ND		5.0		ug/L			10/15/25 15:17	1
Chloroethane	ND		5.0		ug/L			10/15/25 15:17	1
Chloroform	ND		5.0		ug/L			10/15/25 15:17	1
Chloromethane	ND		5.0		ug/L			10/15/25 15:17	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/15/25 15:17	1
Bromodichloromethane	ND		5.0		ug/L			10/15/25 15:17	1
Dichlorodifluoromethane	ND		5.0		ug/L			10/15/25 15:17	1
Ethylbenzene	ND		5.0		ug/L			10/15/25 15:17	1
1,2-Dibromoethane	ND		5.0		ug/L			10/15/25 15:17	1
Isopropylbenzene	ND		5.0		ug/L			10/15/25 15:17	1
2-Chlorotoluene	ND		5.0		ug/L			10/15/25 15:17	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/15/25 15:17	1
4-Chlorotoluene	ND		5.0		ug/L			10/15/25 15:17	1
Methylene Chloride	ND		5.0		ug/L			10/15/25 15:17	1
3-Chlorotoluene	ND		5.0		ug/L			10/15/25 15:17	1
Tetrachloroethene	ND		5.0		ug/L			10/15/25 15:17	1
Toluene	ND		5.0		ug/L			10/15/25 15:17	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/15/25 15:17	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/15/25 15:17	1
Trichloroethene	ND		5.0		ug/L			10/15/25 15:17	1
Trichlorofluoromethane	ND		5.0		ug/L			10/15/25 15:17	1
Vinyl chloride	ND		5.0		ug/L			10/15/25 15:17	1
Xylenes, Total	ND		10		ug/L			10/15/25 15:17	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/15/25 15:17	1
Styrene	ND		5.0		ug/L			10/15/25 15:17	1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-759691/8
Matrix: Water
Analysis Batch: 759691

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*116*		*68 - 130*		*10/15/25 15:17*	*1*
4-Bromofluorobenzene (Surr)	*105*		*76 - 123*		*10/15/25 15:17*	*1*
Toluene-d8 (Surr)	*106*		*77 - 120*		*10/15/25 15:17*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*10/15/25 15:17*	*1*

Lab Sample ID: LCS 480-759691/6
Matrix: Water
Analysis Batch: 759691

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	23.9		ug/L		120	52 - 162
1,1,2,2-Tetrachloroethane	20.0	20.6		ug/L		103	46 - 157
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	23.3		ug/L		117	50 - 150
1,1,2-Trichloroethane	20.0	21.1		ug/L		106	52 - 150
1,1-Dichloroethane	20.0	21.7		ug/L		108	59 - 155
1,1-Dichloroethene	20.0	21.7		ug/L		109	1 - 234
1,2,4-Trichlorobenzene	20.0	20.1		ug/L		101	56 - 128
1,2-Dibromo-3-Chloropropane	20.0	22.2		ug/L		111	44 - 138
1,2-Dichlorobenzene	20.0	21.1		ug/L		106	18 - 190
1,2-Dichloroethane	20.0	23.1		ug/L		116	49 - 155
1,2-Dichloropropane	20.0	21.6		ug/L		108	1 - 210
1,3-Dichlorobenzene	20.0	21.5		ug/L		107	59 - 156
1,4-Dichlorobenzene	20.0	21.2		ug/L		106	18 - 190
2-Butanone (MEK)	100	135		ug/L		135	57 - 140
2-Hexanone	100	127		ug/L		127	50 - 150
4-Methyl-2-pentanone (MIBK)	100	115		ug/L		115	50 - 150
Acetone	100	130		ug/L		130	21 - 161
Benzene	20.0	21.6		ug/L		108	37 - 151
Bromoform	20.0	22.7		ug/L		114	45 - 169
Bromomethane	20.0	20.7		ug/L		104	1 - 242
Carbon disulfide	20.0	21.3		ug/L		106	49 - 145
Carbon tetrachloride	20.0	25.8		ug/L		129	70 - 140
Chlorobenzene	20.0	21.1		ug/L		105	37 - 160
Dibromochloromethane	20.0	22.7		ug/L		114	53 - 149
Chloroethane	20.0	21.7		ug/L		109	14 - 230
Chloroform	20.0	21.5		ug/L		107	51 - 138
Chloromethane	20.0	23.7		ug/L		118	1 - 273
cis-1,2-Dichloroethene	20.0	20.7		ug/L		104	50 - 150
Bromodichloromethane	20.0	23.2		ug/L		116	35 - 155
Dichlorodifluoromethane	20.0	20.5		ug/L		103	59 - 135
Ethylbenzene	20.0	21.2		ug/L		106	37 - 162
1,2-Dibromoethane	20.0	21.4		ug/L		107	77 - 124
Isopropylbenzene	20.0	21.4		ug/L		107	68 - 133
2-Chlorotoluene	20.0	21.6		ug/L		108	72 - 126
Methyl tert-butyl ether	20.0	21.0		ug/L		105	78 - 118
4-Chlorotoluene	20.0	21.6		ug/L		108	76 - 120
Methylene Chloride	20.0	20.9		ug/L		105	1 - 221
Tetrachloroethene	20.0	22.7		ug/L		113	64 - 148

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-759691/6
Matrix: Water
Analysis Batch: 759691

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	20.0	21.1		ug/L		106	47 - 150
trans-1,2-Dichloroethene	20.0	21.2		ug/L		106	54 - 156
trans-1,3-Dichloropropene	20.0	23.5		ug/L		117	17 - 183
Trichloroethene	20.0	22.7		ug/L		113	71 - 157
Trichlorofluoromethane	20.0	25.0		ug/L		125	17 - 181
Vinyl chloride	20.0	21.9		ug/L		110	1 - 251
cis-1,3-Dichloropropene	20.0	23.8		ug/L		119	1 - 227
Styrene	20.0	20.9		ug/L		104	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*68 - 130*
4-Bromofluorobenzene (Surr)	*104*		*76 - 123*
Toluene-d8 (Surr)	*107*		*77 - 120*
Dibromofluoromethane (Surr)	*105*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-759801/1-A
Matrix: Water
Analysis Batch: 759895

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 759801

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	ug/L		10/16/25 09:10	10/20/25 09:55	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*15 - 110*	*10/16/25 09:10*	*10/20/25 09:55*	*1*

Lab Sample ID: LCS 480-759801/2-A
Matrix: Water
Analysis Batch: 759895

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 759801

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	2.00	2.24		ug/L		112	40 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*37*		*15 - 110*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-759586/1-A
Matrix: Water
Analysis Batch: 759776

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 759586

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	mg/L		10/15/25 08:27	10/15/25 15:16	1
Iron	ND		0.050	mg/L		10/15/25 08:27	10/15/25 15:16	1
Potassium	ND		0.50	mg/L		10/15/25 08:27	10/15/25 15:16	1
Sodium	ND		1.0	mg/L		10/15/25 08:27	10/15/25 15:16	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-759586/2-A
Matrix: Water
Analysis Batch: 759776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 759586

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic			1.00	1.01		mg/L		101	85 - 115		
Iron			5.10	5.45		mg/L		107	85 - 115		
Potassium			25.0	24.0		mg/L		96	85 - 115		
Sodium			25.0	25.0		mg/L		100	85 - 115		

Lab Sample ID: 480-233507-6 MS
Matrix: Water
Analysis Batch: 759776

Client Sample ID: WG-12595539-101325-DB-017
Prep Type: Total/NA
Prep Batch: 759586

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron	1.5		5.10	7.02		mg/L		109	70 - 130		
Potassium	70		25.0	94.6		mg/L		98	70 - 130		
Sodium	130		25.0	155	4	mg/L		101	70 - 130		

Lab Sample ID: 480-233507-6 MS
Matrix: Water
Analysis Batch: 759833

Client Sample ID: WG-12595539-101325-DB-017
Prep Type: Total/NA
Prep Batch: 759586

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic	ND		1.00	1.08		mg/L		108	70 - 130		

Lab Sample ID: 480-233507-6 MSD
Matrix: Water
Analysis Batch: 759776

Client Sample ID: WG-12595539-101325-DB-017
Prep Type: Total/NA
Prep Batch: 759586

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	1.5		5.10	7.07		mg/L		110	70 - 130	1	20
Potassium	70		25.0	92.8		mg/L		91	70 - 130	2	20
Sodium	130		25.0	150	4	mg/L		80	70 - 130	3	20

Lab Sample ID: 480-233507-6 MSD
Matrix: Water
Analysis Batch: 759833

Client Sample ID: WG-12595539-101325-DB-017
Prep Type: Total/NA
Prep Batch: 759586

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.07		mg/L		107	70 - 130	1	20

Lab Sample ID: MB 480-759723/1-A
Matrix: Water
Analysis Batch: 759845

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 759723

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015		mg/L		10/16/25 08:25	10/16/25 13:03	1
Iron	ND		0.050		mg/L		10/16/25 08:25	10/16/25 13:03	1
Potassium	ND		0.50		mg/L		10/16/25 08:25	10/16/25 13:03	1
Sodium	ND		1.0		mg/L		10/16/25 08:25	10/16/25 13:03	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-759723/2-A
Matrix: Water
Analysis Batch: 759845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 759723

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.00	0.991		mg/L		99	85 - 115
Iron	5.10	5.36		mg/L		105	85 - 115
Potassium	25.0	24.0		mg/L		96	85 - 115
Sodium	25.0	24.4		mg/L		98	85 - 115

Method: 420.4 - Phenolics, Total Recoverable

Lab Sample ID: MB 480-759872/45
Matrix: Water
Analysis Batch: 759872

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		0.010	mg/L			10/15/25 20:46	1

Lab Sample ID: MB 480-759872/73
Matrix: Water
Analysis Batch: 759872

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		0.010	mg/L			10/15/25 22:29	1

Lab Sample ID: LCS 480-759872/46
Matrix: Water
Analysis Batch: 759872

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	0.100	0.0928		mg/L		93	90 - 110

Lab Sample ID: LCS 480-759872/74
Matrix: Water
Analysis Batch: 759872

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	0.100	0.0943		mg/L		94	90 - 110

Lab Sample ID: 480-233507-7 MS
Matrix: Water
Analysis Batch: 759872

Client Sample ID: WG-12595539-101325-GH-018
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	ND		0.100	0.104		mg/L		104	90 - 110

Lab Sample ID: 480-233507-6 DU
Matrix: Water
Analysis Batch: 759872

Client Sample ID: WG-12595539-101325-DB-017
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Phenolics, Total Recoverable	ND		ND		mg/L		NC	20

Method: 420.4 - Phenolics, Total Recoverable (Continued)

Lab Sample ID: MB 480-760444/17
Matrix: Water
Analysis Batch: 760444

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		0.010		mg/L			10/21/25 17:37	1

Lab Sample ID: LCS 480-760444/18
Matrix: Water
Analysis Batch: 760444

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Phenolics, Total Recoverable			0.100	0.0965		mg/L		97	90 - 110		

GC/MS VOA

Analysis Batch: 759691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233507-1	TB-12595539-101325	Total/NA	Water	624.1	
480-233507-2	WG-12595539-101325-DB-013	Total/NA	Water	624.1	
480-233507-3	WG-12595539-101325-GH-014	Total/NA	Water	624.1	
480-233507-4	WG-12595539-101325-DB-015	Total/NA	Water	624.1	
480-233507-5	WG-12595539-101325-GH-016	Total/NA	Water	624.1	
480-233507-6	WG-12595539-101325-DB-017	Total/NA	Water	624.1	
480-233507-7	WG-12595539-101325-GH-018	Total/NA	Water	624.1	
MB 480-759691/8	Method Blank	Total/NA	Water	624.1	
LCS 480-759691/6	Lab Control Sample	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 759801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233507-2	WG-12595539-101325-DB-013	Total/NA	Water	3510C	
480-233507-3	WG-12595539-101325-GH-014	Total/NA	Water	3510C	
480-233507-4	WG-12595539-101325-DB-015	Total/NA	Water	3510C	
MB 480-759801/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-759801/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 759895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233507-2	WG-12595539-101325-DB-013	Total/NA	Water	8270D SIM ID	759801
480-233507-3	WG-12595539-101325-GH-014	Total/NA	Water	8270D SIM ID	759801
480-233507-4	WG-12595539-101325-DB-015	Total/NA	Water	8270D SIM ID	759801
MB 480-759801/1-A	Method Blank	Total/NA	Water	8270D SIM ID	759801
LCS 480-759801/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	759801

Metals

Prep Batch: 759586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233507-4	WG-12595539-101325-DB-015	Total/NA	Water	200.7	
480-233507-5	WG-12595539-101325-GH-016	Total/NA	Water	200.7	
480-233507-6	WG-12595539-101325-DB-017	Total/NA	Water	200.7	
480-233507-7	WG-12595539-101325-GH-018	Total/NA	Water	200.7	
MB 480-759586/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-759586/2-A	Lab Control Sample	Total/NA	Water	200.7	
480-233507-6 MS	WG-12595539-101325-DB-017	Total/NA	Water	200.7	
480-233507-6 MSD	WG-12595539-101325-DB-017	Total/NA	Water	200.7	

Prep Batch: 759723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233507-2	WG-12595539-101325-DB-013	Total/NA	Water	200.7	
480-233507-3	WG-12595539-101325-GH-014	Total/NA	Water	200.7	
MB 480-759723/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-759723/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 759776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233507-4	WG-12595539-101325-DB-015	Total/NA	Water	200.7 Rev 4.4	759586
480-233507-5	WG-12595539-101325-GH-016	Total/NA	Water	200.7 Rev 4.4	759586

Metals (Continued)

Analysis Batch: 759776 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233507-6	WG-12595539-101325-DB-017	Total/NA	Water	200.7 Rev 4.4	759586
480-233507-7	WG-12595539-101325-GH-018	Total/NA	Water	200.7 Rev 4.4	759586
MB 480-759586/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	759586
LCS 480-759586/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	759586
480-233507-6 MS	WG-12595539-101325-DB-017	Total/NA	Water	200.7 Rev 4.4	759586
480-233507-6 MSD	WG-12595539-101325-DB-017	Total/NA	Water	200.7 Rev 4.4	759586

Analysis Batch: 759833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233507-5	WG-12595539-101325-GH-016	Total/NA	Water	200.7 Rev 4.4	759586
480-233507-6	WG-12595539-101325-DB-017	Total/NA	Water	200.7 Rev 4.4	759586
480-233507-6 MS	WG-12595539-101325-DB-017	Total/NA	Water	200.7 Rev 4.4	759586
480-233507-6 MSD	WG-12595539-101325-DB-017	Total/NA	Water	200.7 Rev 4.4	759586

Analysis Batch: 759845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233507-2	WG-12595539-101325-DB-013	Total/NA	Water	200.7 Rev 4.4	759723
480-233507-3	WG-12595539-101325-GH-014	Total/NA	Water	200.7 Rev 4.4	759723
MB 480-759723/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	759723
LCS 480-759723/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	759723

Analysis Batch: 759917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233507-2	WG-12595539-101325-DB-013	Total/NA	Water	200.7 Rev 4.4	759723
480-233507-3	WG-12595539-101325-GH-014	Total/NA	Water	200.7 Rev 4.4	759723

General Chemistry

Analysis Batch: 759872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233507-2	WG-12595539-101325-DB-013	Total/NA	Water	420.4	
480-233507-3	WG-12595539-101325-GH-014	Total/NA	Water	420.4	
480-233507-4	WG-12595539-101325-DB-015	Total/NA	Water	420.4	
480-233507-6	WG-12595539-101325-DB-017	Total/NA	Water	420.4	
480-233507-7	WG-12595539-101325-GH-018	Total/NA	Water	420.4	
MB 480-759872/45	Method Blank	Total/NA	Water	420.4	
MB 480-759872/73	Method Blank	Total/NA	Water	420.4	
LCS 480-759872/46	Lab Control Sample	Total/NA	Water	420.4	
LCS 480-759872/74	Lab Control Sample	Total/NA	Water	420.4	
480-233507-7 MS	WG-12595539-101325-GH-018	Total/NA	Water	420.4	
480-233507-6 DU	WG-12595539-101325-DB-017	Total/NA	Water	420.4	

Analysis Batch: 760444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-233507-5	WG-12595539-101325-GH-016	Total/NA	Water	420.4	
MB 480-760444/17	Method Blank	Total/NA	Water	420.4	
LCS 480-760444/18	Lab Control Sample	Total/NA	Water	420.4	

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233507-1

Client Sample ID: TB-12595539-101325

Lab Sample ID: 480-233507-1
Date Collected: 10/13/25 08:45
Matrix: Water
Date Received: 10/13/25 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	759691	AXK	EET BUF	10/15/25 16:07

Client Sample ID: WG-12595539-101325-DB-013

Lab Sample ID: 480-233507-2
Date Collected: 10/13/25 08:50
Matrix: Water
Date Received: 10/13/25 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		20	759691	AXK	EET BUF	10/15/25 19:20
Total/NA	Prep	3510C			759801	JMP	EET BUF	10/16/25 09:10
Total/NA	Analysis	8270D SIM ID		1	759895	JMM	EET BUF	10/20/25 15:34
Total/NA	Prep	200.7			759723	EMO	EET BUF	10/16/25 08:25
Total/NA	Analysis	200.7 Rev 4.4		1	759845	MP	EET BUF	10/16/25 13:53
Total/NA	Prep	200.7			759723	EMO	EET BUF	10/16/25 08:25
Total/NA	Analysis	200.7 Rev 4.4		5	759917	BMB	EET BUF	10/16/25 20:38
Total/NA	Analysis	420.4		1	759872	GW	EET BUF	10/15/25 21:59

Client Sample ID: WG-12595539-101325-GH-014

Lab Sample ID: 480-233507-3
Date Collected: 10/13/25 09:15
Matrix: Water
Date Received: 10/13/25 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		10	759691	AXK	EET BUF	10/15/25 19:45
Total/NA	Prep	3510C			759801	JMP	EET BUF	10/16/25 09:10
Total/NA	Analysis	8270D SIM ID		1	759895	JMM	EET BUF	10/20/25 15:54
Total/NA	Prep	200.7			759723	EMO	EET BUF	10/16/25 08:25
Total/NA	Analysis	200.7 Rev 4.4		1	759845	MP	EET BUF	10/16/25 13:55
Total/NA	Prep	200.7			759723	EMO	EET BUF	10/16/25 08:25
Total/NA	Analysis	200.7 Rev 4.4		10	759917	BMB	EET BUF	10/16/25 20:40
Total/NA	Analysis	420.4		1	759872	GW	EET BUF	10/15/25 22:03

Client Sample ID: WG-12595539-101325-DB-015

Lab Sample ID: 480-233507-4
Date Collected: 10/13/25 09:40
Matrix: Water
Date Received: 10/13/25 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		4	759691	AXK	EET BUF	10/15/25 20:09
Total/NA	Prep	3510C			759801	JMP	EET BUF	10/16/25 09:10
Total/NA	Analysis	8270D SIM ID		1	759895	JMM	EET BUF	10/20/25 16:14
Total/NA	Prep	200.7			759586	EMO	EET BUF	10/15/25 08:27
Total/NA	Analysis	200.7 Rev 4.4		1	759776	MP	EET BUF	10/15/25 15:21
Total/NA	Analysis	420.4		1	759872	GW	EET BUF	10/15/25 22:07

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233507-1

Client Sample ID: WG-12595539-101325-GH-016

Lab Sample ID: 480-233507-5

Date Collected: 10/13/25 10:40
Matrix: Water
Date Received: 10/13/25 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		2000	759691	AXK	EET BUF	10/15/25 20:34
Total/NA	Prep	200.7			759586	EMO	EET BUF	10/15/25 08:27
Total/NA	Analysis	200.7 Rev 4.4		1	759776	MP	EET BUF	10/15/25 15:23
Total/NA	Prep	200.7			759586	EMO	EET BUF	10/15/25 08:27
Total/NA	Analysis	200.7 Rev 4.4		5	759833	MP	EET BUF	10/16/25 11:46
Total/NA	Analysis	420.4		2	760444	GW	EET BUF	10/21/25 18:06

Client Sample ID: WG-12595539-101325-DB-017

Lab Sample ID: 480-233507-6

Date Collected: 10/13/25 11:35
Matrix: Water
Date Received: 10/13/25 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		10	759691	AXK	EET BUF	10/15/25 20:58
Total/NA	Prep	200.7			759586	EMO	EET BUF	10/15/25 08:27
Total/NA	Analysis	200.7 Rev 4.4		1	759776	MP	EET BUF	10/15/25 15:25
Total/NA	Prep	200.7			759586	EMO	EET BUF	10/15/25 08:27
Total/NA	Analysis	200.7 Rev 4.4		1	759833	MP	EET BUF	10/16/25 11:48
Total/NA	Analysis	420.4		1	759872	GW	EET BUF	10/15/25 22:36

Client Sample ID: WG-12595539-101325-GH-018

Lab Sample ID: 480-233507-7

Date Collected: 10/13/25 13:35
Matrix: Water
Date Received: 10/13/25 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		5	759691	AXK	EET BUF	10/15/25 18:33
Total/NA	Prep	200.7			759586	EMO	EET BUF	10/15/25 08:27
Total/NA	Analysis	200.7 Rev 4.4		1	759776	MP	EET BUF	10/15/25 16:14
Total/NA	Analysis	420.4		1	759872	GW	EET BUF	10/15/25 22:43

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: GHD Services Inc.
Job ID: 480-233507-1
Project/Site: 12595539-004 , Cascades

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00686	07-06-25 *
Connecticut	State	PH-0807	03-31-26
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-26
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	01-31-26
Kentucky (UST)	State	108092	03-31-26
Kentucky (WW)	State	KY90029	12-31-25
Maine	State	NY00044	04-21-27
Maryland	State	294	06-30-26
Massachusetts	State	M-NY044	06-30-26
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-25
New Jersey	NELAP	NY455	06-30-26
New York	NELAP	10026	10-22-25
Pennsylvania	NELAP	68-00281	08-30-26
Rhode Island	State	LAO00378	12-30-25
USDA	US Federal Programs	P330-18-00039	02-16-27
Virginia	NELAP	460185	09-14-26
Washington	State	C784	02-10-26
Wisconsin	State	998310390	08-31-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233507-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
420.4	Phenolics, Total Recoverable	EPA	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: GHD Services Inc.
Project/Site: 12595539-004 , Cascades

Job ID: 480-233507-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
480-233507-1	TB-12595539-101325	Water	10/13/25 08:45	10/13/25 15:30	New York
480-233507-2	WG-12595539-101325-DB-013	Water	10/13/25 08:50	10/13/25 15:30	New York
480-233507-3	WG-12595539-101325-GH-014	Water	10/13/25 09:15	10/13/25 15:30	New York
480-233507-4	WG-12595539-101325-DB-015	Water	10/13/25 09:40	10/13/25 15:30	New York
480-233507-5	WG-12595539-101325-GH-016	Water	10/13/25 10:40	10/13/25 15:30	New York
480-233507-6	WG-12595539-101325-DB-017	Water	10/13/25 11:35	10/13/25 15:30	New York
480-233507-7	WG-12595539-101325-GH-018	Water	10/13/25 13:35	10/13/25 15:30	New York

CHAIN OF CUSTODY RECORD

COC NO.: 61295

GHD

Address: 2055 Niagara Falls Blvd Niagara Falls, NY 14304 — PAGE 1 OF 1

Phone: (716) 297-6150 — Fax:

Project No/ Phase/Task Code: 12595539-	Laboratory Name: Eurofins - Buffalo	Lab Location:	SSOW ID:
Project Name: Cascades	Lab Contact: Denise Hecklos		Cooler No: 1 of 1
Project Location: Royal Ave.			Carrier: Hand Delivered
GHD Chemistry Contact: Sheri Finn			Airbill No:
Sampler(s): D. Burr, G. Hartuch			Total # of Containers: 44

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Filtered (Y/N)	SSPL VOCs	Metals	Phenols	1,4-Dioxane	Total VOCs	Total Containers/sample	MS/MSD Request	Comments/ Special Instructions:
	PRESERVATION - (SEE BACK OF COC FOR ABBREVIATIONS)													
1	TB-12595539-101325	10/13/25	0845	WG	G	N					X	2		
2	WG-12595539-101325-DB-013	10/13/25	0850				X	X	X	X		8		
3	WG-12595539-101325-GH-014	10/13/25	0915				X	X	X	X		8		
4	WG-12595539-101325-DB-015	10/13/25	0940				X	X	X	X		8		
5	WG-12595539-101325-[redacted]-016	10/13/25	1040				X	X	X			6		
6	WG-12595539-101325-DB-017	10/13/25	1135				X	X	X			6		
7	WG-12595539-101325-GH-018	10/13/25	1335				X	X	X			6		
8														
9														
10														
11														
12														

480-233507 Chain of Custody

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other:

Notes/ Special Requirements: 4.9 ICE

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1. Daniel Burr	GHD	10/13/25		1.	TAB	10-13-25	1530
				2.			
				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

10/27/2025

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 480-233507-1

Login Number: 233507
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.9 ICE IR# SC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GHD
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Attachment D

Data Verification Report

Data Verification Report

November 11, 2025

To	Shaun McEvoy	**Project No.**	12595539
Copy to	Kevin Miller	**DVR No.**	7
From	Sheri Finn/cs	**Contact No.**	716-205-1977
Project Name	Cascades (Frontier Chemical)	**Email**	Sheri.Finn@ghd.com
Subject	Analytical Results and Data Verification Publicly Owned Treatment Works Sampling Cascades Containerboard Packaging Company Niagara Falls, New York October 2025		

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

1. Introduction

This document details a reduced validation of analytical results for water samples collected in support of the Publicly Owned Treatment Works (POTW) semiannual and annual sampling program at the Cascades Containerboard Packaging Company site during October 2025. The samples were submitted to Eurofins Environment Testing located in Amherst, New York. The per- and poly-fluoroalkyl substances (PFAS) analysis was performed at the Eurofins lab in West Sacramento, California. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Standard GHD report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, recovery data from surrogate spikes, laboratory control samples (LCS), laboratory duplicate, matrix spike/matrix spike duplicates (MS/MSD), and field QA/QC.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and applicable guidance from the documents entitled:

1. "National Functional Guidelines for Inorganic Superfund Methods Data Review", United States Environmental Protection Agency (USEPA) 542-R-20-006, November 2020
2. “National Functional Guidelines for Organic Superfund Methods Data Review", USEPA 540-R-20-005, November 2020
3. “Data Review and Validation Guidelines for Perfluoroalkyl Substances (PFASs) Analyzed Using EPA Method 537”, EPA 910-R-18-001, November 2018

Items 1,2 and 3 will subsequently be referred to as the "Guidelines" in this Memorandum.

2. Sample Holding Time and Preservation

The sample holding time criteria for the analyses are summarized in Table 3. The sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were prepared and analyzed within the required holding times.

All samples were properly delivered on ice and stored by the laboratory at the required temperature (0-6°C).

3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

All method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation.

4. Surrogate Spike Recoveries - Organic Analyses

In accordance with the methods employed, all samples, blanks, and QA/QC samples analyzed for volatile organic compounds (VOC) and semi volatile organic compounds (SVOC) are spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for VOC and SVOC determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction and/or analysis.

Surrogate recoveries were assessed against laboratory control limits. All surrogate recoveries met the laboratory criteria.

5. Isotope Dilution Analytes

In accordance with the methods employed, all samples, blanks, and QA/QC samples analyzed for 1,4-dioxane and PFAS are spiked with isotopically labelled analytes (IDA) prior to sample extraction and analysis. IDA recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

The proper IDA were added to all samples, blanks, and QC samples prior to extraction of 1,4-dioxane and PFAS. Labelled standards exhibited recovery within the acceptable range, and no qualification of data was necessary.

6. Laboratory Control Sample Analyses

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

For this study, LCS were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

Organic Analyses

The LCS contained the compounds specified in the method. The LCS was analyzed in duplicate (LCSD) for PFAS analysis. All LCS recoveries were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision, where applicable.

Inorganic Analyses

The LCS contained all analytes of interest. LCS recoveries were assessed per the "Guidelines". All LCS recoveries were within the control limits, demonstrating acceptable analytical accuracy.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

To evaluate the effects of sample matrices on the preparation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS/MSD samples. The relative percent difference (RPD) between the MS and MSD is used to assess analytical precision. If the original sample concentration is significantly greater than the spike concentration, the recovery is not assessed.

MS/MSD analyses were performed by the laboratory internally. If only the MS or MSD recovery was outside of control limits, no qualification of the data was performed based on the acceptable recovery of the companion spike and the acceptable RPD.

Organic Analyses

The MS/MSD sample was spiked with the compounds specified in the method for VOC analysis. All percent recoveries and RPD values were within the associated control limits, demonstrating acceptable analytical accuracy and precision.

Inorganic Analyses

The MS/MSD samples were spiked with the analytes of interest, and the results were evaluated using the "Guidelines" for metals analysis. All percent recoveries and RPD values were within the control limits, demonstrating acceptable analytical accuracy and precision.

8. Field QA/QC Samples

The field QA/QC consisted of two trip blank samples and one field duplicate sample set.

Trip Blank

To evaluate contamination from sample collection, transportation, storage, and analytical activities, two trip blanks were submitted to the laboratory for VOC analysis. All results were non-detect for the compounds of interest.

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, one field duplicate sample set was collected and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with the duplicate sample must be less than 50 percent for water samples. If the reported concentration in either the investigative sample or its duplicate is less than five times the reporting limit (RL), the evaluation criteria is one times the RL value for water samples.

All field duplicate results met the above criteria demonstrating acceptable sampling and analytical precision.

9. Analyte Reporting

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each compound. Positive detections less than the RL but greater than the MDL were reported as estimated (J) in Table 2 unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL in Table 2.

For PFAS analysis a sample had ion abundance ratio outside criteria and the results were reported as estimated maximum possible concentration (EMPC) and qualified as estimated (see Table 4).

10. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable with the qualification noted.

Regards



Sheri Finn
Analyst

Table 1

Sample Collection and Analysis Summary
Publicly Owned Treatment Works Sampling
Cascades Containerboard Packaging Company
Niagara Falls, New York
October 2025

					Analysis/Parameters					
Sample Identification	**Location**	**Matrix**	**Collection Date (mm/dd/yyyy)**	**Collection Time (hr:min)**	**VOC ***	**Metals**	**Phenol**	**1,4-Dioxane**	**PFAS**	**Comments**
WG-12595539-100825-GH-010	BH87-28	Water	10/08/2025	16:20					X	
WG-12595539-101325-GH-014	BH87-28	Water	10/13/2025	09:15	X			X		
WG-12595539-100925-DB-009	BH87-3A	Water	10/09/2025	10:25	X	X	X			
WG-12595539-100925-DB-011	BH87-3B	Water	10/09/2025	12:05	X	X	X			
WG-12595539-100825-DB-001	MW1-9A	Water	10/08/2025	11:15	X	X	X	X	X	
WG-12595539-100825-GH-002	MW1-C-08	Water	10/08/2025	10:50	X	X	X			
WG-12595539-100925-GH-012	MW2-C-08	Water	10/09/2025	13:45	X					
WG-12595539-100825-DB-003	MW3-C-08	Water	10/08/2025	13:30	X					
WG-12595539-100825-DB-005	MW9	Water	10/08/2025	15:55					X	
WG-12595539-101325-DB-013	MW9	Water	10/13/2025	08:50	X			X		
WG-12595539-100825-GH-004	MW12	Water	10/08/2025	13:25	X	X	X			
WG-12595539-100825-GH-006	MW12	Water	10/08/2025	13:25	X	X	X			Field Duplicate of WG-12595539-100825-GH-004
WG-12595539-100825-GH-008	MW13	Water	10/08/2025	16:10		X	X		X	
WG-12595539-101325-DB-015	MW13	Water	10/13/2025	09:40	X			X		
WG-12595539-101325-GH-018	MW88-12A	Water	10/13/2025	13:35	X	X	X			
WG-12595539-100825-DB-007	MW88-13A	Water	10/08/2025	16:35	X	X	X	X	X	
WG-12595539-101325-GH-016	MW88-8A	Water	10/13/2025	10:40	X	X	X			
WG-12595539-101325-DB-017	MW88-8B	Water	10/13/2025	11:35	X	X	X			
TB-12595539-100825	-	Water	10/08/2025	09:00	X	X	X			Trip Blank
TB-12595539-101325	-	Water	10/13/2025	08:45	X					Trip Blank

Notes:

VOC - Volatile Organic Compounds
PFAS - Per and Polyfluoroalkyl Substances
* - Plus Chlorotoluenes

Table 2

Analytical Results Summary
Publicly Owned Treatment Works Sampling
Cascades Containerboard Packaging Company
Niagara Falls, New York
October 2025

	Location ID:	BH87-28	BH87-28	BH87-3A	BH87-3B	MW1-9A	MW1-C-08	MW2-C-08
	Sample Name:	WG-12595539-100825-GH-010	WG-12595539-101325-GH-014	WG-12595539-100925-DB-009	WG-12595539-100925-DB-011	WG-12595539-100825-DB-001	WG-12595539-100825-GH-002	WG-12595539-100925-GH-012
	Sample Date:	10/08/2025	10/13/2025	10/09/2025	10/09/2025	10/08/2025	10/08/2025	10/09/2025
Parameters	**Unit**							
Volatile Organic Compounds								
1,1,1-Trichloroethane	µg/L	--	--	--	--	--	5.0 U	20 U
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	--	--	5.0 U	20 U
1,1,2-Trichloroethane	µg/L	--	--	--	--	--	5.0 U	20 U
1,1-Dichloroethane	µg/L	--	50 U	10 U	25 U	50 U	5.0 U	20 U
1,1-Dichloroethene	µg/L	--	--	--	--	--	5.0 U	20 U
1,2,4-Trichlorobenzene	µg/L	--	50 U	10 U	25 U	50 U	5.0 U	20 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	--	--	--	--	--	5.0 U	20 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	--	--	--	--	--	5.0 U	20 U
1,2-Dichlorobenzene	µg/L	--	67	43	35	50 U	5.0 U	20 U
1,2-Dichloroethane	µg/L	--	--	--	--	--	5.0 U	20 U
1,2-Dichloropropane	µg/L	--	--	--	--	--	5.0 U	20 U
1,3-Dichlorobenzene	µg/L	--	220	97	63	50 U	5.0 U	49
1,4-Dichlorobenzene	µg/L	--	170	140	110	140	5.0 U	100
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	--	--	--	--	--	25 U	100 U
2-Chlorotoluene	µg/L	--	160	15	25 U	150	5.0 U	57
2-Hexanone	µg/L	--	--	--	--	--	25 U	100 U
3-Chlorotoluene	µg/L	--	50 U	10 U	25 U	50 U	5.0 U	20 U
4-Chlorotoluene	µg/L	--	70	10 U	25 U	50 U	5.0 U	20 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	--	--	--	--	--	25 U	100 U
Acetone	µg/L	--	250 U	50 U	130 U	250 U	25 U	100 U
Benzene	µg/L	--	220	10 U	25 U	50 U	5.0 U	20 U
Bromodichloromethane	µg/L	--	--	--	--	--	5.0 U	20 U
Bromoform	µg/L	--	--	--	--	--	5.0 U	20 U
Bromomethane (Methyl bromide)	µg/L	--	--	--	--	--	5.0 U	20 U
Carbon disulfide	µg/L	--	--	--	--	--	5.0 U	20 U
Carbon tetrachloride	µg/L	--	--	--	--	--	5.0 U	20 U
Chlorobenzene	µg/L	--	490	130	270	340	5.0 U	170
Chloroethane	µg/L	--	--	--	--	--	5.0 U	20 U
Chloroform (Trichloromethane)	µg/L	--	--	--	--	--	5.0 U	20 U
Chloromethane (Methyl chloride)	µg/L	--	--	--	--	--	5.0 U	20 U
cis-1,2-Dichloroethene	µg/L	--	50 U	14	25 U	50 U	5.0 U	20 U
cis-1,3-Dichloropropene	µg/L	--	--	--	--	--	5.0 U	20 U
Dibromochloromethane	µg/L	--	--	--	--	--	5.0 U	20 U
Dichlorodifluoromethane (CFC-12)	µg/L	--	--	--	--	--	5.0 U	20 U
Ethylbenzene	µg/L	--	--	--	--	--	5.0 U	20 U
Isopropyl benzene	µg/L	--	--	--	--	--	5.0 U	20 U
Methyl tert butyl ether (MTBE)	µg/L	--	--	--	--	--	5.0 U	20 U

Table 2

Analytical Results Summary
Publicly Owned Treatment Works Sampling
Cascades Containerboard Packaging Company
Niagara Falls, New York
October 2025

Location ID:		BH87-28	BH87-28	BH87-3A	BH87-3B	MW1-9A	MW1-C-08	MW2-C-08
Sample Name:		WG-12595539-100825-GH-010	WG-12595539-101325-GH-014	WG-12595539-100925-DB-009	WG-12595539-100925-DB-011	WG-12595539-100825-DB-001	WG-12595539-100825-GH-002	WG-12595539-100925-GH-012
Sample Date:		10/08/2025	10/13/2025	10/09/2025	10/09/2025	10/08/2025	10/08/2025	10/09/2025
Parameters	**Unit**							
Volatile Organic Compounds								
Methylene chloride	µg/L	--	--	--	--	--	5.0 U	20 U
Styrene	µg/L	--	--	--	--	--	5.0 U	20 U
Tetrachloroethene	µg/L	--	50 U	11	25 U	50 U	5.0 U	20 U
Toluene	µg/L	--	50 U	10 U	25 U	50 U	5.0 U	20 U
trans-1,2-Dichloroethene	µg/L	--	--	--	--	--	5.0 U	20 U
trans-1,3-Dichloropropene	µg/L	--	--	--	--	--	5.0 U	20 U
Trichloroethene	µg/L	--	50 U	14	25 U	50 U	5.0 U	20 U
Trichlorofluoromethane (CFC-11)	µg/L	--	--	--	--	--	5.0 U	20 U
Trifluorotrichloroethane (CFC-113)	µg/L	--	--	--	--	--	5.0 U	20 U
Vinyl chloride	µg/L	--	210	10 U	25 U	50 U	5.0 U	20 U
Xylenes (total)	µg/L	--	--	--	--	--	10 U	40 U
Semivolatile Organic Compounds, SIM								
1,4-Dioxane	µg/L	--	6.6	--	--	19	--	--
Per/Polyfluoroalkyl Substances								
Fluorotelomer sulfonic acid (6:2)	ng/L	1500	--	--	--	430	--	--
Fluorotelomer sulfonic acid (8:2)	ng/L	81	--	--	--	22	--	--
N-Ethyl perfluorooctane sulfonamido acetic acid (N-EtFOSAA)	ng/L	32 U	--	--	--	3.1 U	--	--
N-Methyl perfluorooctane sulfonamido acetic acid	ng/L	32 U	--	--	--	3.1 U	--	--
Perfluorobutane sulfonic acid (PFBS)	ng/L	6.3 U	--	--	--	3.1 U	--	--
Perfluorobutanoic acid (PFBA)	ng/L	220	--	--	--	120	--	--
Perfluorodecanesulfonic acid (PFDS)	ng/L	32 U	--	--	--	3.1 U	--	--
Perfluorodecanoic acid (PFDA)	ng/L	32 U	--	--	--	3.1 U	--	--
Perfluorododecanoic acid (PFDoDA)	ng/L	6.3 U	--	--	--	3.1 U	--	--
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	32 U	--	--	--	3.1 U	--	--
Perfluoroheptanoic acid (PFHpA)	ng/L	91	--	--	--	60	--	--
Perfluorohexane sulfonic acid (PFHxS)	ng/L	15	--	--	--	3.2	--	--
Perfluorohexanoic acid (PFHxA)	ng/L	320	--	--	--	180	--	--
Perfluorononanoic acid (PFNA)	ng/L	6.6	--	--	--	4.9	--	--
Perfluorooctane sulfonamide (FOSA)	ng/L	7.5 J	--	--	--	3.1 U	--	--
Perfluorooctane sulfonic acid (PFOS)	ng/L	32 U	--	--	--	3.5	--	--
Perfluorooctanoic acid (PFOA)	ng/L	130	--	--	--	100	--	--
Perfluoropentanoic acid (PFPeA)	ng/L	630	--	--	--	370	--	--
Perfluorotetradecanoic acid (PFTeDA)	ng/L	32 U	--	--	--	3.1 U	--	--
Perfluorotridecanoic acid (PFTrDA)	ng/L	32 U	--	--	--	3.1 U	--	--
Perfluoroundecanoic acid (PFUnA)	ng/L	32 U	--	--	--	3.1 U	--	--

Table 2

Analytical Results Summary
Publicly Owned Treatment Works Sampling
Cascades Containerboard Packaging Company
Niagara Falls, New York
October 2025

	Location ID:	**BH87-28**	**BH87-28**	**BH87-3A**	**BH87-3B**	**MW1-9A**	**MW1-C-08**	**MW2-C-08**
	Sample Name:	**WG-12595539-100825-GH-010**	**WG-12595539-101325-GH-014**	**WG-12595539-100925-DB-009**	**WG-12595539-100925-DB-011**	**WG-12595539-100825-DB-001**	**WG-12595539-100825-GH-002**	**WG-12595539-100925-GH-012**
	Sample Date:	**10/08/2025**	**10/13/2025**	**10/09/2025**	**10/09/2025**	**10/08/2025**	**10/08/2025**	**10/09/2025**
Parameters	**Unit**							
Metals								
Arsenic	mg/L	--	0.018	0.015 U	0.015 U	0.019	--	--
Iron	mg/L	--	10	0.077	0.23	2.6	--	--
Potassium	mg/L	--	3500	17	41	960	--	--
Sodium	mg/L	--	340	44	47	200	--	--
General Chemistry								
Phenolics (total)	mg/L	--	0.14	0.010 U	0.010 U	0.010 U	--	--

Table 2

Analytical Results Summary
Publicly Owned Treatment Works Sampling
Cascades Containerboard Packaging Company
Niagara Falls, New York
October 2025

	Location ID:	**MW3-C-08**	**MW9**	**MW9**	**MW12**	**MW12**	**MW13**
	Sample Name:	**WG-12595539-100825-DB-003**	**WG-12595539-100825-DB-005**	**WG-12595539-101325-DB-013**	**WG-12595539-100825-GH-004**	**WG-12595539-100825-GH-006**	**WG-12595539-100825-GH-008**
	Sample Date:	**10/08/2025**	**10/08/2025**	**10/13/2025**	**10/08/2025**	**10/08/2025**	**10/08/2025**
						Duplicate	
Parameters	**Unit**						
Volatile Organic Compounds							
1,1,1-Trichloroethane	µg/L	5.0 U	--	--	--	--	--
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	--	--	--	--	--
1,1,2-Trichloroethane	µg/L	5.0 U	--	--	--	--	--
1,1-Dichloroethane	µg/L	5.0 U	--	100 U	100 U	20 U	--
1,1-Dichloroethene	µg/L	5.0 U	--	--	--	--	--
1,2,4-Trichlorobenzene	µg/L	5.0 U	--	100 U	100 U	20 U	--
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5.0 U	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	µg/L	5.0 U	--	--	--	--	--
1,2-Dichlorobenzene	µg/L	5.0 U	--	100 U	100 U	20 U	--
1,2-Dichloroethane	µg/L	5.0 U	--	--	--	--	--
1,2-Dichloropropane	µg/L	5.0 U	--	--	--	--	--
1,3-Dichlorobenzene	µg/L	5.0 U	--	180	100 U	20 U	--
1,4-Dichlorobenzene	µg/L	19	--	410	100 U	20 U	--
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	25 U	--	--	--	--	--
2-Chlorotoluene	µg/L	5.0 U	--	460	100 U	20 U	--
2-Hexanone	µg/L	25 U	--	--	--	--	--
3-Chlorotoluene	µg/L	5.0 U	--	100 U	100 U	20 U	--
4-Chlorotoluene	µg/L	5.0 U	--	100 U	100 U	20 U	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	25 U	--	--	--	--	--
Acetone	µg/L	25 U	--	500 U	500 U	100 U	--
Benzene	µg/L	5.0 U	--	320	100 U	20 U	--
Bromodichloromethane	µg/L	5.0 U	--	--	--	--	--
Bromoform	µg/L	5.0 U	--	--	--	--	--
Bromomethane (Methyl bromide)	µg/L	5.0 U	--	--	--	--	--
Carbon disulfide	µg/L	5.0 U	--	--	--	--	--
Carbon tetrachloride	µg/L	5.0 U	--	--	--	--	--
Chlorobenzene	µg/L	9.4	--	650	100 U	20 U	--
Chloroethane	µg/L	5.0 U	--	--	--	--	--
Chloroform (Trichloromethane)	µg/L	5.0 U	--	--	--	--	--
Chloromethane (Methyl chloride)	µg/L	5.0 U	--	--	--	--	--
cis-1,2-Dichloroethene	µg/L	5.0 U	--	100 U	100 U	20 U	--
cis-1,3-Dichloropropene	µg/L	5.0 U	--	--	--	--	--
Dibromochloromethane	µg/L	5.0 U	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	5.0 U	--	--	--	--	--
Ethylbenzene	µg/L	5.0 U	--	--	--	--	--
Isopropyl benzene	µg/L	5.0 U	--	--	--	--	--
Methyl tert butyl ether (MTBE)	µg/L	5.0 U	--	--	--	--	--

Table 2

Analytical Results Summary
Publicly Owned Treatment Works Sampling
Cascades Containerboard Packaging Company
Niagara Falls, New York
October 2025

Location ID:		MW3-C-08	MW9	MW9	MW12	MW12	MW13
Sample Name:		WG-12595539-100825-DB-003	WG-12595539-100825-DB-005	WG-12595539-101325-DB-013	WG-12595539-100825-GH-004	WG-12595539-100825-GH-006	WG-12595539-100825-GH-008
Sample Date:		10/08/2025	10/08/2025	10/13/2025	10/08/2025	10/08/2025	10/08/2025
						Duplicate	
Parameters	**Unit**						
Volatile Organic Compounds							
Methylene chloride	µg/L	5.0 U	--	--	--	--	--
Styrene	µg/L	5.0 U	--	--	--	--	--
Tetrachloroethene	µg/L	5.0 U	--	100 U	100 U	20 U	--
Toluene	µg/L	5.0 U	--	100 U	100 U	20 U	--
trans-1,2-Dichloroethene	µg/L	5.0 U	--	--	--	--	--
trans-1,3-Dichloropropene	µg/L	5.0 U	--	--	--	--	--
Trichloroethene	µg/L	5.0 U	--	100 U	100 U	20 U	--
Trichlorofluoromethane (CFC-11)	µg/L	5.0 U	--	--	--	--	--
Trifluorotrichloroethane (CFC-113)	µg/L	5.0 U	--	--	--	--	--
Vinyl chloride	µg/L	5.0 U	--	100 U	100 U	20 U	--
Xylenes (total)	µg/L	10 U	--	--	--	--	--
Semivolatile Organic Compounds, SIM							
1,4-Dioxane	µg/L	--	--	12	--	--	--
Per/Polyfluoroalkyl Substances							
Fluorotelomer sulfonic acid (6:2)	ng/L	--	280	--	--	--	54
Fluorotelomer sulfonic acid (8:2)	ng/L	--	34	--	--	--	5.7
N-Ethyl perfluorooctane sulfonamido acetic acid (N-EtFOSAA)	ng/L	--	1.5 U	--	--	--	1.5 U
N-Methyl perfluorooctane sulfonamido acetic acid	ng/L	--	1.5 U	--	--	--	1.5 U
Perfluorobutane sulfonic acid (PFBS)	ng/L	--	1.5	--	--	--	2.3
Perfluorobutanoic acid (PFBA)	ng/L	--	44	--	--	--	41
Perfluorodecanesulfonic acid (PFDS)	ng/L	--	1.5 U	--	--	--	1.5 U
Perfluorodecanoic acid (PFDA)	ng/L	--	1.5 U	--	--	--	1.5 U
Perfluorododecanoic acid (PFDoDA)	ng/L	--	1.5 U	--	--	--	1.5 U
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	--	1.5 U	--	--	--	1.5 U
Perfluoroheptanoic acid (PFHpA)	ng/L	--	19	--	--	--	15
Perfluorohexane sulfonic acid (PFHxS)	ng/L	--	1.5 U	--	--	--	2.3
Perfluorohexanoic acid (PFHxA)	ng/L	--	66	--	--	--	55
Perfluorononanoic acid (PFNA)	ng/L	--	1.8	--	--	--	5.1
Perfluorooctane sulfonamide (FOSA)	ng/L	--	1.5 U	--	--	--	1.5 U
Perfluorooctane sulfonic acid (PFOS)	ng/L	--	2.6	--	--	--	21
Perfluorooctanoic acid (PFOA)	ng/L	--	31	--	--	--	30
Perfluoropentanoic acid (PFPeA)	ng/L	--	130	--	--	--	160
Perfluorotetradecanoic acid (PFTeDA)	ng/L	--	1.5 U	--	--	--	1.5 U
Perfluorotridecanoic acid (PFTrDA)	ng/L	--	1.5 U	--	--	--	1.5 U
Perfluoroundecanoic acid (PFUnA)	ng/L	--	1.5 U	--	--	--	1.5 U

Table 2

Analytical Results Summary
Publicly Owned Treatment Works Sampling
Cascades Containerboard Packaging Company
Niagara Falls, New York
October 2025

	Location ID:	MW3-C-08	MW9	MW9	MW12	MW12	MW13
	Sample Name:	WG-12595539-100825-DB-003	WG-12595539-100825-DB-005	WG-12595539-101325-DB-013	WG-12595539-100825-GH-004	WG-12595539-100825-GH-006	WG-12595539-100825-GH-008
	Sample Date:	10/08/2025	10/08/2025	10/13/2025	10/08/2025	10/08/2025	10/08/2025
						Duplicate	
Parameters	**Unit**						
Metals							
Arsenic	mg/L	--	--	0.015	0.015 U	0.015 U	--
Iron	mg/L	--	--	40	0.23	0.33	--
Potassium	mg/L	--	--	960	3900	3900	--
Sodium	mg/L	--	--	210	330	330	--
General Chemistry							
Phenolics (total)	mg/L	--	--	0.042	0.010 U	0.010 U	--

Table 2

Analytical Results Summary
Publicly Owned Treatment Works Sampling
Cascades Containerboard Packaging Company
Niagara Falls, New York
October 2025

	Location ID:	MW13	MW88-12A	MW88-13A	MW88-8A	MW88-8B	Trip Blank	Trip Blank
	Sample Name:	WG-12595539-101325-DB-015	WG-12595539-101325-GH-018	WG-12595539-100825-DB-007	WG-12595539-101325-GH-016	WG-12595539-101325-DB-017	TB-12595539-100825	TB-12595539-101325
	Sample Date:	10/13/2025	10/13/2025	10/08/2025	10/13/2025	10/13/2025	10/08/2025	10/13/2025
Parameters	**Unit**							
Volatile Organic Compounds								
1,1,1-Trichloroethane	µg/L	--	--	--	--	--	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	--	--	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	--	--	--	--	--	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	20 U	38	250	10000 U	50 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	--	--	--	--	--	5.0 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	20 U	25 U	200 U	10000 U	50 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	--	--	--	--	--	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	--	--	--	--	--	5.0 U	5.0 U
1,2-Dichlorobenzene	µg/L	20 U	25 U	2400	10000 U	50 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	--	--	--	--	--	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	--	--	--	--	--	5.0 U	5.0 U
1,3-Dichlorobenzene	µg/L	20 U	25 U	660	10000 U	86	5.0 U	5.0 U
1,4-Dichlorobenzene	µg/L	20 U	25 U	1300	10000 U	340	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	--	--	--	--	--	25 U	25 U
2-Chlorotoluene	µg/L	170	25 U	1500	10000 U	540	5.0 U	5.0 U
2-Hexanone	µg/L	--	--	--	--	--	25 U	25 U
3-Chlorotoluene	µg/L	20 U	25 U	200 U	10000 U	50 U	5.0 U	5.0 U
4-Chlorotoluene	µg/L	20 U	25 U	620	10000 U	50 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	--	--	--	--	--	25 U	25 U
Acetone	µg/L	100 U	130 U	1000 U	50000 U	250 U	25 U	25 U
Benzene	µg/L	20 U	25 U	270	10000 U	50 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	--	--	--	--	--	5.0 U	5.0 U
Bromoform	µg/L	--	--	--	--	--	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	--	--	--	--	--	5.0 U	5.0 U
Carbon disulfide	µg/L	--	--	--	--	--	5.0 U	5.0 U
Carbon tetrachloride	µg/L	--	--	--	--	--	5.0 U	5.0 U
Chlorobenzene	µg/L	20 U	25 U	560	10000 U	560	5.0 U	5.0 U
Chloroethane	µg/L	--	--	--	--	--	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	--	--	--	--	--	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	--	--	--	--	--	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	32	67	1600	41000	50 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	µg/L	--	--	--	--	--	5.0 U	5.0 U
Dibromochloromethane	µg/L	--	--	--	--	--	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	--	--	--	--	--	5.0 U	5.0 U
Ethylbenzene	µg/L	--	--	--	--	--	5.0 U	5.0 U
Isopropyl benzene	µg/L	--	--	--	--	--	5.0 U	5.0 U
Methyl tert butyl ether (MTBE)	µg/L	--	--	--	--	--	5.0 U	5.0 U

Table 2

Analytical Results Summary
Publicly Owned Treatment Works Sampling
Cascades Containerboard Packaging Company
Niagara Falls, New York
October 2025

Location ID:		MW13	MW88-12A	MW88-13A	MW88-8A	MW88-8B	Trip Blank	Trip Blank
Sample Name:		WG-12595539-101325-DB-015	WG-12595539-101325-GH-018	WG-12595539-100825-DB-007	WG-12595539-101325-GH-016	WG-12595539-101325-DB-017	TB-12595539-100825	TB-12595539-101325
Sample Date:		10/13/2025	10/13/2025	10/08/2025	10/13/2025	10/13/2025	10/08/2025	10/13/2025
Parameters	**Unit**							
Volatile Organic Compounds								
Methylene chloride	µg/L	--	--	--	--	--	5.0 U	5.0 U
Styrene	µg/L	--	--	--	--	--	5.0 U	5.0 U
Tetrachloroethene	µg/L	20 U	25 U	200 U	82000	50 U	5.0 U	5.0 U
Toluene	µg/L	20 U	25 U	200 U	10000 U	50 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	--	--	--	--	--	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	--	--	--	--	--	5.0 U	5.0 U
Trichloroethene	µg/L	20 U	25 U	200 U	120000	53	5.0 U	5.0 U
Trichlorofluoromethane (CFC-11)	µg/L	--	--	--	--	--	5.0 U	5.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	--	--	--	--	--	5.0 U	5.0 U
Vinyl chloride	µg/L	20 U	410	200 U	10000 U	50 U	5.0 U	5.0 U
Xylenes (total)	µg/L	--	--	--	--	--	10 U	10 U
Semivolatile Organic Compounds, SIM								
1,4-Dioxane	µg/L	1.0	--	12	--	--	--	--
Per/Polyfluoroalkyl Substances								
Fluorotelomer sulfonic acid (6:2)	ng/L	--	--	1500	--	--	--	--
Fluorotelomer sulfonic acid (8:2)	ng/L	--	--	44	--	--	--	--
N-Ethyl perfluorooctane sulfonamido acetic acid (N-EtFOSAA)	ng/L	--	--	2.8 U	--	--	--	--
N-Methyl perfluorooctane sulfonamido acetic acid	ng/L	--	--	2.8 U	--	--	--	--
Perfluorobutane sulfonic acid (PFBS)	ng/L	--	--	2.8 U	--	--	--	--
Perfluorobutanoic acid (PFBA)	ng/L	--	--	220	--	--	--	--
Perfluorodecanesulfonic acid (PFDS)	ng/L	--	--	2.8 U	--	--	--	--
Perfluorodecanoic acid (PFDA)	ng/L	--	--	2.8 U	--	--	--	--
Perfluorododecanoic acid (PFDoDA)	ng/L	--	--	2.8 U	--	--	--	--
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	--	--	2.8 U	--	--	--	--
Perfluoroheptanoic acid (PFHpA)	ng/L	--	--	160	--	--	--	--
Perfluorohexane sulfonic acid (PFHxS)	ng/L	--	--	5.4	--	--	--	--
Perfluorohexanoic acid (PFHxA)	ng/L	--	--	390	--	--	--	--
Perfluorononanoic acid (PFNA)	ng/L	--	--	5.0	--	--	--	--
Perfluorooctane sulfonamide (FOSA)	ng/L	--	--	2.8 U	--	--	--	--
Perfluorooctane sulfonic acid (PFOS)	ng/L	--	--	16	--	--	--	--
Perfluorooctanoic acid (PFOA)	ng/L	--	--	140	--	--	--	--
Perfluoropentanoic acid (PFPeA)	ng/L	--	--	990	--	--	--	--
Perfluorotetradecanoic acid (PFTeDA)	ng/L	--	--	2.8 U	--	--	--	--
Perfluorotridecanoic acid (PFTrDA)	ng/L	--	--	2.8 U	--	--	--	--
Perfluoroundecanoic acid (PFUnA)	ng/L	--	--	2.8 U	--	--	--	--

Table 2

Analytical Results Summary
Publicly Owned Treatment Works Sampling
Cascades Containerboard Packaging Company
Niagara Falls, New York
October 2025

	Location ID:	MW13	MW88-12A	MW88-13A	MW88-8A	MW88-8B	Trip Blank	Trip Blank
	Sample Name:	WG-12595539-101325-DB-015	WG-12595539-101325-GH-018	WG-12595539-100825-DB-007	WG-12595539-101325-GH-016	WG-12595539-101325-DB-017	TB-12595539-100825	TB-12595539-101325
	Sample Date:	10/13/2025	10/13/2025	10/08/2025	10/13/2025	10/13/2025	10/08/2025	10/13/2025
Parameters	**Unit**							
Metals								
Arsenic	mg/L	0.015 U	0.015 U	0.035	0.048	0.015 U	--	--
Iron	mg/L	30	21	6.3	0.21	1.5	--	--
Potassium	mg/L	29	320	830	820	70	--	--
Sodium	mg/L	240	160	170	260	130	--	--
General Chemistry								
Phenolics (total)	mg/L	0.017	0.010 U	0.078	0.043	0.010 U	--	--

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
-- - Not applicable

Table 3

Analytical Methods
Publicly Owned Treatment Works Sampling
Cascades Containerboard Packaging Company
Niagara Falls, New York
October 2025

Parameter	Method	Matrix	Collection to Extraction (Days)	Collection to Analysis (Days)
VOC	EPA 624	Water	-	14
SVOC (1,4-Dioxane)	SW-8270 SIM	Water	7	40
PFCs	EPA 1633	Water	14	28
Metals	EPA 200.7	Water	-	180
Total Phenolics	EPA 420.4	Water	-	28

Notes:

VOC - Volatile Organic Compounds
SVOC - Semi-volatile Organic Compounds
PFCs - Perfluorinated Chemicals
\- - Not applicable

Method References:

SW - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions
EPA - EPA/600/R-08/092, September 2009 (Method 537)
SIM - Selective Ion Monitoring

Table 4

Qualified Sample Data Due to Results Being Rported As An Estimated Possible Concentration (EMPC)
Publicly Owned Treatment Works Sampling
Cascades Containerboard Packaging Company
Niagara Falls, New York
October 2025

Parameter	Sample ID	Analyte	Qualified Result		Units
PFAS	WG-12595539-100825-GH-010	Perfluorooctane sulfonamide (FOSA)	7.5	J	ng/L

Notes: -

PFAS - Per and Polyfluoroalkyl Substances
J - Estimated Concentration

Attachment E

Notice – Institutional and Engineering Controls Certification Form

Enclosure 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **932110**

Site Name ~~**Frontier Chemical - Royal Avenue**~~ Cascades Containerboard Packaging, Inc. Royal Avenue

Site Address: 4626 Royal Avenue Zip Code: 14303
City/Town: Niagara Falls
County: Niagara
Site Acreage: 9.810

Reporting Period: November 18, 2024 to November 18, 2025

	YES	NO
1. Is the information above correct?		✓
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		✓
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		✓
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		✓
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?		✓

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Industrial	✓	
7. Are all ICs in place and functioning as designed?	✓	

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. 932110 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
160.09-1-6	4626 Royal Avenue Holding LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Site Management Plan Monitoring Plan IC/EC Plan

Environmental Easement and Site Management Plan.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
160.09-1-6	Cover System

Twelve inch clean cover system consisting of crushed concrete or crushed stone with some asphalt.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
✓	

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
✓	

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 932110

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Anthony J. Newman (print name) at 4400 Royal Ave, Niagara Falls, NY (print business address)

am certifying as Plant Manager (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification — Date: 1/29/26

EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Richard J. Snyder (print name) at 2055 Niagara Falls Blvd Niagara Falls NY 14304 (print business address),

am certifying as a Qualified Environmental Professional for the Remedial Party (Owner or Remedial Party)



Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

December 12, 2025
Date