PERIODIC REVIEW ANNUAL REPORT No. 11
(JULY 1, 2022 – JUNE 30, 2023)
CARRIAGE CLEANERS-BRIGHTON
NYSDEC SITE NO. 828120

WORK ASSIGNMENT NO. D009809-15

Prepared for:

New York State Department of Environmental Conservation
Albany, New York

Prepared by:

Earth Environment Engineering and Geology, P.C.
Portland, Maine

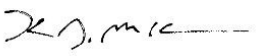
EEEG Project No.: US-EI-3616206118

MAY 2025

MAY 2025

CERTIFICATION STATEMENT

I Kevin McKeever certify that I am currently a Qualified Environmental Professional as in defined in 6 NYCRR Part 375 and that this Periodic Review Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

 QEP

05/30/2025 DATE

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TABLE OF CONTENTS

LIST OF TABLES

Tables

LIST OF FIGURES

Figures

LIST OF APPENDICES

Appendices

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

ACM	asbestos containing materials
ACSM	American Congress on Surveying and Mapping
ALTA	American Land Title Association/
EC(s)	engineering controls
EEEG	Earth Environment Engineering and Geology, P.C.
FS	Feasibility Study
GES	Groundwater and Environmental Services, Inc.
GWETS	groundwater extraction and treatment system
IC(s)	institutional controls
lbs/hr	pounds per hour
MACTEC	MACTEC Engineering and Consulting, P.C. (prior to 2020) or MACTEC Engineering and Geology, P.C. (from 2020 to 2024)
MCDES	Monroe County Department of Environmental Services
µg/L	microgram(s) per liter
mg/kg	milligram(s) per kilogram
NYSDEC	New York State Department of Environmental Conservation
O&M	operation and maintenance
OBG	O'Brien and Gere Engineers
PCE	tetrachloroethene
ppbv	part(s) per billion by volume
ppm	part(s) per million

GLOSSARY OF ACRONYMS AND ABBREVIATIONS (CONTINUED)

PRR	periodic review report
RA	Remedial Action
RI	Remedial Investigation
ROD	Record of Decision
RSO	remedial system optimization
SCO(s)	soil cleanup objective(s)
Site	Carriage Cleaners site
SM	site management
SMP	Site Management Plan
SSDS	sub-slab depressurization system
SVE	soil vapor extraction
SVI	soil vapor intrusion
USEPA	United Stated Environmental Protection Agency
VOC(s)	volatile organic compounds

EXECUTIVE SUMMARY

The Carriage Cleaners site (Site No. 828120; hereinafter referred to as the Site) is a commercially zoned parcel approximately 0.35 acres in size located at the intersection of Brooklawn Drive and Monroe Avenue, in Brighton, New York (Figure 1.1). Dry cleaning operations have occurred at the Site for at least 30 years; a Town of Brighton Sewer inspection suggests that dry cleaning operations may have occurred at the Site as early as 1959. Carriage Cleaners utilized tetrachloroethene (PCE) during dry-cleaning operations until October 10, 2018, when operations switched to a naphthalene-based product. The current operations at the Carriage Cleaners building consist of laundry pickup and drop off activities only.

The remedy for the Site was selected and a Record of Decision (ROD) issued in March 2008 (New York State Department of Environmental Conservation [NYSDEC], 2008). Contaminants of concern at the Site are volatile organic compounds (VOCs), specifically PCE and its breakdown components. RA activities have included:

1. Contaminated soil was excavated to bedrock (approximately sixteen feet below ground surface) at a suspected contaminant source area adjacent to the active dry cleaner building in 2011. Excavated material was transported and disposed at an off-site facility. The excavation was backfilled with clean soil. In addition, in 2011, a PCE aboveground storage tank (AST) stored between the Carriage Cleaners building and the adjacent residence was also removed, and floor drains located within the Carriage Cleaners building were abandoned to prevent possible discharge of contaminants to storm sewers. [1]
2. A soil vapor extraction (SVE) system was installed in 2011. Contaminated air from the extraction wells is treated by granular activated carbon to remove contaminants before being discharged to the atmosphere. The SVE system was shut down from December 20, 2017, to November 21, 2018, during execution of a rebound study and was restarted after witnessing rebound in the soil vapor due to continued groundwater impacts.
3. A groundwater extraction treatment system (GWETS) was in operation from October 2011 to September 2020. The GWETS consisted of one extraction well which collected groundwater on site to prevent continued off-site migration of contaminants. Contaminated water from the extraction well was treated to remove contaminants before being discharged to the sanitary sewer in accordance with an approved permit (Appendix A). The GWETS was shut down in September 2020, at the request of the NYSDEC, following the submittal of the January 2020 Remedial System Optimization (RSO) Report.
4. The GWETS discharge to the sanitary sewer was permanently disconnected on October 17, 2022, by NYSDEC standby contractor GES. The Monroe County Department of

[1] Periodic Review Report No. 10 (July 14, 2021 – July 1, 2022) [Mactec, 2022b] incorrectly stated that excavations were completed in 2013 and 2017, and that AST removal and floor drain abandonments were completed in 2017.

Environmental Services (MCDES) inspected and verified the disconnection on November 17, 2022. The sewer line disconnection summary is provided in Appendix B.

5. A RSO work plan to implement the recommended action to convert the existing SVE system to a sub-slab depressurization system (SSDS) was submitted and approved by the NYSDEC on January 14, 2022.
6. A RSO Installation Performance Criteria Letter proposing the conversion of the existing SVE system was prepared by MACTEC Engineering and Geology, P.C. (MACTEC), now Earth Environment Engineering and Geology, P.C. (EEEG), and submitted to the NYSDEC on May 2, 2023; the letter was approved by the NYSDEC on May 18, 2023. A RSO Conversion proposal is anticipated from standby Contractor GES in September 2023. Implementation of this RSO is planned to begin within the third or fourth quarter of 2023.

A Site Management (SM) Plan (MACTEC, 2022a) outlines the controls established to meet the ROD requirements. Because remaining contaminated groundwater exists beneath the Site, engineering controls (ECs)/institutional controls (ICs) are required to protect human health and the environment. Previously contaminated soil onsite has been remediated.

EC systems at the Site include:

1. A cover system consisting of asphalt pavement, concrete sidewalks, and concrete building slabs.
2. Site fencing to keep the public from approaching the Site treatment trailer.
3. A SVE system to treat soil contamination on-site.
4. SSDS at seventeen structures are in place to mitigate soil vapor in the neighboring community. The SSDSs are being monitored and maintained by the NYSDEC under a separate contract and are not a focus of the annual Periodic Review Report (PRR), however they are still active and their locations in relation to the Site are shown in Figure 1.2.

IC systems at the Site in the form of an environmental easement include:

1. Limiting use and development of the property to commercial and industrial activities
2. Land use restrictions which require proper worker protections during construction or excavation activities that would potentially cause a worker to contact contaminated soil, groundwater, or soil vapor
3. Compliance with the approved Site Management Plan (SMP)
4. Groundwater use restrictions which preclude the use of groundwater at the Site without prior notification and approval from NYSDEC
5. Restrictions implemented on the site property related to soil, groundwater, and soil vapor
6. A periodic certification of ICs/ECs.

This is the eleventh annual PRR for the Site. The PRR summarizes the SM activities completed at the Site from July 1, 2022, through June 30, 2023, and evaluates the effectiveness of the RA

conducted. During the reporting period, SM requirements were met. Based on this review, the combined remedy continues to be protective of the public health and the environment; several of the remedial action objectives in the ROD have been achieved, and ongoing SM activities could be optimized while continuing to be protective of public health and the environment.

1.0 SITE OVERVIEW

1.1 INTRODUCTION

This Periodic Review Report (PRR), which covers the period of performance from July 1, 2022, to June 30, 2023 (hereinafter referred to as the "reporting period"), is the eleventh annual PRR for the Carriage Cleaners site (Site) and includes:

- Required institutional control/engineering control (IC/EC) certification by the site owner and the project engineer (Earth Environment Engineering and Geology [EEEG])
- Summary and documentation of site-related data to support IC/EC certification
- Discharge monitoring data for the certification period
- A description of the on-line treatment system(s) performance
- Groundwater sampling results and findings.

The remedy for the Site was selected and a Record of Decision (ROD) issued in March 2008 (New York State Department of Environmental Conservation [NYSDEC], 2008). Initial Remedial Action (RA) work commenced in 2011 with the installation of a groundwater extraction and treatment system (GWETS) and a soil vapor extraction (SVE) system, followed by source removal activities in 2011 (MACTEC Engineering and Consulting, P.C. [MACTEC], 2012). [2]

Site Management (SM) has historically included operation of a GWETS to contain the groundwater contaminant plume in bedrock fractures, and a SVE system to treat contaminated vadose zone soil beneath the Site building.

Full-time combined SVE and GWETS operations and corresponding SM activities were initiated in January 2012. The GWETS was shut down in September 2020 at the request of the NYSDEC, and the GWETS sewer connection was permanently disconnected and verified by Monroe County Department of Environmental Services (MCDES) in November 2022. During the reporting period, the SVE system was operated, monitored, and maintained by Groundwater and Environmental

[2] Periodic Review Report No. 10 (July 14, 2021 – July 1, 2022) [Mactec, 2022b] incorrectly stated that source removal activities were completed in 2013 and 2017.

Services, Inc. (GES) under a standby contract (No. C100607) to the NYSDEC and under direction by EEEG, formerly MACTEC (named changed in May 2024).

1.2 SITE HISTORY AND DESCRIPTION

The Site is located at 2101 Monroe Avenue, Town of Brighton, Monroe County, New York (Figure 1.1). The Site is a commercially zoned parcel approximately 0.35 acres in size located at the intersection of Brooklawn Drive and Monroe Avenue. The area is a densely populated, mixed commercial and residential area. The Site is currently occupied by a one-story cement block laundry facility, a two-story wood house, and a paved parking lot.

Dry cleaning operations have occurred at the Site for at least 30 years; a Town of Brighton Sewer inspection suggests that dry cleaning operations may have occurred at the Site as early as 1959. Until October 10, 2018, Carriage Cleaners utilized tetrachloroethene (PCE) during dry-cleaning operations. After that date, naphthalene, a petroleum-based solvent, was used until 2022. The current operations at the Carriage Cleaners building consist of laundry pickup and drop off activities only.

In 2003, a petroleum spill (Spill Number 0306131, closed on March 27, 2013) occurred adjacent to the Site at a former Newcomb Oil/Citgo Gasoline Station located at 2087 Monroe Avenue. PCE was discovered within groundwater downgradient of the Site during a series of investigations related to the petroleum spill. Due to the proximity of the Site and the history of PCE used during dry cleaning operations at the Site, the Carriage Cleaners Property was determined to be a potential source of the PCE detected within the groundwater (NYSDEC, 2008).

Because of the PCE detections, a Phase II Environmental Site Assessment was completed by the site owner in 2004. This investigation did not identify an onsite source for the PCE; however, the assessment suggested that potential ruptures within the sanitary and storm sewer line could be a source for the PCE detected within groundwater. The NYSDEC completed an offsite vapor intrusion study at four nearby residential properties. The results from this study led to the installation of one basement ventilation system and four sub-slab depressurization systems (SSDS) as part of an interim remedial measure (NYSDEC, 2008).

As a result of these investigations, the NYSDEC listed the Site as a Class 2 Site in the Registry of Inactive Hazardous Waste Disposal Sites in New York in June of 2004. The NYSDEC ordered a Remedial Investigation (RI) and Feasibility Study (FS) to be completed (NYSDEC, 2008).

1.3 PHYSICAL SETTING

The geology beneath and near the Site directly influences the distribution and ability for contaminants to migrate from the Site. Site geology consists of a sandy glacial till (overburden beneath the Site) comprised of loose to dense, fine, and medium sand with some silt and gravel overlying a medium dark gray dolomite (bedrock beneath the Site) of the Lockport Group. The thickness of the overburden ranges from approximately 3 feet to 15 feet. Based on data collected as part of the RI, O'Brien and Gere Engineers (OBG) reported that three zones can be distinguished within the bedrock unit. These include a weathered bedrock zone immediately below the till deposit ranging from 1 to 3 feet in thickness, a shallow fractured bedrock zone with a thickness of approximately 6 to 15 feet, and a more competent intermediate bedrock zone where fracture frequency decreases with depth. The data suggest that there is a hydraulic connection/communication between the overburden zone and the shallow bedrock groundwater zone (OBG, 2007).

1.4 REMEDIAL PROGRESS AND CLEANUP GOALS

Based on the OBG RI/FS, EEEG (operating as MACTEC at the time) performed an additional investigation in 2013, including the installation of bedrock monitoring well 6B (MW-6B), which indicated the presence of PCE diffused into the bedrock matrix, resulting in PCE detected at high concentrations. Methanol Extraction of rock chips testing of the rock core from MW-6B indicated PCE concentrations as high as 48 milligrams per kilogram (mg/kg) were present in the matrix of the shallow bedrock. Matrix diffusion will occur if there is a concentration gradient between the PCE-contaminated matrix and the groundwater-filled fracture.

Therefore, in 2014 potassium permanganate (RemOx® SR) cylinders were installed to passively treat groundwater and bedrock in the vicinity of MW-6/6B. Since the removal of the cylinders in late 2018, groundwater contaminant concentrations reported in the bedrock at MW-6B have varied with the seasonal fluctuation of the groundwater table with detections of 5.3 micrograms per liter (µg/L), 1,500 µg/L, 410 µg/L, 3.2 µg/L, 990 µg/L, and 160 µg/L during the March 2020, November 2020, March 2021, April 2022, October 2022, and April 2023 sampling events, respectively.

Lingering contamination is evident in MW-6, an overburden well located near the northeast corner of the building in the narrow alleyway where PCE was temporarily stored and presumably spilled.

In MW-6, PCE concentrations have remained elevated over the last six sampling events ranging from 32,000 µg/L (March 2020) to 2,000 µg/L (October 2022). PCE detections indicate contamination could be desorbing into the groundwater from the overburden soils and bedrock under the building adjacent to MW-6. [3]

1.4.1 Description of Selected Remedy and Associated Cleanup Goals

Based on the results of the RI/FS and the criteria identified for evaluation of alternatives, the NYSDEC selected excavation (to the extent practical) to remove from the Site contaminated soil exhibiting concentrations of PCE greater than the soil cleanup objective (SCO) for unrestricted use (1.3 parts per million [ppm]). The selected remedy also included operation of an on-site SVE system to treat residual contaminated soil (i.e., beneath the building) and operation of a GWETS to contain contaminated shallow bedrock groundwater, along with the continued operation of the existing off-site SSDS and periodic soil vapor intrusion (SVI) monitoring at nearby residences.

As part of the remedy, ICs in the form of an environmental easement are being used to impose land use restrictions and groundwater use restrictions at the Site. Specifically, the environmental easement includes:

- limiting use and development of the property to commercial and industrial activities
- land use restrictions which require proper worker protections during construction or excavation activities that would potentially cause a worker to contact contaminated soil, groundwater, or soil vapor
- compliance with the approved Site Management Plan (SMP)
- groundwater use restrictions which preclude the use of groundwater at the Site without prior notification and approval from NYSDEC
- restrictions implemented on the site property related to soil, groundwater, and soil vapor
- a periodic certification of ICs/ECs.

The cleanup goals for the site continue to follow the SMP wherein groundwater sampling results are compared to the New York State Class GA Groundwater Standards and New York State Guidance Values.

[3] Periodic Review Report No. 10 (July 14, 2021 – July 1, 2022) [MACTEC, 2022b] incorrectly stated that overburden soils in the vicinity of MW-6 were excavated to bedrock and replaced with clean fill in 2017.

1.4.2 Remedial Progress

In March 2017, results of soil samples collected from beneath the building indicated that the SCO had been achieved. Therefore, the SVE system was taken offline on December 20, 2017, to conduct a rebound study to evaluate the need for its continued operation. The SVE system was turned back on to support SVI mitigation in the Site building on November 21, 2018. Following the submittal of the January 2020 Remedial System Optimization (RSO) Report, the GWETS was shut down (September 2020) at the request of the NYSDEC. The GWETS sewer connection was permanently disconnected and verified by MCDES in November 2022.

The A RSO work plan to implement the recommended action to convert the existing SVE system to a SSDS was approved by the NYSDEC on January 14, 2022. A RSO Installation Performance Criteria Letter proposing conversion of the existing SVE system was prepared by MACTEC and submitted to the NYSDEC on May 2, 2023; the letter was approved by the NYSDEC on May 18, 2023. The RSO Installation Performance Criteria was submitted to On-Call contractor GES on May 19, 2023, and a response to comments email was prepared by MACTEC and submitted to GES on June 2, 2023, to clarify and answer GES questions. GES conducted a site visit on June 21, 2023, to evaluate existing SVE and SSDS equipment for reuse as part of the RSO conversion. A RSO Conversion proposal is anticipated from GES in September 2023.

Implementation of this RSO is planned to begin during the third or fourth quarter of 2023 and will follow the procedures and criteria discussed in the RSO Work Plan (MACTEC, 2021e) and the RSO Installation Performance Criteria, and will include asbestos containing materials (ACM) abatement, if necessary, for floor tiles and mastic.

In accordance with the ROD, operation of the remedy components will continue until the remedial objectives have been achieved, or until the NYSDEC determines that continued operation is technically impracticable or not feasible.

2.0 EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS

Ongoing SM activities required by the SMP include ICs/ECs, the monitoring program, and the implementation of the site Operation and Maintenance (O&M) Plan described in the SMP (MACTEC, 2022a).

2.1 SITE MANAGEMENT STATUS

During this reporting period EEEG (operating as MACTEC at the time) performed O&M oversight of the on-site standby remedial contractor GES and prepared quarterly and monthly O&M monitoring reports. As requested by the NYSDEC, submission of Monthly Progress Reports began in October 2021 and quarterly reports were no longer required. GES provided EEEG with transmittals of field data tables and a summary of site activities included in the PRR. Since the previous PRR (MACTEC, 2022b), MACTEC prepared and submitted Revision No. 3 of the SMP for the site (MACTEC, 2022a).

EEEG performed two semi-annual groundwater sampling events during this reporting period. This PRR was completed using site specific documentation including the Site's ROD (NYSDEC, 2008), periodic site inspections conducted by GES, the quarterly and monthly O&M monitoring reports, and the SMP. This review was conducted to confirm that established controls required in the SMP are operational and effective, that the SMP is being implemented and conducted accordingly, and that the remedy remains protective of the environment and/or public health. A summary of SM activities completed during the reporting period and an evaluation of the performance, protectiveness, and effectiveness of the remedy is provided below.

2.2 INSTITUTIONAL CONTROLS/ENGINEERING CONTROLS

Residual contamination is present at this Site above the SCO for unrestricted use (1.3 ppm for PCE), and in groundwater above GA standards, therefore, ICs and ECs have been implemented to protect public health and the environment. The IC/ECs are designed to prevent:

- ingestion/direct contact with contaminated soil
- inhalation of or exposure to contaminants volatilizing from contaminated soil
- ingestion of groundwater with contaminant levels that exceed drinking water standards

- contact with or inhalation of volatiles from contaminated groundwater.

2.2.1 Institutional Controls

A series of ICs were put in place to provide site restrictions and implement, maintain, and monitor the ECs. Currently, ICs in the form of an environmental easement are being used to impose land use restrictions and groundwater use restrictions at the Site. Based on current site conditions and inspections conducted throughout the reporting period, there has not been a change in property use, site activities are compliant with the ICs and the environmental easement, and no change in ICs are required.

2.2.2 Engineering Controls

In accordance with the ROD, the following ECs have been put in place:

- use of the existing asphalt pavement, concrete sidewalks, and concrete building slabs as a cover system to minimize direct contact to impacted subsurface soil
- an SVE system to treat soil contamination on-site
- groundwater monitoring wells and a GWETS to prevent and monitor off-site migration of contaminants through groundwater
- site fencing to keep the public from approaching the treatment trailer.

2.2.2.1 Asphalt and Concrete Cover System

The cover system, comprised of asphalt pavement and concrete sidewalks and building slabs, documented in the American Land Title Association/American Congress on Surveying and Mapping (ALTA/ACSM) Land Title Survey included in Appendix A of the SMP (MACTEC, 2022a) is a permanent control to prevent direct contact to impacted subsurface soil. The cover system was observed during the reporting period to be intact and continuing to provide an effective barrier to site soils. However, as described in subsequent sections, the SCO for the site has been achieved and therefore the cover system may no longer be required. This EC should be considered for revision in the next SMP update.

2.2.2.2 Soil Vapor Extraction System

The purpose of the SVE system was to treat residual contamination in overburden vadose zone soil. The general configuration of the SVE system's extraction wells and vapor monitoring points is presented in Figure 2.1.

PCE concentrations in soil samples indicate that the SCO has been reached in subsurface soil and that the SVE system has treated subsurface soil to the extent practicable as described in the ROD. Table 2.1 shows that 2017 PCE concentrations are below the SCO of 1.3 ppm and reduced compared to 2013 results.

As a result of the March 2017 soil investigation, a rebound study involving shutdown of the SVE system from December 2017 until November 2018 was conducted. Elevated VOC soil vapor concentrations due to continued groundwater impacts in the fourth quarter 2018 were observed and the SVE system was restarted. Concentrations thereafter returned to normal range as shown on Figure 2.2. A trend line showing a slight decrease in influent VOC concentration since the beginning of SVE system operation and the cumulative total mass of VOCs removed from the system are also depicted on Figure 2.2.

During the current PRR reporting period, the average total VOC concentration per quarter in the combined influent soil vapor samples utilizing the United States Environmental Protection Agency (USEPA) TO-15 analysis was:

- 2022 third quarter – 250 parts per billion by volume (ppbv)
- 2022 fourth quarter – 310 ppbv
- 2023 first quarter – 57 ppbv
- 2023 second quarter – 64 ppbv.

Through June 17, 2023, the aggregate mass of total VOCs extracted by the SVE system is estimated to be 351.88 pounds.

During the PRR reporting period monthly effluent samples were collected from July 2022 through June 2023 to evaluate compliance with the air discharge criteria for the Site defined in the DAR-1 Guidelines for the Control of Toxic Ambient Air Contaminants and Title 6 of the New York Codes, Rules, and Regulations Part 212. The average monthly combined stack discharge for the period did

not exceed the discharge objective of 0.1 pounds per hour (lbs/hr) of high toxicity contaminants, with the maximum monthly average combined stack discharge occurring in the month of July 2022 at 0.0054 lbs/hr.

Overall, the SVE system has generally performed as expected over its ten years of operation and has achieved its goal of reducing soil concentrations to below the SCO. Although there are still measurable PCE concentrations in soil vapor at the SVE influent, the reported detections are likely attributable to off gassing of groundwater, overburden soils, and/or bedrock from the subsurface. This impacted soil vapor could impact indoor air concentrations at the dry cleaner building over time. At this point in time, a SSDS would be better suited for vapor intrusion mitigation than the ongoing operation of the SVE system. A RSO work plan to implement the recommended action to convert the existing SVE system to a SSDS was approved by the NYSDEC on January 14, 2022, and implementation of this RSO is planned to begin in Fall and Winter of 2023.

2.2.2.3 Groundwater Extraction and Treatment System

As noted in the Third Quarter 2020 OM&M Report, the GWETS was shut down on September 9, 2020, upon the request of the NYSDEC. The GWETS discharge to the sanitary sewer was permanently disconnected on October 17, 2022 by NYSDEC call-out contractor GES. The Monroe County Department of Environmental Services (MCDES) inspected and verified the disconnection on November 17, 2022. The sewer line disconnection summary is provided in Appendix B.

2.2.2.4 Groundwater Monitoring Well Gauging and Sampling

Monitoring wells MW-111I, HA-114, MW-210, MW-8B, MW-9, MW-9B, MW-6, and MW-6B, shown in Figure 2.3, were gauged and sampled in the weeks of October 24, 2022 and April 10, 2023 as part of a combined comprehensive groundwater sampling event including wells from nearby Former Speedy's Cleaners. Table 2.2 presents the groundwater elevation summary for the October 2022 and April 2023 gauging events. Figure 2.4 and figure 2.5 present the groundwater contours for the October 2022 and April 2023 gauging events, respectively. Table 2.3 summarizes groundwater PCE concentrations in monitoring wells onsite and adjacent to the Site. The extent of PCE in groundwater in in October 2022 and April 2023 are presented in Figure 2.6 and Figure 2.7, respectively. Appendix C contains the Laboratory Validation Reports for the sampling periods discussed below. The Low Flow Groundwater Data Records are presented in Appendix D.

3.0 CONCLUSIONS AND RECOMMENDATIONS

The site remedy continues to be protective of the public health and the environment and is compliant with the decision document. However, portions of the remedy could be omitted or optimized while continuing to be protective.

3.1 INSTITUIONAL CONTROLS

The current ICs are adequate to achieve the objectives for protection of human health and the environment based on current site use.

3.2 ENGINEERING CONTROLS

The current ECs are adequate to achieve the objectives for protection of human health and the environment based on current Site use. The SCO has been achieved, indicating that the SVE system and cover system may no longer be necessary for the purpose of soil remediation. Although the degree of groundwater containment cannot be clearly demonstrated, observed influent groundwater concentrations and surrounding groundwater concentrations generally exhibit a decreasing trend.

3.3 RECOMMENDATIONS

Based on the information presented in this PRR, the following is proposed:

- Continue with the conversion of the SVE system to an SSDS: the SCO has been achieved, and conversion of the existing SVE system to an SSDS will mitigate potential SVI issues while reducing O&M costs.
- Evaluate a viable method to reduce the concentration of the onsite groundwater VOC plume.
- Continue to further define/delineate the groundwater plume off-Site and evaluate the potential for a comingled plume with Former Speedy's Dry Cleaners.
- Evaluate the Green Remediation status for converting the SVE system to the SSDS.
- Update the SMP once SVE to SSDS conversion is completed. Permanent EC of asphalt cover may potentially be modified in the SMP.

4.0 REFERENCES

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FIGURES

NYSDEC
Carriage Cleaners Site
Brighton, NY

EARTH ENVIRONMENT
Engineering and Geology P.C.

Site Location
Project 3616206118
Figure 1.1

Document: P:\Projects|nysdec1\Contract D007619\Projects\Carriage Cleaners - SM\4.0_Deliverables\4.5_Databases\GIS\MapDocuments\SSDS_Status_2019_11x17LS.mxd PDF: P:\Projects|nysdec1\Contract D007619\Projects\Carriage Cleaners - SM\4.0_Deliverables\4.1_Reports\RSO_Supplemental\Figure 2.2 - SSDS Locations.pdf 09/25/2019 8:03 AM brian.peters

Legend

- SSDS System in Place
- House is currently abandoned and SSDS is not in operation

N

0 40 80 Feet

Monroe County color digital orthoimagery (2015) obtained from New York State GIS Clearinghouse at: gis.ny.gov

Prepared/Date: BRP 09/25/19
Checked/Date: KC 09/25/19

NYSDEC Site # 828120
Carriage Cleaners Site
Brighton, NY

EARTH ENVIRONMENT
Engineering and Geology P.C.

SSDS Locations

Project 3616206118 Figure 1.2

Prepared/Date: BRP 09/18/17
Checked/Date: SLB 09/18/17

NYSDEC
Carriage Cleaners Site
Brighton, NY

EARTH ENVIRONMENT
Engineering and Geology P.C.

Vapor and Soil
Sampling Locations
Project 3616206118 Figure 2.1

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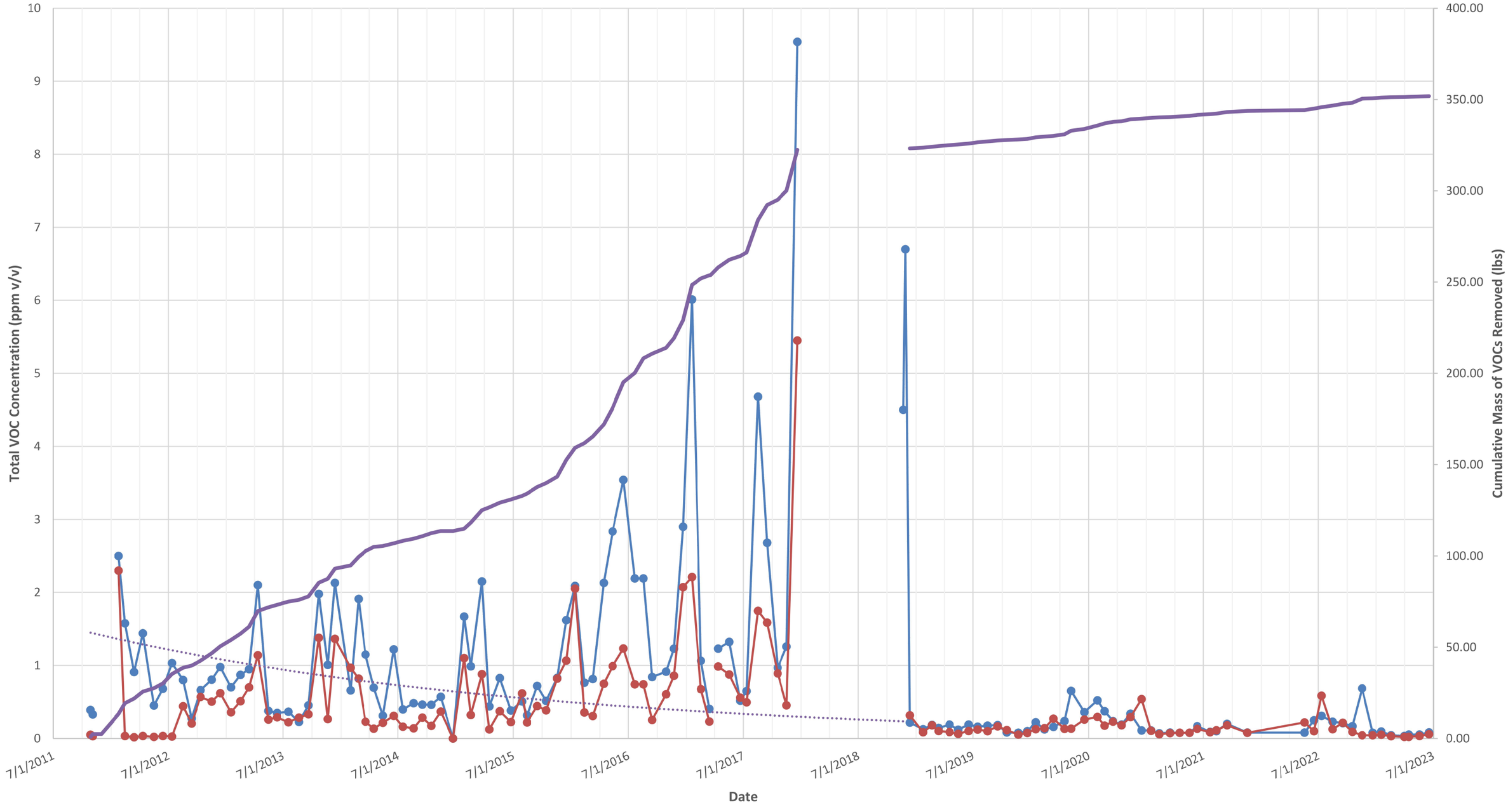
PDF: P:\Projects\nysdec1\Contract D007619\Projects\Carriage Cleaners - SM4.0_Deliverables\4.1_Reports\PRR (2017)\Figures\Figure 3 - Vapor and Soil Locations.pdf 09/18/2017 8:21 AM brian.peters



LEGEND

Influent
Effluent
VOC Mass Removed
Expon. (Trend)

REV.	DATE	STATUS	BY

EEEG PROJECT No. 3616206118

PREPARED/DATE: VMW 08/29/23

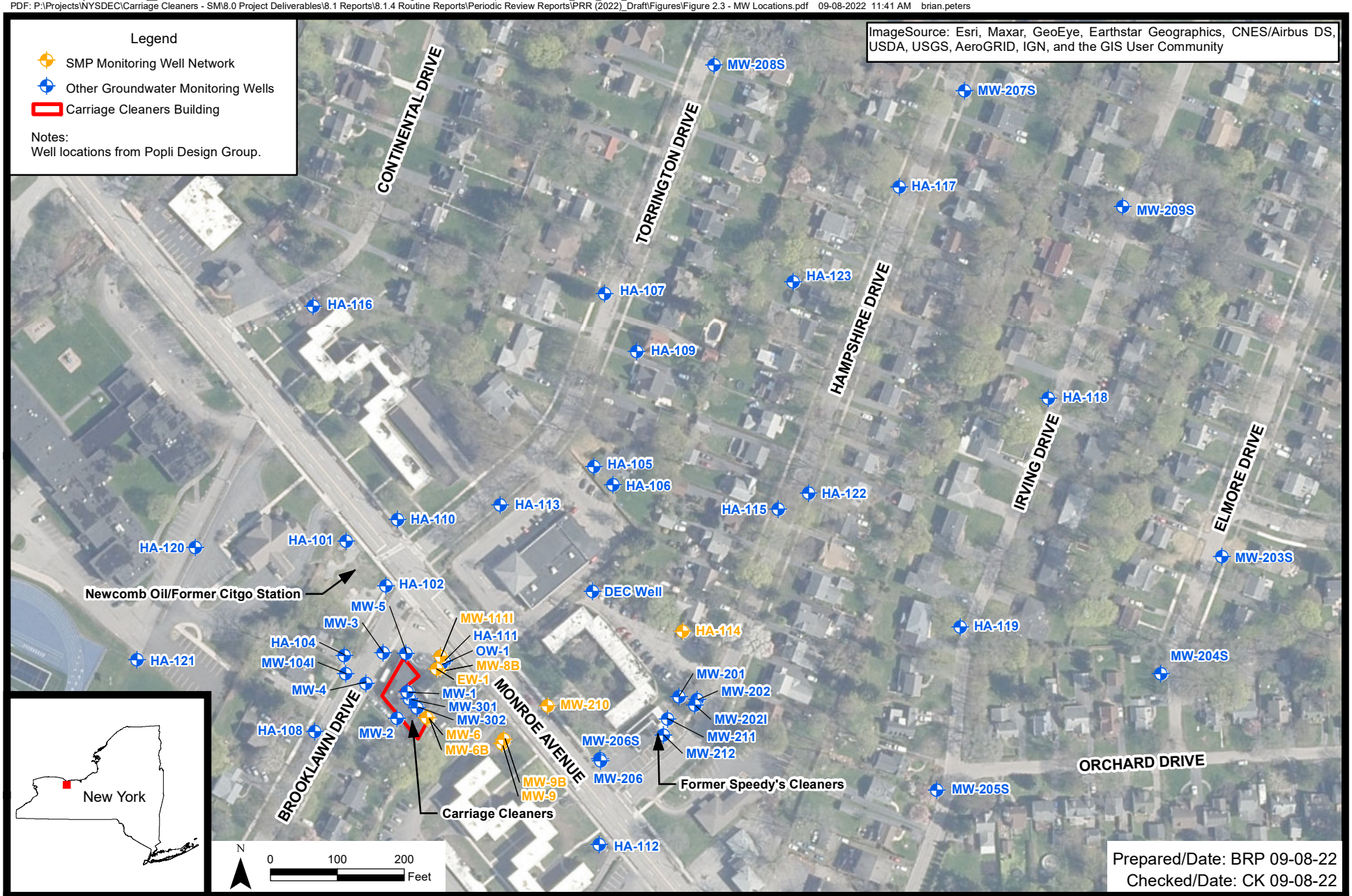
CHECKED/DATE: KJM 08/29/23

EARTH ENVIRONMENT
Engineering and Geology P.C.

FIGURE 2.2
SVE INFLUENT AND EFFLUENT VOC CONCENTRATION
CARRIAGE CLEANERS
NYSDEC SITE NO. 828120
BRIGHTON, NEW YORK

C:\Users\USVW720043\WSP O365\NYSDEC Carriage Cleaners - Internal\Reports\PRRs\2022--2023\CAD\Figure 2.2 - SVE VOC Concentrations.dwg Fri, 16 May 2025 - 1:28pm USVW720043

Document: P:\Projects\NYSDEC__General NYSDEC Information D009809\Database\GIS\Carriage Cleaners GIS\MapDocuments\SMP_MWs_2022_8.5x11LS.mxd
PDF: P:\Projects\NYSDEC\Carriage Cleaners - SM\8.0 Project Deliverables\8.1 Reports\8.1.4 Routine Reports\Periodic Review Reports\PRR (2022)_Draft\Figures\Figure 2.3 - MW Locations.pdf 09-08-2022 11:41 AM brian.peters



Prepared/Date: BRP 09-08-22
Checked/Date: CK 09-08-22

NYSDEC
Carriage Cleaners Site
Brighton, NY

EARTH ENVIRONMENT
Engineering and Geology P.C.

Groundwater Monitoring Well Locations

Project 3616206118 Figure 2.3

Image Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Legend

- Monitoring Well
- Carriage Cleaners Building
- Former Speedy's Cleaners Building
- Groundwater Contour October 2022
- (dashed where inferred)
- Groundwater Flow Direction

N

0 75 150 Feet

MW-202 = Well ID
476.97 = Water level in feet above sea level

Prepared/Date: NES 08-03-23
Checked/Date: CRS 08-03-23

Carriage Cleaners
NYSDEC Site No. 828120
Brighton, New York

EARTH ENVIRONMENT
Engineering and Geology P.C.

Groundwater Contours October 2022

Project 3616206118 Figure 2.4

Image Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

481
480
479
478
477
476
475
474
473
472
471
470
469

EW-1
484.00

MW-111I
480.99

MW-8B
479.75

MW-6
481.08

MW-6B
481.20

MW-9B
480.34

MW-9
479.97

MW-210
480.70

MW-206
480.53

HA-114
477.22

MW-202
477.80

MW-211
478.52

MW-212
478.47

HA-119
474.52

MW-205S
474.87

MW-204S
471.81

MW-203S
469.44

Legend

- Monitoring Well
- Carriage Cleaners Building
- Former Speedy's Cleaners Building
- Groundwater Contour April 2023
- (dashed where inferred)
- Groundwater Flow Direction

N

0 75 150 Feet

MW-202 = Well ID
476.97 = Water level in feet above sea level

Prepared/Date: NES 08-03-23
Checked/Date: CRS 08-03-23

Carriage Cleaners
NYSDEC Site No. 828120
Brighton, New York

EARTH ENVIRONMENT
Engineering and Geology P.C.

Groundwater Contours April 2023

Project 3616206118 Figure 2.5

Image Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

MW-111I
140

MW-8B
380

HA-114
170

MW-210
50

MW-9B
ND

MW-9
4.6

MW-6B
990

MW-6
2000

Legend

- Monitoring Well (Carriage)
- Monitoring Well (Speedy's)

PCE Isoconcentration (µg/L):

- 10
- 100
- 500
- 1000
- 10000

- Carriage Cleaners Building
- Former Speedy's Cleaners Building

N

0 75 150 Feet

Prepared/Date: NES 08-03-23
Checked/Date: CRS 08-03-23

Carriage Cleaners
NYSDEC Site No. 828120
Brighton, New York

EARTH ENVIRONMENT
Engineering and Geology P.C.

Extent of PCE (µg/L) in Groundwater
October 2022
Project 3616206118 Figure 2.6

Image Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

MW-111I
110

MW-8B
200

HA-114
29

MW-210
36

MW-9B
ND

MW-9
1.1

MW-6B
160

MW-6
25000

Legend

- Monitoring Well (Carriage)
- Monitoring Well (Speedy's)

PCE Isoconcentration (µg/L):

- 10
- 100
- 500
- 1000
- 10000

- Carriage Cleaners Building
- Former Speedy's Cleaners Building

N

0 75 150 Feet

Prepared/Date: NES 08-03-23
Checked/Date: CRS 08-03-23

Carriage Cleaners
NYSDEC Site No. 828120
Brighton, New York

EARTH ENVIRONMENT
Engineering and Geology P.C.

Extent of PCE (µg/L) in Groundwater
April 2023
Project 3616206118 Figure 2.7

TABLES

Table 2.1: PCE Concentrations in Subsurface Soil

Boring Location	December 1, 2008		September 1, 2013		March 1, 2017	
	Depth Interval (ft bgs)	PCE Concentration (ppm)	Depth Interval (ft bgs)	PCE Concentration (ppm)	Depth Interval (ft bgs)	PCE Concentration (ppm)
DP-14	6	**290**	4 – 6	**140.01**	4 – 6	0.0061
			6 – 8	**39.01**	6 – 8	0.019
			10 – 11.5	0.85	10 – 11.5	Not Sampled

Notes:

Results in **bold** exceed the SCO of 1.3 ppm.

ft bgs = feet below ground surface

ppm = parts per million

PCE = tetrachloroethene

Prepared by: KJM 08/21/2023
Checked by: VMW 08/25/2023

Table 2.2: Monitoring Well Water Level Measurements

Well IDs	Northing	Easting	TOC Elevation (ft)	October 2022		April 2023		Site
				DTW Level (ft)	Water Level Elevation (ft amsl)	DTW Level (ft)	Water Level Elevation (ft amsl)	
EW-1	1139726.244	1421079.581	489.21	10.50	478.71	5.21	484.00	Carriage
HA-114	1139782.288	1421447.223	485.02	8.95	476.07	7.80	477.22	Carriage
HA-119	1139788.0	1421862.9	481.97	7.61	474.36	7.45	474.52	Former Speedy's
MW-111I	1139745.197	1421085.641	489.17	11.04	478.13	8.18	480.99	Carriage
MW-6	1139652.675	1421066.565	488.26	9.10	479.16	7.18	481.08	Carriage
MW-6B	1139653.369	1421065.272	488.26	9.35	478.91	7.06	481.20	Carriage
MW-8B	1139726.966	1421085.226	487.66	9.79	477.87	7.91	479.75	Carriage
MW-9	1139614.688	1421177.678	486.11	8.51	477.60	6.14	479.97	Carriage
MW-9B	1139620.959	1421180.713	485.65	7.91	477.74	5.31	480.34	Carriage
MW-202	1139675.55	1421474.94	484.89	7.92	476.97	7.09	477.80	Former Speedy's
MW-203S	1139893.9	1422253.7	478.51	9.42	469.09	9.07	469.44	Former Speedy's
MW-204S	1139719.2	1422162.6	478.86	7.55	471.31	7.05	471.81	Former Speedy's
MW-205S	1139544.9	1421827.3	482.05	7.45	474.60	7.18	474.87	Former Speedy's
MW-206	1139588.95	1421327.16	486.74	8.24	478.50	6.21	480.53	Former Speedy's
MW-210	1139671.22	1421245.63	486.78	7.95	478.83	6.08	480.70	Carriage
MW-211	1139653.59	1421434.22	485.96	8.21	477.75	7.44	478.52	Former Speedy's
MW-212	1139621.36	1421428.00	485.44	7.62	477.82	6.97	478.47	Former Speedy's

Notes:

Northern/Eastern/Elevation Reference: Horizontal Coordinates reference to the New York State Plane Coordinate System, West Zone NAD 83/96. Vertical Datum is NAVD88.

ft = feet
ft amsl = feet above mean sea level
DTW = depth to water
TOC = top of casing

Prepared by: AJ 07/17/2023
Checked by: VMW 08/25/2023

Table 2.3: Groundwater Monitoring Well PCE Concentrations

	Monitoring Wells							
Sample Date	**MW-111I**	**HA-114**	**MW-210**	**MW-8B**	**MW-9**	**MW-9B**	**MW-6B**	**MW-6**
1/1/2009	240	-	230	-	-	-	-	
12/1/2012	-	31	-	-	-	-	-	
2/14/2013	-	-	4.3	-	-	-	-	-
10/10/2013	-	-	5.1	-	-	-	-	-
4/4/2014	-	-	2.6	-	-	-	-	-
12/17/2014	83	13	3.5	-	-	-	-	-
5/26/2015	96	55	1.8	620	-	ND	-	-
8/25/2015	150	76	2.8	810	5.5	ND	-	-
4/25/2016	200	6.3	1.1	450	1.9	ND	-	-
11/9/2016	290	19	160	380	3.9	46	-	-
5/10/2017	190	2.3	7.5	140	1.7	0.73	-	-
11/1/2017 [a]	92	10	5.6	490	5.1	ND	-	-
5/2/2018 [b]	170	42	2.6	480	0.94	ND	-	-
11/14/2018	44	60	3.7	380	ND	6.5	-	-
1/23/2019	-	-	-	-	-	-	335	-
2/6/2019	-	-	-	-	-	-	1400	-
2/20/2019	-	-	-	-	-	-	130	-
3/14/2019	-	-	-	-	-	-	78.5	-
3/21/2019	-	-	-	-	-	-	26	-
4/3/2019	-	-	-	-	-	-	19.5	-
4/17/2019	-	-	-	-	-	-	12	-
5/1/2019	49	30	1.2	290	2.2	-	5.8	31000
5/15/2019	-	-	-	200	-	-	-	-
6/12/2019	-	-	-	300	-	-	-	-
6/25/2019	-	-	-	290	-	-	-	-
7/1/2019	-	-	-	380 F1	-	-	-	-
10/16/2019	130 E	140 E	8	620 E	1.2	ND	1000 E	5500
3/30/2020 [c]	88	30	1.7	380	2.3	ND	5.3	32000
11/11/2020	5.7	130	8.7	540	3.2	ND	1500	-
3/20/2021 [d]	2.6	41	16	320	5.7	ND	410	27000
4/12/22 and 4/13/22	58	11	14	220	1.9	ND	3.2	19000
10/24/2022 [d]	140	170	50	380	4.6	ND	990	2000
04/10/2023 [d]	110	29	36	200	1.1	ND	160	25000

Notes:

RemOx® SR permanganate cylinders were installed in MW-6 and MW-6B during second quarter of 2014 and removed December 2018 and were not sampled during this period

Groundwater extraction pilot testing conducted at MW-6B and MW-8B from December 2018 to July 1019

– not sampled

ND = non-detect

(a) Sample for well HA-114 was collected on 11/2/2017

(b) Samples for wells HA-114 and MW-210 were collected on 5/3/2018

(c) Samples for wells MW-9, MW-9B, MW-210, and HA-114 were collected on 3/31/2020

(d) Samples were taken throughout the week of the date indicated.

F1 = MS and/or MSD Recovery is outside acceptance limits

E = Result exceeded calibration range

H = Sample was prepped or analyzed beyond the specified holding time

PCE = tetrachloroethene

Prepared by: KJM 08/21/2023
Checked by: VMW 08/25/2023

APPENDIX A

MONROE COUNTY SEWER USE PERMIT

CK # 496475

COUNTY OF MONROE
SEWER USE PERMIT RENEWAL

Firm Name: NYS DEC - Carriage Cleaners
2101 MonroeAvenue

Mailing Addr: 625 Broadway, 12th Floor
Albany, NY 12233-7017

Business Type: Pretreatment

Permit Number: IWC-951
Fee: $ 75.00
Expires: October 31, 2022

W/C Expire: 7/1/2020
District No: 8574

Has there been any revision to the plant sewer system or any change in industrial wastes discharged to the public sewer in the past twelve months

Yes: __ No: ✓ If yes, please explain in a separate letter.

Approx. monthly treated groundwater discharged 8/18 → 8/19 - 29,000 gallons/month

Average monthly consumption for the past twelve (12) months:

Water Account No.(s) _____ (cu ft/gal) N/A

In consideration of the granting of this renewal permit the undersigned agrees to comply with all the requirements in the Initial Permit as listed under II.

Name of person to be contacted for inspection & sampling purposes:

Type or Print: Thomas Palmer (GES) Phone No: (716) 866 3590

YOUR PERMIT MUST BE SIGNED AS FOLLOWS:

1 For a corporation, by a responsible corporate officer A corporate officer means
(a) A president, secretary, treasurer or vice - president of the corporation in charge of a principal business function, or any other person who performs similar policy - or decision - making functions for the corporation or
(b) The manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second - quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures

2. For a partnership or sole proprietorship by a general partner or the proprietor, respectively, or

3 By a duly authorized representative of the individual designated in items (1) or (2) above if

(a) The authorization is made in writing by the individual described in items (1) or (2).
(b) The authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the Industrial Discharge originates such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company; (A duly authorized representative may thus be either a named individual or any individual occupying named position), and
(c) The written authorization is submitted to this Department

Print or Type: David J. Chiusano Phone No (518) 402-9813

Signature: _____ Date 09/24/19

Title: Env Engr/PM (NYSDEC - DER)

Renewal Approved by: _____ Issued this 3 day of Oct 20 19

Michael J. Garland, P.E.
Director of Environmental Services-PureWaters
Monroe County

COUNTY OF MONROE
SEWER USE PERMIT ENCLOSURE

NYS DEC- Carriage Cleaners
625 Broadway, 12th Floor
Albany, NY 12233-7017

PERMIT NUMBER: 951
DISTRICT NUMBER: 8574

TYPE OF BUSINESS: Groundwater Remediation
LOCATION: 2101 Monroe Ave
Brighton, NY

SAMPLE POINT: IWC-951.1 – Sample Port on Treatment System

REQUIRED MONITORING & EFFLUENT LIMITS

SAMPLE POINT: IWC-951.1 – Sample Port on Treatment System

SELF-MONITORING FREQUENCY: **MONTHLY**

SAMPLING PROTOCOL: Sampling and analysis shall be performed in accordance with the techniques prescribed in 40CFR part 136 and amendments thereto. A grab sample, collected from the above noted sample point shall be analyzed for the following:

Parameter	Sewer Use Limit	Action Level
Purgeable Aromatics		2.13 mg/L*
Purgeable Halocarbons		2.13 mg/L*
Methyl tert-butyl ether	(monitor only)	

*The summation of the purgeable aromatics and purgeable halocarbons with detection levels greater than 10µg/l shall not exceed 2.13 mg/l.

SPECIAL CONDITIONS:

1. All groundwater must be treated regardless of the influent concentrations.
2. Monthly flow summaries shall be submitted for billing purposes.
3. If there is no discharge for a given month, then a letter must be submitted stating so.

TERMS AND CONDITIONS

GENERAL REQUIRMENTS:

A. The permittee agrees to accept and abide by all provisions of the Sewer Use Law of Monroe County (MCSUL) and of all pertinent rules or regulations now in force or shall be adopted in the future.

B. In addition to the parameters/limits outlined, the total facility discharge shall meet all other concentration values listed within the MCSUL and as described in Article III, Section 3.3(d) of the Law.

C. Included in Article II, Section 2.1 of the MCSUL, is the definition of "Normal Sewage". "Normal Sewage" may be discharged to the sewer system in excess of the concentrations outlined in the definition, however, the facility will be subject to the imposition of a sewer surcharge and possible self-monitoring requirements as a result. Surcharging procedures are outlined in Article X of the MCSUL.

D. Regulatory sampling for analytes not specified under "required monitoring" shall be conducted by Monroe County at a minimum frequency of once every three (3) years.

E. This permit is not assignable or transferable. The permit is issued to a specific user and location.

F. Per Article IX, section 9.9 of the MCSUL, a violation by the permittee of the permit conditions may be cause for revocation or suspension of the permit after a Hearing by the Administrative Board, or if the violation is found to be within the emergency powers of the Director under Section 9.6. The revocation is immediate upon receipt of notice to the Industrial User. If the revocation or suspension is issued under Section 9.6, a Hearing shall be held as soon as possible.

G. As provided under Article VI, Section 6.1 of the MCSUL, the Director and/or his duly authorized representatives shall gain entry on to private lands by permission or duly issued warrant for the purpose of inspection, observation, measurement sampling and testing in accordance with the provisions of this law and its implementing Rules and Regulations. The Director or his representatives shall not have authority to inquire into any processes used in any industrial operation beyond that information having a direct bearing on the kind and source of discharge to the sewers or the on-site facilities for waste treatment. While performing the necessary work on private lands, referred to above, the Director or his duly authorized representative shall observe all safety rules applicable to the premises as established by the owner and/or occupant.

H. All required monitoring shall be analyzed by a New York State Department of Health certified laboratory. All sampling and analysis must be performed in accordance with Title 40 Code of Federal Regulations Part 136.

I. The pH range for this permit is 5.0 – 12.0 su. This range is specifically permitted by the Director as allowed under Article III, Section 3.3(b) of the MCSUL. pH must be analyzed within 15 minutes of the time of collection as specified in 40 CFR, part 136.

J. Discharges of wax, fats, oil or grease shall not exceed 100 mg/l as imposed by the Director under Article III, Section 3.3 of the MCSUL.

SURCHARGE CONCENTRATIONS:

Concentration and/or characteristics of normal sewage:
"Normal Sewage" shall mean sewage, industrial wastes or other wastes, which when analyzed, show concentration values with the following characteristics based on daily maximum limits:

a. B. O. D.	300 mg/l
b. Total Suspended Solids	300 mg/l
c. Total Phosphorus, as P	10 mg/l

Annual average concentrations above normal sewage are subject to surcharge as defined in Article X, section 10.7 of the MCSUL.

DISCHARGE LIMITATIONS (SEWER USE LIMITS)

Permissible concentrations of toxic substances and/or substances the Department wishes to control:
The concentration in sewage of any of the following toxic substances and/or substances the Department wishes to control shall not exceed the concentration limits specified when discharged into the County Sewer System; metal pollutants are expressed as <u>total</u> metals in mg/l (ppm): the following pollutant limits are based on daily maximum values:

a. Antimony (Sb)	1.0 mg/l
b. Arsenic (As)	0.5 mg/l
c. Barium (Ba)	2.0 mg/l
d. Beryllium (Be)	5.0 mg/l
e. Cadmium (Cd)	1.0 mg/l
f. Chromium (Cr)	3.0 mg/l
g. Copper (Cu)	3.0 mg/l
h. Cyanide (CN)	1.0 mg/l
i. Iron (Fe)	5.0 mg/l
j. Lead (Pb)	1.0 mg/l
k. Manganese (Mn)	5.0 mg/l
l. Mercury (Hg)	0.05 mg/l
m. Nickel (Ni)	3.0 mg/l
n. Selenium (Se)	2.0 mg/l
o. Silver (Ag)	2.0 mg/l
p. Thallium (Tl)	1.0 mg/l
q. Zinc (Zn)	5.0 mg/l

REPORTING REQUIREMENTS:

A. Per the requirements of 40 CFR, Part 403.12, Significant Industrial Users must submit Periodic Reports on Continued Compliance to the Control Authority on a biannual (2/yr) basis. Deadline dates of submission for these reports will be August 15 and February 15, respectively.

B. Discharge monitoring reports shall be submitted to the Control Authority upon receipt from the permittee's testing laboratory. Reports submitted from industrial users identified as Significant Industrial Users (SIU) must be accompanied by a certification statement as required by 40 CFR part 403 and the MCSUL, Article VI, section 6.12.

C. Any Industrial User subject to the reporting requirements of the General Pretreatment Regulations shall maintain records of all information resulting from any monitoring activities required by 40 CFR, part 403.12 for a minimum of three (3) years. These records shall be available for inspection and copying by the Control Authority. This period of retention shall be extended during the course

of any unresolved litigation regarding the discharge of pollutants by the Industrial User or the operation of the POTW Pretreatment Program or when requested by the Director or the Regional Administrator.

D. Pursuant to Article VI, Section 6.10 (4) of the MCSUL and the reporting requirements of the Code of Federal Regulations 40 CFR part 403.12, if a permitted user elects to perform monitoring at compliance monitoring locations more often than required and uses approved laboratory procedures, the results of all such additional monitoring and any additional flow measurements shall be reported to the Director on a timely basis and shall be included in reports as outlined in the MCSUL section 6.10(1)-(4).

NOTIFICATION REQUIREMENTS:

A. Pursuant to Article VI, Section 6.10(5), the permittee shall notify the Department within 24 hours of becoming aware that discharge monitoring is in violation of any permit limit. This notification shall be directed to the Industrial Waste Section at 585-753-7600 Option 4. The User shall also repeat sampling and analysis for the analyte in non-compliance and submit the results of the repeat analysis to Monroe County within 30 days after becoming aware of the violation.

B. Notify the Director in writing when considering a revision to the plant sewer system or any change in industrial waste discharges to the public sewers. The later encompasses either an increase or decrease in average daily volume or strength of waste or new wastes.

C. Notify the Director immediately of any accident, negligence, breakdown of pretreatment equipment or other occurrence that occasions discharge to the public sewer of any waste or process waters not covered by this permit.

SLUG CONTROL

An Industrial User shall be required to report any/all slug discharges to the Monroe County sewer system by calling 585-753-7600 option 4. For the purpose of this permit enclosure, a slug discharge shall be identified as any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge. Following a review process, the Control Authority (Monroe County) shall determine the applicability of a facility slug control plan. If the Control Authority decides that a Slug Discharge Control Plan (SDCP) is needed, the plan shall contain, at a minimum, the following elements:

1. Description of discharge practices, including non-routine batch discharges.
2. Description of stored chemicals.
3. Procedures for immediately notifying the Control Authority of slug discharges, including any discharge that would violate a prohibition under 40 CFR 403.5 (b), with procedures for follow up written notification within five (5) days.
4. If necessary, procedures to prevent adverse impact from accidental spills, including, but not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents) and/or measures and equipment for emergency purposes.

SNC DEFINITION:

In accordance with 40 CFR 403.8 (f) (vii), an Industrial User is in significant noncompliance (SNC) if its violations meet one or more of the following criteria:

A. Chronic violations of wastewater discharge limits – defined as those which 66% or more of all the measurements taken during a six-month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter (ref. Article IX, section 9.19 – MCSUL). This criteria does NOT apply to the following Monroe County surchargeable parameters: Biochemical Oxygen Demand, Total Suspended Solids, Chlorine Demand and Total Phosphorus.

B. Technical review criteria (TRC) violations – defined as those in which 33% or more of all the measurements for each pollutant parameter taken during a six month period equal or exceed the product of the daily maximum limit or the average limit times the applicable TRC (ref. Article IX, section 9.19 – MCSUL). This criteria does NOT apply to the following Monroe County surchargeable parameters: Biochemical Oxygen Demand, Total Suspended Solids, Chlorine Demand and Total Phosphorus.

C. Any other violation of a pretreatment effluent limit (daily maximum or longer-term average) that the Control Authority determines has caused, alone or in combination with other discharges, interference or pass-through (including endangering the health or POTW personnel or the general public).

D. Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or the environment or has resulted in the POTW's exercise of its emergency authority under paragraph (t)(1)(vi)(8) of 40 CFR part 403 to prevent such a discharge.

E. Failure to meet, within 90 days after the scheduled date, a compliance schedule milestone contained in a local control mechanism or enforcement order, for starting construction, completing construction or attaining final compliance.

F. Failure to provide, within 30 days after the due date, required reports such as BMRs, 90 day compliance reports, periodic reports on continued compliance.

G. Failure to accurately report noncompliance.

H. Any other violation or group of violations that the Control Authority determines will adversely affect the operation and implementation of the local Pretreatment Program.

PENALTIES

Should the facility be considered in Significant Non-Compliance (SNC), based on the above mentioned criteria, the minimum enforcement response by Monroe County will be the publication of the company name in the Gannett Rochester newspaper. The company will be published as an Industrial User in Significant Non-Compliance (SNC). Fines and criminal penalties may follow this publication (ref. Article IX – MCSUL).

Nothing in this permit shall be construed to relieve the permittees from civil/criminal penalties for noncompliance under Article IX, Section 9.7(a)(5) MCSUL. Article IX provides that any person who violates a permit condition is subject to a civil penalty not to exceed $25,000 for any one case and an additional penalty not to exceed $25,000 for each day of continued violation.

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 09/12/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Insurance Solutions & Services, Inc. 619 Amboy Avenue Edison NJ 08837	**CONTACT NAME:** Jane Begreen **PHONE (A/C, No, Ext):** (732) 738-6080 **FAX (A/C, No):** (732) 738-6081 **E-MAIL ADDRESS:** jbegreen@issi-nj.com
INSURED Groundwater & Environmental Services, Inc. 415 Lawrence Bell Blvd, Suite Williamsville NY 14221	**INSURER(S) AFFORDING COVERAGE** — **NAIC #** **INSURER A :** Great Divide Insurance Company — 25224 **INSURER B :** **INSURER C :** **INSURER D :** **INSURER E :** **INSURER F :**

COVERAGES **CERTIFICATE NUMBER:** CL1961800740 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$
	☐ CLAIMS-MADE ☐ OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
							MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$
	☐ POLICY ☐ PRO-JECT ☐ LOC						PRODUCTS - COMP/OP AGG	$
	☐ OTHER:						Employee Benefits	$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	☐ ANY AUTO						BODILY INJURY (Per person)	$
	☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	☐ HIRED AUTOS ONLY ☐ NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
							Medical payments	$
	☐ UMBRELLA LIAB ☐ OCCUR						EACH OCCURRENCE	$
	☐ EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE	$
	☐ DED ☐ RETENTION $ 0							$
A	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☐ N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		WCA2022992	07/01/2019	07/01/2020	☒ PER STATUTE ☐ OTH-ER	
							E.L. EACH ACCIDENT	$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
						0		

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

Monroe County Department of Environmental Services
145 Paul Road, Building 1
Rochester NY 14624

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

STATE OF NEW YORK
WORKERS' COMPENSATION BOARD

CERTIFICATE OF NYS WORKERS' COMPENSATION INSURANCE COVERAGE

1a. Legal Name & Address of Insured (Use street address only) Groundwater & Environmental Services, Inc. 5 Technology Place Suite 4 East Syracuse, NY 13057 **NYC TRACKING CODE 601456** **Work Location of Insured** ***(Only required if coverage is specifically limited to certain locations in New York State, i.e., a Wrap-Up Policy)***	**1b. Business Telephone Number of Insured** 800-220-3068 **1c. NYS Unemployment Insurance Employer Registration Number of Insured** 83-51399 **1d. Federal Employer Identification Number of Insured or Social Security Number** 23-2335424
2. Name and Address of the Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder) **Monroe County Department of Environmental Services** **Industrial Waste Section** **145 Paul Road, Bldg.1** **Rochester, NY 14624**	**3a. Name of Insurance Carrier** Great Divide Insurance Company **3b. Policy Number of entity listed in box "1a"** WCA202299212 **3c. Policy effective period** 7/1/2019 to 7/1/2020 **3d. The Proprietor, Partners or Executive Officers are** ☒ **included.** **(Only check box if all partners/officers included)** ☐ **all excluded or certain partners/officers excluded.**

This certifies that the insurance carrier indicated above in box "3" insures the business referenced above in box "1a" for workers' compensation under the New York State Workers' Compensation Law. **(To use this form, New York (NY) must be listed under Item 3A on the INFORMATION PAGE of the workers' compensation insurance policy).** The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed above as the certificate holder in box "2".

The Insurance Carrier will also notify the above certificate holder within 10 days IF a policy is canceled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from the coverage indicated on this Certificate. (These notices may be sent by regular mail.) ***Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in box "3c", whichever is earlier.***

Please Note: Upon the cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Workers' Compensation Law.

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form.

Approved by: Insurance Solutions & Services, Inc.
(Print name of authorized representative or licensed agent of insurance carrier)

Approved by: Frank G Jacobs 9/12/2019
(Signature) (Date)

Title: Frank G. Jacobs, President

Telephone Number of authorized representative or licensed agent of insurance carrier: (732) 738-6080

Please Note: *Only insurance carriers and their licensed agents are authorized to issue Form C-105.2. Insurance brokers are* ***NOT*** *authorized to issue it.*

NEW YORK STATE | Workers' Compensation Board

CERTIFICATE OF INSURANCE COVERAGE

DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

PART 1. To be completed by Disability and Paid Family Leave Benefits Carrier or Licensed Insurance Agent of that Carrier

1a. Legal Name & Address of Insured (use street address only)

GROUNDWATER & ENVIRONMENTAL SERVICES INC.
5 TECHNOLOGY PLACE SUITE 4
EAST SYRACUSE, NY 13057

Work Location of Insured *(Only required if coverage is specifically limited to certain locations in New York State, i.e., Wrap-Up Policy)*

1b. Business Telephone Number of Insured

800-220-3068

1c. Federal Employer Identification Number of Insured or Social Security Number

232335424

2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)

Monroe County Department of Environmental Services
Industrial Waste Section
145 Paul Road, Bldg.1
Rochester, NY 14624

3a Name of Insurance Carrier

HARTFORD LIFE AND ACCIDENT

3b Policy Number of Entity Listed in Box "1a"

LNY324265

3c Policy effective period

01-01-2019 to 12-31-2019

4. Policy provides the following benefits:

- [x] A. Both disability and paid family leave benefits.
- [ ] B. Disability benefits only.
- [ ] C. Paid family leave benefits only.

5. Policy covers:

- [x] A. All of the employer's employees eligible under the NYS Disability and Paid Family Leave Benefits Law.
- [ ] B. Only the following class or classes of employer's employees:

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has NYS Disability and/or Paid Family Leave Benefits insurance coverage as described above.

Date Signed 01-03-2019 *Elizabeth Tello*

(Signature of insurance carrier's authorized representative or NYS Licensed Insurance Agent of that insurance carrier)

Telephone Number (212) 553-8074 **Name and Title**: Elizabeth Tello – Assistant Director, Statutory Services

IMPORTANT: If Boxes 4A and 5A are checked, and this form is signed by the insurance carrier's authorized representative or NYS Licensed Insurance Agent of that carrier, this certificate is COMPLETE. Mail it directly to the certificate holder.

If Box 4B, 4C or 5B is checked, this certificate is NOT COMPLETE for purposes of Section 220, Subd. 8 of the NYS Disability and Paid Family Leave Benefits Law. It must be mailed for completion to the Workers' Compensation Board, Plans Acceptance Unit, PO Box 5200, Binghamton, NY 13902-5200.

PART 2. To be completed by the NYS Workers' Compensation Board (Only if Box 4C or 5B of Part 1 has been checked)

State of New York
Workers' Compensation Board

According to information maintained by the NYS Workers' Compensation Board, the above-named employer has complied with the NYS Disability and Paid Family Leave Benefits Law with respect to all of his/her employees.

Date Signed **By**

(Signature of Authorized NYS Workers' Compensation Board Employee)

Telephone Number **Name and Title**

Please Note: Only insurance carriers licensed to write NYS disability and paid family leave benefits insurance policies and NYS licensed insurance agents of those insurance carriers are authorized to issue Form DB-120.1. Insurance brokers are NOT authorized to issue this form.

APPENDIX B

SEWER LINE DISCONNECTION SUMMARY LETTER

Groundwater & Environmental Services, Inc.

495 Aero Drive, Suite 3
Cheektowaga, NY 14225

T. 800.287.7857

November 21, 2022

Charles Gregory
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway - 12th Floor
Albany, New York 12233-7017

Re: Sewer Line Disconnection Summary
Carriage Cleaners
2101 Monroe Avenue
Brighton, New York 14618
NYSDEC Site #828120
Offsite Property: 2113 Monroe Avenue, Brighton, New York

Dear Mr. Gregory:

Please find herein the summary of the sewer disconnection activities, with regard to Monroe County Sewer Use Permit #951 (the permit), conducted by Groundwater & Environmental Services, Inc. (GES). The work was completed on behalf of the New York State Department of Environmental Conservation (NYSDEC) at the above referenced property (hereto referenced as "the Site") in Brighton, New York.

On October 5, 2022, NYSDEC determined that the permit associated with the groundwater extraction treatment (GWET) system at the Site would not be renewed due to the GWET system being inactive. As such, it was required by Monroe County that the discharge line to the sewer be disconnected. On October 7, 2022, following a meeting with NYSDEC and the engineers at Wood, PLC (Wood), GES communicated the disconnection plans with a Monroe County Department of Environmental Services (MCDES) representative to propose the disconnection of the sewer discharge line by removing the plumbing from the air stripper to the furnco where the connection was made to the sewer pipe. Following plumbing and furnco removal, it was proposed to glue a PVC cap to close the tie in to the sewer. The MCDES representative agreed to this plan on October 11, 2022. On October 17, 2022, GES personnel performed the sewer disconnect activities in accordance with the activities as proposed above, and MCDES was notified that the disconnection activities were complete.

The permit expired on October 31, 2022. An MCDES representative met GES at the Site to inspect and verify the disconnection from the sewer on November 17, 2022. MCDES personnel had no concerns regarding the disconnection during this meeting.

Photographs of the line before and after the disconnection as well as the MCDES Permit Closure letter, dated November 18, 2022, are attached.

If you have any questions or concerns, please contact GES at 1-800-287-7857.

Sincerely,

GROUNDWATER & ENVIRONMENTAL SERVICES, INC.

Nicole Lindner	Thomas Palmer
Case Manager	Sr. Project Manager

Attachments

Sewer Line Disconnection Summary Photograph Documentation

MCDES Permit Closeout for IWC-951

Attachments

View of sewer line following disconnect of furnco from system and sewer piping.

View of capped sewer line.

Department of Environmental Services

Monroe County, New York

Adam J. Bello
County Executive

Michael J. Garland, P.E.
Director

11/18/2022

Charles Gregory
NYS DEC
625 Broadway, 12th Floor
Albany, NY 12233-7017

Re: Permit Closeout for permit IWC-951

Dear Mr. Gregory:

The groundwater remediation system located at 2101 Monroe Avenue, Rochester, NY 14618 (Carriage Cleaners) discharged treated groundwater to the sanitary sewer under Monroe County Sewer Use Permit #951, which expired on October 31, 2022.

The Monroe County Office of Industrial Waste was notified by GES Inc. in 2020 that the groundwater treatment system was taken offline. There has been no discharge from the system since September of 2020.

Monroe County's Office of Industrial Waste performed a close-out inspection of the site on November 17, 2022. During the inspection it was verified the groundwater treatment system has been disconnected from the sanitary sewer. The treatment system is still present, but it has been disconnected from the discharge point by removing a length of pipe and gluing a PVC cap on the discharge pipe.

If the system is going to be restarted a new sewer use permit will be required prior to re-connecting the system to the sanitary sewer. Please contact this office a minimum of 30 days prior to reconnecting to allow time to process the permit.

Sewer use permit IWC-951 was not renewed and it expired on October 31, 2022. No further action is required regarding the closure of this permit. Please notify this office if the groundwater treatment system is removed from the site.

If you have any questions or concerns, please call me at (585) 753-5441.

Sincerely,

Donald Wolf
Industrial Waste Engineer

Cc: Nicole Lindner, GES Inc.
xc: file

APPENDIX C

LABORATORY VALDATION REPORTS

CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

1.0 INTRODUCTION

Groundwater samples were collected in October 2022 at Carriage Cleaners in Brighton, New York, and shipped to Con-test Analytical Laboratory located in East Longmeadow, Massachusetts, for analysis. Samples included in this review were analyzed by the following United States Environmental Protection Agency (USEPA) method:

- Volatile Organic Compounds (VOCs) by Method 8260D

Results were reported in the following sample delivery groups (SDGs):
- 22J3631
- 22J3896
- 22J4221

Sample event information included in this chemistry review is presented in the following Tables:
- Table 1 – Summary of Samples and Analytical Methods
- Table 2 – Summary of Analytical Results
- Table 3 – Summary of Qualification Actions.

A summary of table notes applicable to Tables 1, 2, and 3 is presented just before Table 1.

Laboratory deliverables included:
- Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2005).

The Category A review included the following evaluations. Data review checklists are provided as Attachment A.

- Lab Report Narrative Review
- Data Package Completeness and COC records (Table 1 verification)
- Sample Preservation and Holding Times
- QC Blanks
- Laboratory Control Samples (LCS)
- Matrix Spike and Matrix Spike Duplicate (MS/MSD) (as applicable)
- Field Duplicates (as applicable)
- Surrogates (as applicable)
- Reporting Limits
- Electronic Data Qualification and Verification

CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

1.0 INTRODUCTION

Groundwater samples were collected in April 2023 at Carriage Cleaners in Brighton, New York, and shipped to Con-test Analytical Laboratory located in East Longmeadow, Massachusetts, for analysis. Samples included in this review were analyzed by the following United States Environmental Protection Agency (USEPA) method:

- Volatile Organic Compounds (VOCs) by Method 8260D

Results were reported in the following sample delivery group (SDG):

- 23D1781

Sample event information included in this chemistry review is presented in the following Tables:

- Table 1 – Summary of Samples and Analytical Methods
- Table 2 – Summary of Analytical Results
- Table 3 – Summary of Qualification Actions.

A summary of table notes applicable to Tables 1, 2, and 3 is presented just before Table 1.

Laboratory deliverables included:

- Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2005).

The Category A review included the following evaluations. Data review checklists are provided as Attachment A.

- Lab Report Narrative Review
- Data Package Completeness and COC records (Table 1 verification)
- Sample Preservation and Holding Times
- QC Blanks
- Laboratory Control Samples (LCS)
- Matrix Spike and Matrix Spike Duplicate (MS/MSD) (as applicable)
- Field Duplicates (as applicable)
- Surrogates (as applicable)
- Reporting Limits
- Electronic Data Qualification and Verification

The following laboratory data qualifiers or data review qualifiers are used in the final data presentation:

U = target analyte is not detected at or above the reporting limit

J = concentration is estimated
UJ = target analyte is not detected, value is estimated
J- = concentration is estimated, potentially biased low

Results are interpreted to be usable as reported by the laboratory or as qualified in the following section.

2.0 POTENTIAL DATA LIMITATIONS

Based on the Category A Review the data meet the data quality objectives; however, the following potential limitations were identified:

VOCs by 8260D

Detections of methylene chloride in samples 828120MW210015, DUP 828120, and 828120MW09008 were qualified non-detect (U) at the reporting limit based on contamination in the associated trip blank. Qualified results are included in Table 3 with reason code BL2.

Reporting limits for naphthalene in all field samples were qualified estimated (UJ) based on low recovery in the associated LCS/LCSD. Qualified results are included in Table 3 with reason code LCSL.

Results for a subset of parameters in sample 828120MW210015 and associated field duplicate DUP 828120 were qualified estimated (UJ) or estimated with potential low bias (J-) based on low recoveries in the associated MS/MSD. The MS/MSD RPDs for naphthalene and acrylonitrile exceeded project limits. Qualified results are included in Table 3 with reason codes MSL and MSRPD.

Reporting limits for a subset of parameters in sample 828120MW9B017 and associated field duplicate DUP 828420 were qualified estimated (UJ) based on low recoveries in the associated MS/MSD. The MS/MSD RPDs for 1,2-dibromo-3-chloropropane and t-butyl alcohol exceeded project limits. Qualified results are included in Table 3 with reason codes MSL and MSRPD.

3.0 ADDITIONAL QC EXCEEDANCES AND OBSERVATIONS

Reporting limits in a subset of samples are elevated due to dilutions as indicated in Table 2.

Reference:

NYSDEC, 2005. "Analytical Services Protocols"; July 2005.

NYSDEC, 2010. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; DER-10; Division of Environmental Remediation; May 2010.

USEPA, 2014. "Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B and 8260C"; HW-24, Revision 4; USEPA Region II Hazardous Waste Support Section; September 2014.

Data Validator: Amber Jones

Date: May 15, 2023

Reviewed by: Julie Ricardi

Date: May 22, 2023

Standard Table Notes:

Sample Type (QC Code)

FS – field sample

FD – field duplicate

TB – trip blank

EB – equipment blank

FB – field blank

Matrix

GW – ground water

BW – blank water

TW – tap water

SV – soil vapor

SED - sediment

Units

mg/L – milligrams per liter

ng/L – nanograms per liter

µg/L – micrograms per liter

mg/kg – milligrams per kilogram

µg/kg – micrograms per kilogram

µg/m^3 – micrograms per cubic meter

Qualifiers

U – not detected above quantitation limit

J – estimated quantity

J+ - estimated quantity, biased high

J- - estimated quantity, biased low

R – data unusable

Fraction

T – total

D – dissolved

N – normal

Qualification Reason Codes

BL1 – method blank qualifier

BL2 – field or trip blank qualifier

CCV – continuing calibration verification recovery outside limits

CCV%D – continuing calibration verification percent difference exceeds goal

CCVRRF – continuing calibration relative response factor low

CI – chromatographic interference present

DCPD – dual column percent difference exceeds limit

E – result exceeds calibration range

FD – field duplicate precision goal exceeded

FP – false positive interference

HT – holding time for prep or analysis exceeded

HTG – holding time for prep or analysis grossly exceeded

ICV – initial calibration verification recovery outside limit

ICVRRF – initial calibration verification relative response factor low

ICVRSD – initial calibration verification % relative standard deviation exceeds goal

ISH – internal standard response greater than limit

ISL – internal standard response less than limit

LCSH – laboratory control sample recovery high

LCSL – laboratory control sample recovery low

LCSRPD – laboratory control sample/duplicate relative % difference precision goal exceeded

LD – lab duplicate precision goal exceeded

MSH – matrix spike and/or MS duplicate recovery high

MSL – matrix spike and/or MS duplicate recovery low

MSRPD – matrix spike/duplicate relative % difference precision goal exceeded

N – analyte identification is not certain

PEM – performance evaluation mixture exceeds limit

PM – sample percent moisture exceeds EPA guideline

SD – serial dilution result exceeds percent difference limit

SP – sample preservation/collection does not meet method requirement

SSH – surrogate recovery high

SSL – surrogate recovery low

TD – dissolved concentration exceeds total

TABLE 1 - SUMMARY OF SAMPLES AND ANALYTICAL METHODS
CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

					Analysis Method	SW8260	SW6010	SW6010	E300	RSK 175	E310.1	SM4500S-F	A5310B
					Method Class	VOCs	Metals	Metals	Anions	Diss Gases	Alkalinity	Sulfide	TOC
					Fraction	N	D	T	N	N	N	N	N
SDG	**Location**	**Field Sample ID**	**Media**	**Sample Date**	**Qc Code**	Count	Count	Count	Count	Count	Count	Count	Count
23D1781	EW-1	828120EW01010	GW	4/12/2023	FS	78	1	2	3	3	1	1	1
23D1781	HA-114	828120HA114013	GW	4/13/2023	FS	78	1	2	3	3	1	1	1
23D1781	MW-111I	828120MW111I013	GW	4/11/2023	FS	78	1	2	3	3	1	1	1
23D1781	MW-210	828120MW210015	GW	4/13/2023	FS	78	1	2	3	3	1	1	1
23D1781	MW-210	DUP 828120	GW	4/13/2023	FD	78							
23D1781	MW-6	828120MW06009	GW	4/12/2023	FS	78							
23D1781	MW-6B	828120MW06B027	GW	4/12/2023	FS	78							
23D1781	MW-8B	828120MW08B027	GW	4/12/2023	FS	78							
23D1781	MW-9	828120MW09008	GW	4/11/2023	FS	78	1	2	3	3	1	1	1
23D1781	MW-9B	828120MW9B017	GW	4/11/2023	FS	78							
23D1781	MW-9B	DUP 828420	GW	4/11/2023	FD	78							
23D1781	QC	828120 TB	BW	4/13/2023	TB	78							

Created by: KLD 5/2/2023
Checked by: ALJ 5/15/2023

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	EW-1		HA-114		MW-111I		MW-210	
		Lab Sample Delivery Group	23D1781		23D1781		23D1781		23D1781	
		Field Sample Date	4/12/2023		4/13/2023		4/11/2023		4/13/2023	
		Field Sample ID	828120EW01010		828120HA114013		828120MW111I013		828120MW210015	
		Qc Code	FS		FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	1,1,1,2-Tetrachloroethane	UG/L	1	U	1	U	2	U	1	U
SW8260	1,1,1-Trichloroethane	UG/L	1	U	1	U	2	U	1	U
SW8260	1,1,2,2-Tetrachloroethane	UG/L	0.5	U	0.5	U	1	U	0.5	U
SW8260	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	UG/L	1	U	1	U	2	U	1	U
SW8260	1,1,2-Trichloroethane	UG/L	1	U	1	U	2	U	1	U
SW8260	1,1-Dichloroethane	UG/L	1	U	1	U	2	U	1	U
SW8260	1,1-Dichloroethene	UG/L	1	U	1	U	2	U	1	U
SW8260	1,1-Dichloropropene	UG/L	2	U	2	U	4	U	2	U
SW8260	1,2,3-Trichlorobenzene	UG/L	5	U	5	U	10	U	5	UJ
SW8260	1,2,3-Trichloropropane	UG/L	2	U	2	U	4	U	2	U
SW8260	1,2,4-Trichlorobenzene	UG/L	1	U	1	U	2	U	1	UJ
SW8260	1,2,4-Trimethylbenzene	UG/L	1	U	1	U	2	U	1	U
SW8260	1,2-Dibromo-3-chloropropane	UG/L	5	U	5	U	10	U	5	U
SW8260	1,2-Dibromoethane	UG/L	0.5	U	0.5	U	1	U	0.5	U
SW8260	1,2-Dichlorobenzene	UG/L	1	U	1	U	2	U	1	U
SW8260	1,2-Dichloroethane	UG/L	1	U	1	U	2	U	1	U
SW8260	1,2-Dichloropropane	UG/L	1	U	1	U	2	U	1	U
SW8260	1,3,5-Trichlorobenzene	UG/L	1	U	1	U	2	U	1	U
SW8260	1,3,5-Trimethylbenzene	UG/L	1	U	1	U	2	U	1	U
SW8260	1,3-Dichlorobenzene	UG/L	1	U	1	U	2	U	1	U
SW8260	1,3-Dichloropropane	UG/L	0.5	U	0.5	U	1	U	0.5	U
SW8260	1,4-Dichlorobenzene	UG/L	1	U	1	U	2	U	1	U
SW8260	1,4-Dioxane	UG/L	50	U	50	U	100	U	50	U
SW8260	2,2-Dichloropropane	UG/L	1	U	1	U	2	U	1	UJ
SW8260	2-Butanone	UG/L	20	U	20	U	40	U	20	U

Created by: KLD 5/16/2023
Checked by: ALJ 5/16/2023

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	EW-1		HA-114		MW-111I		MW-210	
		Lab Sample Delivery Group	23D1781		23D1781		23D1781		23D1781	
		Field Sample Date	4/12/2023		4/13/2023		4/11/2023		4/13/2023	
		Field Sample ID	828120EW01010		828120HA114013		828120MW111I013		828120MW210015	
		Qc Code	FS		FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	2-Chlorotoluene	UG/L	1	U	1	U	2	U	1	U
SW8260	2-Hexanone	UG/L	10	U	10	U	20	U	10	U
SW8260	4-Chlorotoluene	UG/L	1	U	1	U	2	U	1	U
SW8260	4-iso-Propyltoluene	UG/L	1	U	1	U	2	U	1	U
SW8260	4-Methyl-2-pentanone	UG/L	10	U	10	U	20	U	10	U
SW8260	Acetic acid, methyl ester	UG/L	1	U	1	U	2	U	1	UJ
SW8260	Acetone	UG/L	50	U	50	U	100	U	50	U
SW8260	Acrylonitrile	UG/L	5	U	5	U	10	U	5	UJ
SW8260	Benzene	UG/L	1	U	1	U	2	U	1	U
SW8260	Bromobenzene	UG/L	1	U	1	U	2	U	1	U
SW8260	Bromochloromethane	UG/L	1	U	1	U	2	U	1	U
SW8260	Bromodichloromethane	UG/L	0.5	U	0.5	U	1	U	0.5	U
SW8260	Bromoform	UG/L	1	U	1	U	2	U	1	UJ
SW8260	Bromomethane	UG/L	2	U	2	U	4	U	2	U
SW8260	Butane, 2-methoxy-2-methyl-	UG/L	0.5	U	0.5	U	1	U	0.5	U
SW8260	Carbon disulfide	UG/L	5	U	5	U	10	U	5	U
SW8260	Carbon tetrachloride	UG/L	5	U	5	U	10	U	5	U
SW8260	Chlorobenzene	UG/L	1	U	1	U	2	U	1	U
SW8260	Chloroethane	UG/L	2	U	2	U	4	U	2	U
SW8260	Chloroform	UG/L	2	U	2	U	4	U	2	U
SW8260	Chloromethane	UG/L	2	U	2	U	4	U	2	U
SW8260	cis-1,2-Dichloroethene	UG/L	10		2.5		15		6.2	
SW8260	cis-1,3-Dichloropropene	UG/L	0.5	U	0.5	U	1	U	0.5	U
SW8260	Dibromochloromethane	UG/L	0.5	U	0.5	U	1	U	0.5	U
SW8260	Dibromomethane	UG/L	1	U	1	U	2	U	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	EW-1		HA-114		MW-111I		MW-210	
		Lab Sample Delivery Group	23D1781		23D1781		23D1781		23D1781	
		Field Sample Date	4/12/2023		4/13/2023		4/11/2023		4/13/2023	
		Field Sample ID	828120EW01010		828120HA114013		828120MW111I013		828120MW210015	
		Qc Code	FS		FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	Dichlorodifluoromethane	UG/L	2	U	2	U	4	U	2	U
SW8260	Diethyl ether	UG/L	2	U	2	U	4	U	2	U
SW8260	Ethyl-t-Butyl Ether	UG/L	0.5	U	0.5	U	1	U	0.5	U
SW8260	Ethylbenzene	UG/L	1	U	1	U	2	U	1	U
SW8260	Hexachlorobutadiene	UG/L	0.6	U	0.6	U	1.2	U	0.6	U
SW8260	Isopropyl ether	UG/L	0.5	U	0.5	U	1	U	0.5	U
SW8260	Isopropylbenzene	UG/L	1	U	1	U	2	U	1	U
SW8260	Methyl cyclohexane	UG/L	1	U	1	U	2	U	1	U
SW8260	Methyl Tertbutyl Ether	UG/L	1	U	1	U	2	U	1	U
SW8260	Methylene chloride	UG/L	5	U	5	U	10	U	5	U
SW8260	n-Butylbenzene	UG/L	1	U	1	U	2	U	1	U
SW8260	Naphthalene	UG/L	2	UJ	2	UJ	4	UJ	2	UJ
SW8260	Propylbenzene	UG/L	1	U	1	U	2	U	1	U
SW8260	sec-Butylbenzene	UG/L	1	U	1	U	2	U	1	U
SW8260	Styrene	UG/L	1	U	1	U	2	U	1	U
SW8260	t-Butyl alcohol	UG/L	20	U	20	U	40	U	20	U
SW8260	tert-Butylbenzene	UG/L	1	U	1	U	2	U	1	U
SW8260	Tetrachloroethene	UG/L	61		29		110		36	J-
SW8260	Tetrahydrofuran	UG/L	10	U	10	U	20	U	10	U
SW8260	Toluene	UG/L	1	U	1	U	2	U	1	U
SW8260	trans-1,2-Dichloroethene	UG/L	0.22	J	1	U	2	U	1	U
SW8260	trans-1,3-Dichloropropene	UG/L	0.5	U	0.5	U	1	U	0.5	U
SW8260	trans-1,4-Dichloro-2-butene	UG/L	2	U	2	U	4	U	2	UJ
SW8260	Trichloroethene	UG/L	6.8		2.5		21		3.9	
SW8260	Trichlorofluoromethane	UG/L	2	U	2	U	4	U	2	U

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TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	EW-1		HA-114		MW-111I		MW-210	
		Lab Sample Delivery Group	23D1781		23D1781		23D1781		23D1781	
		Field Sample Date	4/12/2023		4/13/2023		4/11/2023		4/13/2023	
		Field Sample ID	828120EW01010		828120HA114013		828120MW111I013		828120MW210015	
		Qc Code	FS		FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	Vinyl chloride	UG/L	2	U	2	U	3.2	J	1.3	J
SW8260	Xylene, o	UG/L	1	U	1	U	2	U	1	U
SW8260	Xylenes (m&p)	UG/L	2	U	2	U	4	U	2	U

Created by: KLD 5/16/2023
Checked by: ALJ 5/16/2023

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	MW-210		MW-6		MW-6B		MW-8B	
		Lab Sample Delivery Group	23D1781		23D1781		23D1781		23D1781	
		Field Sample Date	4/13/2023		4/12/2023		4/12/2023		4/12/2023	
		Field Sample ID	DUP 828120		828120MW06009		828120MW06B027		828120MW08B027	
		Qc Code	FD		FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	1,1,1,2-Tetrachloroethane	UG/L	1	U	400	U	2	U	4	U
SW8260	1,1,1-Trichloroethane	UG/L	1	U	400	U	2	U	4	U
SW8260	1,1,2,2-Tetrachloroethane	UG/L	0.5	U	200	U	1	U	2	U
SW8260	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	UG/L	1	U	400	U	2	U	4	U
SW8260	1,1,2-Trichloroethane	UG/L	1	U	400	U	2	U	4	U
SW8260	1,1-Dichloroethane	UG/L	1	U	400	U	2	U	4	U
SW8260	1,1-Dichloroethene	UG/L	1	U	400	U	2	U	4	U
SW8260	1,1-Dichloropropene	UG/L	2	U	800	U	4	U	8	U
SW8260	1,2,3-Trichlorobenzene	UG/L	5	UJ	2,000	U	10	U	20	U
SW8260	1,2,3-Trichloropropane	UG/L	2	U	800	U	4	U	8	U
SW8260	1,2,4-Trichlorobenzene	UG/L	1	UJ	400	U	2	U	4	U
SW8260	1,2,4-Trimethylbenzene	UG/L	1	U	400	U	2	U	4	U
SW8260	1,2-Dibromo-3-chloropropane	UG/L	5	U	2,000	U	10	U	20	U
SW8260	1,2-Dibromoethane	UG/L	0.5	U	200	U	1	U	2	U
SW8260	1,2-Dichlorobenzene	UG/L	1	U	400	U	2	U	4	U
SW8260	1,2-Dichloroethane	UG/L	1	U	400	U	2	U	4	U
SW8260	1,2-Dichloropropane	UG/L	1	U	400	U	2	U	4	U
SW8260	1,3,5-Trichlorobenzene	UG/L	1	U	400	U	2	U	4	U
SW8260	1,3,5-Trimethylbenzene	UG/L	1	U	400	U	2	U	4	U
SW8260	1,3-Dichlorobenzene	UG/L	1	U	400	U	2	U	4	U
SW8260	1,3-Dichloropropane	UG/L	0.5	U	200	U	1	U	2	U
SW8260	1,4-Dichlorobenzene	UG/L	1	U	400	U	2	U	4	U
SW8260	1,4-Dioxane	UG/L	50	U	20,000	U	100	U	200	U
SW8260	2,2-Dichloropropane	UG/L	1	UJ	400	U	2	U	4	U
SW8260	2-Butanone	UG/L	20	U	8,000	U	40	U	28	J

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	MW-210		MW-6		MW-6B		MW-8B	
		Lab Sample Delivery Group	23D1781		23D1781		23D1781		23D1781	
		Field Sample Date	4/13/2023		4/12/2023		4/12/2023		4/12/2023	
		Field Sample ID	DUP 828120		828120MW06009		828120MW06B027		828120MW08B027	
		Qc Code	FD		FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	2-Chlorotoluene	UG/L	1	U	400	U	2	U	4	U
SW8260	2-Hexanone	UG/L	10	U	4,000	U	20	U	40	U
SW8260	4-Chlorotoluene	UG/L	1	U	400	U	2	U	4	U
SW8260	4-iso-Propyltoluene	UG/L	1	U	400	U	2	U	4	U
SW8260	4-Methyl-2-pentanone	UG/L	10	U	4,000	U	20	U	40	U
SW8260	Acetic acid, methyl ester	UG/L	1	UJ	400	U	2	U	4	U
SW8260	Acetone	UG/L	50	U	20,000	U	100	U	200	U
SW8260	Acrylonitrile	UG/L	5	UJ	2,000	U	10	U	20	U
SW8260	Benzene	UG/L	1	U	400	U	2	U	4	U
SW8260	Bromobenzene	UG/L	1	U	400	U	2	U	4	U
SW8260	Bromochloromethane	UG/L	1	U	400	U	2	U	4	U
SW8260	Bromodichloromethane	UG/L	0.5	U	200	U	1	U	2	U
SW8260	Bromoform	UG/L	1	UJ	400	U	2	U	4	U
SW8260	Bromomethane	UG/L	2	U	800	U	4	U	8	U
SW8260	Butane, 2-methoxy-2-methyl-	UG/L	0.5	U	200	U	1	U	2	U
SW8260	Carbon disulfide	UG/L	5	U	2,000	U	10	U	20	U
SW8260	Carbon tetrachloride	UG/L	5	U	2,000	U	10	U	20	U
SW8260	Chlorobenzene	UG/L	1	U	400	U	2	U	4	U
SW8260	Chloroethane	UG/L	2	U	800	U	4	U	8	U
SW8260	Chloroform	UG/L	2	U	800	U	4	U	8	U
SW8260	Chloromethane	UG/L	2	U	800	U	4	U	8	U
SW8260	cis-1,2-Dichloroethene	UG/L	5.7		400	U	0.4	J	9.5	
SW8260	cis-1,3-Dichloropropene	UG/L	0.5	U	200	U	1	U	2	U
SW8260	Dibromochloromethane	UG/L	0.5	U	200	U	1	U	2	U
SW8260	Dibromomethane	UG/L	1	U	400	U	2	U	4	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	MW-210		MW-6		MW-6B		MW-8B	
		Lab Sample Delivery Group	23D1781		23D1781		23D1781		23D1781	
		Field Sample Date	4/13/2023		4/12/2023		4/12/2023		4/12/2023	
		Field Sample ID	DUP 828120		828120MW06009		828120MW06B027		828120MW08B027	
		Qc Code	FD		FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	Dichlorodifluoromethane	UG/L	2	U	800	U	4	U	8	U
SW8260	Diethyl ether	UG/L	2	U	800	U	4	U	8	U
SW8260	Ethyl-t-Butyl Ether	UG/L	0.5	U	200	U	1	U	2	U
SW8260	Ethylbenzene	UG/L	1	U	400	U	2	U	4	U
SW8260	Hexachlorobutadiene	UG/L	0.6	U	240	U	1.2	U	2.4	U
SW8260	Isopropyl ether	UG/L	0.5	U	200	U	1	U	2	U
SW8260	Isopropylbenzene	UG/L	1	U	400	U	2	U	4	U
SW8260	Methyl cyclohexane	UG/L	1	U	400	U	2	U	4	U
SW8260	Methyl Tertbutyl Ether	UG/L	1	U	400	U	2	U	4	U
SW8260	Methylene chloride	UG/L	5	U	2,000	U	10	U	20	U
SW8260	n-Butylbenzene	UG/L	1	U	400	U	2	U	4	U
SW8260	Naphthalene	UG/L	2	UJ	800	UJ	4	UJ	8	UJ
SW8260	Propylbenzene	UG/L	1	U	400	U	2	U	4	U
SW8260	sec-Butylbenzene	UG/L	1	U	400	U	2	U	4	U
SW8260	Styrene	UG/L	1	U	400	U	2	U	4	U
SW8260	t-Butyl alcohol	UG/L	20	U	8,000	U	40	U	80	U
SW8260	tert-Butylbenzene	UG/L	1	U	400	U	2	U	4	U
SW8260	Tetrachloroethene	UG/L	36	J-	25,000		160		200	
SW8260	Tetrahydrofuran	UG/L	10	U	4,000	U	20	U	40	U
SW8260	Toluene	UG/L	1	U	400	U	2	U	4	U
SW8260	trans-1,2-Dichloroethene	UG/L	1	U	400	U	2	U	4	U
SW8260	trans-1,3-Dichloropropene	UG/L	0.5	U	200	U	1	U	2	U
SW8260	trans-1,4-Dichloro-2-butene	UG/L	2	UJ	800	U	4	U	8	U
SW8260	Trichloroethene	UG/L	3.3		400	U	0.44	J	10	
SW8260	Trichlorofluoromethane	UG/L	2	U	800	U	4	U	8	U

Created by: KLD 5/16/2023
Checked by: ALJ 5/16/2023

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	MW-210		MW-6		MW-6B		MW-8B	
		Lab Sample Delivery Group	23D1781		23D1781		23D1781		23D1781	
		Field Sample Date	4/13/2023		4/12/2023		4/12/2023		4/12/2023	
		Field Sample ID	DUP 828120		828120MW06009		828120MW06B027		828120MW08B027	
		Qc Code	FD		FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	Vinyl chloride	UG/L	1.4	J	800	U	4	U	8	U
SW8260	Xylene, o	UG/L	1	U	400	U	2	U	4	U
SW8260	Xylenes (m&p)	UG/L	2	U	800	U	4	U	8	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	MW-9		MW-9B		MW-9B		QC	
		Lab Sample Delivery Group	23D1781		23D1781		23D1781		23D1781	
		Field Sample Date	4/11/2023		4/11/2023		4/11/2023		4/13/2023	
		Field Sample ID	828120MW09008		DUP 828420		828120MW9B017		828120 TB	
		Qc Code	FS		FD		FS		TB	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	1,1,1,2-Tetrachloroethane	UG/L	1	U	1	U	1	U	1	U
SW8260	1,1,1-Trichloroethane	UG/L	1	U	1	U	1	U	1	U
SW8260	1,1,2,2-Tetrachloroethane	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	UG/L	1	U	1	U	1	U	1	U
SW8260	1,1,2-Trichloroethane	UG/L	1	U	1	U	1	U	1	U
SW8260	1,1-Dichloroethane	UG/L	1	U	1	U	1	U	1	U
SW8260	1,1-Dichloroethene	UG/L	1	U	1	U	1	U	1	U
SW8260	1,1-Dichloropropene	UG/L	2	U	2	U	2	U	2	U
SW8260	1,2,3-Trichlorobenzene	UG/L	5	U	5	UJ	5	UJ	5	U
SW8260	1,2,3-Trichloropropane	UG/L	2	U	2	U	2	U	2	U
SW8260	1,2,4-Trichlorobenzene	UG/L	1	U	1	UJ	1	UJ	1	U
SW8260	1,2,4-Trimethylbenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	1,2-Dibromo-3-chloropropane	UG/L	5	U	5	UJ	5	UJ	5	U
SW8260	1,2-Dibromoethane	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	1,2-Dichlorobenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	1,2-Dichloroethane	UG/L	1	U	1	U	1	U	1	U
SW8260	1,2-Dichloropropane	UG/L	1	U	1	U	1	U	1	U
SW8260	1,3,5-Trichlorobenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	1,3,5-Trimethylbenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	1,3-Dichlorobenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	1,3-Dichloropropane	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	1,4-Dichlorobenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	1,4-Dioxane	UG/L	50	U	50	U	50	U	50	U
SW8260	2,2-Dichloropropane	UG/L	1	U	1	UJ	1	UJ	1	U
SW8260	2-Butanone	UG/L	20	U	20	U	20	U	20	U

Created by: KLD 5/16/2023
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TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	MW-9		MW-9B		MW-9B		QC	
		Lab Sample Delivery Group	23D1781		23D1781		23D1781		23D1781	
		Field Sample Date	4/11/2023		4/11/2023		4/11/2023		4/13/2023	
		Field Sample ID	828120MW09008		DUP 828420		828120MW9B017		828120 TB	
		Qc Code	FS		FD		FS		TB	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	2-Chlorotoluene	UG/L	1	U	1	U	1	U	1	U
SW8260	2-Hexanone	UG/L	10	U	10	U	10	U	10	U
SW8260	4-Chlorotoluene	UG/L	1	U	1	U	1	U	1	U
SW8260	4-iso-Propyltoluene	UG/L	1	U	1	U	1	U	1	U
SW8260	4-Methyl-2-pentanone	UG/L	10	U	10	U	10	U	10	U
SW8260	Acetic acid, methyl ester	UG/L	1	U	1	UJ	1	UJ	1	U
SW8260	Acetone	UG/L	50	U	50	U	50	U	50	U
SW8260	Acrylonitrile	UG/L	5	U	5	U	5	U	5	U
SW8260	Benzene	UG/L	1	U	1	U	1	U	1	U
SW8260	Bromobenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	Bromochloromethane	UG/L	1	U	1	U	1	U	1	U
SW8260	Bromodichloromethane	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	Bromoform	UG/L	1	U	1	UJ	1	UJ	1	U
SW8260	Bromomethane	UG/L	2	U	2	U	2	U	2	U
SW8260	Butane, 2-methoxy-2-methyl-	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	Carbon disulfide	UG/L	5	U	5	U	5	U	5	U
SW8260	Carbon tetrachloride	UG/L	5	U	5	U	5	U	5	U
SW8260	Chlorobenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	Chloroethane	UG/L	2	U	2	U	2	U	2	U
SW8260	Chloroform	UG/L	2	U	2	U	2	U	2	U
SW8260	Chloromethane	UG/L	2	U	2	U	2	U	2	U
SW8260	cis-1,2-Dichloroethene	UG/L	1	U	1	U	1	U	1	U
SW8260	cis-1,3-Dichloropropene	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	Dibromochloromethane	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	Dibromomethane	UG/L	1	U	1	U	1	U	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	MW-9		MW-9B		MW-9B		QC	
		Lab Sample Delivery Group	23D1781		23D1781		23D1781		23D1781	
		Field Sample Date	4/11/2023		4/11/2023		4/11/2023		4/13/2023	
		Field Sample ID	828120MW09008		DUP 828420		828120MW9B017		828120 TB	
		Qc Code	FS		FD		FS		TB	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	Dichlorodifluoromethane	UG/L	2	U	2	U	2	U	2	U
SW8260	Diethyl ether	UG/L	2	U	2	U	2	U	2	U
SW8260	Ethyl-t-Butyl Ether	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	Ethylbenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	Hexachlorobutadiene	UG/L	0.6	U	0.6	U	0.6	U	0.6	U
SW8260	Isopropyl ether	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	Isopropylbenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	Methyl cyclohexane	UG/L	1	U	1	U	1	U	1	U
SW8260	Methyl Tertbutyl Ether	UG/L	1	U	1	U	1	U	1	U
SW8260	Methylene chloride	UG/L	5	U	5	U	5	U	0.24	J
SW8260	n-Butylbenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	Naphthalene	UG/L	2	UJ	2	UJ	2	UJ	2	U
SW8260	Propylbenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	sec-Butylbenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	Styrene	UG/L	1	U	1	U	1	U	1	U
SW8260	t-Butyl alcohol	UG/L	20	U	20	UJ	20	UJ	20	U
SW8260	tert-Butylbenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	Tetrachloroethene	UG/L	1.1		1	U	1	U	1	U
SW8260	Tetrahydrofuran	UG/L	10	U	10	U	10	U	10	U
SW8260	Toluene	UG/L	1	U	1	U	1	U	1	U
SW8260	trans-1,2-Dichloroethene	UG/L	1	U	1	U	1	U	1	U
SW8260	trans-1,3-Dichloropropene	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	trans-1,4-Dichloro-2-butene	UG/L	2	U	2	UJ	2	UJ	2	U
SW8260	Trichloroethene	UG/L	1	U	1	U	1	U	1	U
SW8260	Trichlorofluoromethane	UG/L	2	U	2	U	2	U	2	U

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Checked by: ALJ 5/16/2023

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	MW-9		MW-9B		MW-9B		QC	
		Lab Sample Delivery Group	23D1781		23D1781		23D1781		23D1781	
		Field Sample Date	4/11/2023		4/11/2023		4/11/2023		4/13/2023	
		Field Sample ID	828120MW09008		DUP 828420		828120MW9B017		828120 TB	
		Qc Code	FS		FD		FS		TB	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	Vinyl chloride	UG/L	2	U	2	U	2	U	2	U
SW8260	Xylene, o	UG/L	1	U	1	U	1	U	1	U
SW8260	Xylenes (m&p)	UG/L	2	U	2	U	2	U	2	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

			Location	EW-1		HA-114		MW-111I		MW-210		MW-9	
			Lab Sample Delivery Group	23D1781		23D1781		23D1781		23D1781		23D1781	
			Field Sample Date	4/12/2023		4/13/2023		4/11/2023		4/13/2023		4/11/2023	
			Field Sample ID	828120EW01010		828120HA114013		828120MW111I013		828120MW210015		828120MW09008	
			Qc Code	FS		FS		FS		FS		FS	
Method	**Parameter**	**Fraction**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW6010	Iron	T	MG/L	0.095		0.55		0.05	U	1.2		0.76	
SW6010	Iron	D	MG/L	0.049	J	0.064		0.05	U	0.54		0.49	
SW6010	Manganese	T	MG/L	0.15		0.044		0.043		0.12		0.15	
E300	Nitrate as N	N	MG/L	0.1	U	0.9		0.1	U	0.1	U	1.1	
E300	Sulfate	N	MG/L	33		50		110		67		59	
E300	Chloride	N	MG/L	140		670		240		130		400	
RSK 175	Ethane	N	MG/L	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U
RSK 175	Ethene	N	MG/L	0.017	U	0.017	U	0.017	U	0.017	U	0.017	U
RSK 175	Methane	N	MG/L	0.007	U	0.007	U	0.0018	J	0.0026	J	0.007	U
E310.1	Alkalinity	N	MG/L	350		350		350		400		500	
SM4500S-F	Sulfide	N	MG/L	2.4		3.8		2.8		2	U	4	
A5310B	Total Organic Carbon	N	MG/L	1.6		2		1.6		2		6.7	

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TABLE 3 - SUMMARY OF QUALIFICATION ACTIONS
CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

Lab SDG	Method	Lab Sample ID	Field Sample ID	Parameter	Lab Result	Lab Qualifier	Final Result	Final Qualifier	Val Reason Code	Units
23D1781	SW8260	23D1781-03	828120MW9B017	1,2-Dibromo-3-chloropropane	5	U	5	UJ	MSL, MSRPD	UG/L
23D1781	SW8260	23D1781-04	DUP 828420	1,2-Dibromo-3-chloropropane	5	U	5	UJ	MSL, MSRPD	UG/L
23D1781	SW8260	23D1781-01	828120MW210015	1,2,3-Trichlorobenzene	5	U	5	UJ	MSL	UG/L
23D1781	SW8260	23D1781-01	828120MW210015	Methylene chloride	0.23	J	5	U	BL2	UG/L
23D1781	SW8260	23D1781-02	DUP 828120	1,2,3-Trichlorobenzene	5	U	5	UJ	MSL	UG/L
23D1781	SW8260	23D1781-01	828120MW210015	1,2,4-Trichlorobenzene	1	U	1	UJ	MSL	UG/L
23D1781	SW8260	23D1781-03	828120MW9B017	t-Butyl alcohol	20	U	20	UJ	MSL, MSRPD	UG/L
23D1781	SW8260	23D1781-02	DUP 828120	1,2,4-Trichlorobenzene	1	U	1	UJ	MSL	UG/L
23D1781	SW8260	23D1781-01	828120MW210015	2,2-Dichloropropane	1	U	1	UJ	MSL	UG/L
23D1781	SW8260	23D1781-02	DUP 828120	2,2-Dichloropropane	1	U	1	UJ	MSL	UG/L
23D1781	SW8260	23D1781-01	828120MW210015	Acetic acid, methyl ester	1	U	1	UJ	MSL	UG/L
23D1781	SW8260	23D1781-02	DUP 828120	Acetic acid, methyl ester	1	U	1	UJ	MSL	UG/L
23D1781	SW8260	23D1781-01	828120MW210015	Acrylonitrile	5	U	5	UJ	MSL, MSRPD	UG/L
23D1781	SW8260	23D1781-02	DUP 828120	Acrylonitrile	5	U	5	UJ	MSL, MSRPD	UG/L
23D1781	SW8260	23D1781-01	828120MW210015	Bromoform	1	U	1	UJ	MSL	UG/L
23D1781	SW8260	23D1781-02	DUP 828120	Methylene chloride	0.18	J	5	U	BL2	UG/L
23D1781	SW8260	23D1781-02	DUP 828120	Bromoform	1	U	1	UJ	MSL	UG/L
23D1781	SW8260	23D1781-01	828120MW210015	Naphthalene	2	U	2	UJ	LCSL, MSL, MSRPD	UG/L
23D1781	SW8260	23D1781-02	DUP 828120	Naphthalene	2	U	2	UJ	LCSL, MSL, MSRPD	UG/L
23D1781	SW8260	23D1781-01	828120MW210015	Tetrachloroethene	36		36	J-	MSL	UG/L
23D1781	SW8260	23D1781-02	DUP 828120	Tetrachloroethene	36		36	J-	MSL	UG/L
23D1781	SW8260	23D1781-01	828120MW210015	trans-1,4-Dichloro-2-butene	2	U	2	UJ	MSL	UG/L
23D1781	SW8260	23D1781-03	828120MW9B017	1,2,4-Trichlorobenzene	1	U	1	UJ	MSL	UG/L
23D1781	SW8260	23D1781-03	828120MW9B017	trans-1,4-Dichloro-2-butene	2	U	2	UJ	MSL	UG/L
23D1781	SW8260	23D1781-03	828120MW9B017	Acetic acid, methyl ester	1	U	1	UJ	MSL	UG/L
23D1781	SW8260	23D1781-03	828120MW9B017	Bromoform	1	U	1	UJ	MSL	UG/L
23D1781	SW8260	23D1781-03	828120MW9B017	2,2-Dichloropropane	1	U	1	UJ	MSL	UG/L
23D1781	SW8260	23D1781-03	828120MW9B017	1,2,3-Trichlorobenzene	5	U	5	UJ	MSL	UG/L
23D1781	SW8260	23D1781-04	DUP 828420	1,2,3-Trichlorobenzene	5	U	5	UJ	MSL	UG/L

Created by: KLD 5/16/2023
Checked by: ALJ 5/16/2023

TABLE 3 - SUMMARY OF QUALIFICATION ACTIONS
CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

Lab SDG	Method	Lab Sample ID	Field Sample ID	Parameter	Lab Result	Lab Qualifier	Final Result	Final Qualifier	Val Reason Code	Units
23D1781	SW8260	23D1781-04	DUP 828420	Acetic acid, methyl ester	1	U	1	UJ	MSL	UG/L
23D1781	SW8260	23D1781-04	DUP 828420	Bromoform	1	U	1	UJ	MSL	UG/L
23D1781	SW8260	23D1781-04	DUP 828420	2,2-Dichloropropane	1	U	1	UJ	MSL	UG/L
23D1781	SW8260	23D1781-04	DUP 828420	1,2,4-Trichlorobenzene	1	U	1	UJ	MSL	UG/L
23D1781	SW8260	23D1781-04	DUP 828420	trans-1,4-Dichloro-2-butene	2	U	2	UJ	MSL	UG/L
23D1781	SW8260	23D1781-04	DUP 828420	t-Butyl alcohol	20	U	20	UJ	MSL, MSRPD	UG/L
23D1781	SW8260	23D1781-02	DUP 828120	trans-1,4-Dichloro-2-butene	2	U	2	UJ	MSL	UG/L
23D1781	SW8260	23D1781-03	828120MW9B017	Naphthalene	2	U	2	UJ	LCSL, MSL	UG/L
23D1781	SW8260	23D1781-04	DUP 828420	Naphthalene	2	U	2	UJ	LCSL, MSL	UG/L
23D1781	SW8260	23D1781-05	828120MW06B027	Naphthalene	4	U	4	UJ	LCSL	UG/L
23D1781	SW8260	23D1781-06	828120MW06009	Naphthalene	800	U	800	UJ	LCSL	UG/L
23D1781	SW8260	23D1781-07	828120MW08B027	Naphthalene	8	U	8	UJ	LCSL	UG/L
23D1781	SW8260	23D1781-08	828120HA114013	Naphthalene	2	U	2	UJ	LCSL	UG/L
23D1781	SW8260	23D1781-09	828120MW111I013	Naphthalene	4	U	4	UJ	LCSL	UG/L
23D1781	SW8260	23D1781-10	828120MW09008	Naphthalene	2	U	2	UJ	LCSL	UG/L
23D1781	SW8260	23D1781-10	828120MW09008	Methylene chloride	0.19	J	5	U	BL2	UG/L
23D1781	SW8260	23D1781-11	828120EW01010	Naphthalene	2	U	2	UJ	LCSL	UG/L

Created by: KLD 5/16/2023
Checked by: ALJ 5/16/2023

CATEGORY A REVIEW
APRIL 2023 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

ATTACHMENT A

VOCs

PROJECT CATEGORY A REVIEW RECORD
Project: Carriage Cleaners April 2023
Method : SW-846 8260C
Laboratory: Pace Con-test **SDG(s):** 23D1781
Date: 5/15/2023
Reviewer: Amber Jones
Review Level [X] CATEGORY A

1. ☑ Case **Narrative Review and COC/Data Package Completeness** COMMENTS
   Were problems noted? yes, see atatched

   Were all the samples on the COC analyzed for the requested analyses? YES NO (circle one) MNA parameters - completeness check only

   Are Field Sample IDs and Locations assigned correctly? YES NO (circle one)

2. ☑ **Holding time and Sample Collection**
   All samples were analyzed within the 14 day holding time. YES NO (circle one)

3. ☑ **QC Blanks**
   Are method blanks free of contamination? YES NO (circle one)

   Are Trip blanks free of contamination? YES NO (circle one) see attached - methylene chloride - U @ RL, BL2

   Are Rinse blanks free of contamination? YES NO NA (circle one)

4. ☑ **Matrix Spike** - Region II limits (water and soil 70-130%, water RPD 20, soil RPD 35)
   Were MS/MSDs submitted/analyzed? YES NO see attached - subset UJ/J-, MSL/MSRPD

   Were all results within the Region II limits? YES NO NA (circle one)

5. ☑ **Laboratory Control Sample Results** - Region II (Water and soil 70-130%)

   Were all results were within Region II control limits? YES NO (circle one) see attached - naphthalene - UJ, LCSL

6. ☑ **Surrogate Recovery** - Region II limits (water 80-120%, soil 70-130%)

   Were all results within Region II limits? YES NO (circle one)

7. ☑ **Field Duplicates** - Region II Limits (water RPD 50, soil RPD 100)
   Were Field Duplicates submitted/analyzed? YES NO see attached for RPD calculations

   Were all results within Region II Limits? YES NO NA (circle one)

8. ☑ **Reporting Limits:** Were samples analyzed at a dilution? YES NO (circle one)
   828120MW06009 - 400x; 828120MW08B027 - 4x; 828120MW06B027 and 828120MW111I013 - 2x - elevated RLs for ND

9. ☑ **Electronic Data Review and Edits**
   Does the EDD match the Form Is? YES NO (circle one)

10. ☑ **Table Review**
    Table 1 (Samples and Analytical Methods)
    Table 2 (Analytical Results)
    Table 3 (Qualification Actions)
    Were all tables produced and reviewed? YES NO (circle one)

    Table 4 (TICs) Did lab report TICs? YES NO (circle one)

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

EPA 300.0

Qualifications:

H-01

Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.

Analyte & Samples(s) Qualified:

Nitrate as N
23D1781-11[828120EW01010]

H-03

Sample received after recommended holding time was exceeded.

Analyte & Samples(s) Qualified:

Nitrate as N
23D1781-09[828120MW111I013], 23D1781-10[828120MW09008]

MS-11

Matrix spike recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:

Chloride
23D1781-01[828120MW210015], B338376-MS1, B338376-MSD1

Sulfate
23D1781-01[828120MW210015], B338377-MS1, B338377-MSD1

SM 21-23 5310B

Qualifications:

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

Total Organic Carbon
B338487-BS1

SW-846 8260D

Qualifications:

MS-09

Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated. see attached for MS/MSD review

Analyte & Samples(s) Qualified:

1,2,3-Trichlorobenzene
B337731-MS1, B337731-MSD1

2,2-Dichloropropane
B337731-MS1, B337731-MS2, B337731-MSD1, B337731-MSD2

Methyl Acetate
B337731-MS1, B337731-MS2, B337731-MSD1, B337731-MSD2

Naphthalene
B337731-MS1, B337731-MS2, B337731-MSD1, B337731-MSD2

trans-1,4-Dichloro-2-butene
B337731-MS2, B337731-MSD2

MS-19

Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated. see attached for MS/MSD review

Analyte & Samples(s) Qualified:

Tetrachloroethylene
B337731-MSD1

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

MS-23

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.

see attached for MS/MSD review

Analyte & Samples(s) Qualified:

1,2-Dibromo-3-chloropropane (DB
B337731-MS2, B337731-MSD2

Acrylonitrile
B337731-MSD1

MS-24

Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.

see attached for MS/MSD review

Analyte & Samples(s) Qualified:

1,2,3-Trichlorobenzene
B337731-MS2

1,2,4-Trichlorobenzene
B337731-MS1, B337731-MS2

Bromoform
B337731-MS1, B337731-MS2

tert-Butyl Alcohol (TBA)
B337731-MS2

trans-1,4-Dichloro-2-butene
B337731-MS1

RL-11

Elevated reporting limit due to high concentration of target compounds.

okay - elevated RLs for ND

Analyte & Samples(s) Qualified:

23D1781-05[828120MW06B027], 23D1781-06[828120MW06009], 23D1781-07[828120MW08B027], 23D1781-09[828120MW111I013]

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

outside scope of Cat A review - no quals

Analyte & Samples(s) Qualified:

Naphthalene
23D1781-02[DUP 828120], 23D1781-03[828120MW9B017], 23D1781-04[DUP 828420], 23D1781-05[828120MW06B027], 23D1781-06[828120MW06009], 23D1781-07[828120MW08B027], 23D1781-08[828120HA114013], 23D1781-09[828120MW111I013], 23D1781-10[828120MW09008], 23D1781-11[828120EW01010], 23D1781-12[828120 TB], B337731-BLK1, B337731-BS1, B337731-BSD1, S086276-CCV1

V-06

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.

outside scope of Cat A review - no quals

Analyte & Samples(s) Qualified:

2-Butanone (MEK)
23D1781-07[828120MW08B027], B337731-BS1, B337731-BSD1, S086276-CCV1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

outside scope of Cat A review - no quals

Analyte & Samples(s) Qualified:

Dichlorodifluoromethane (Freon 12
B337731-BS1, B337731-BSD1, S086276-CCV1

Tetrahydrofuran
B337731-BS1, B337731-BSD1, S086276-CCV1

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY | Sample Description: | Work Order: 23D1781

Date Received: 4/14/2023

Field Sample #: 828120 TB | Sampled: 4/13/2023 00:00

Sample ID: 23D1781-12

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
Methylene Chloride	0.24	5.0	0.18	µg/L	1	J	SW-846 8260D	4/20/23	4/21/23 1:42	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
Naphthalene	ND	2.0	0.38	µg/L	1	V-05	SW-846 8260D	4/20/23	4/21/23 1:42	EEH
n-Propylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
m+p Xylene	ND	2.0	0.49	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH
o-Xylene	ND	1.0	0.24	µg/L	1		SW-846 8260D	4/20/23	4/21/23 1:42	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	115	70-130		4/21/23 1:42
Toluene-d8	101	70-130		4/21/23 1:42
4-Bromofluorobenzene	90.3	70-130		4/21/23 1:42

subset U @ RL, RL2

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B337731 - SW-846 5030B								70-130				
LCS (B337731-BS1)					Prepared & Analyzed: 04/20/23							
Carbon Tetrachloride	10.5	5.0	0.16	µg/L	10.0		105	70-130				
Chlorobenzene	9.23	1.0	0.12	µg/L	10.0		92.3	70-130				
Chlorodibromomethane	8.96	0.50	0.20	µg/L	10.0		89.6	70-130				
Chloroethane	9.36	2.0	0.34	µg/L	10.0		93.6	70-130				
Chloroform	10.6	2.0	0.14	µg/L	10.0		106	70-130				
Chloromethane	10.2	2.0	0.50	µg/L	10.0		102	40-160				†
2-Chlorotoluene	9.56	1.0	0.15	µg/L	10.0		95.6	70-130				
4-Chlorotoluene	9.51	1.0	0.15	µg/L	10.0		95.1	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	8.94	5.0	0.85	µg/L	10.0		89.4	70-130				
1,2-Dibromoethane (EDB)	10.0	0.50	0.16	µg/L	10.0		100	70-130				
Dibromomethane	9.98	1.0	0.32	µg/L	10.0		99.8	70-130				
1,2-Dichlorobenzene	9.67	1.0	0.13	µg/L	10.0		96.7	70-130				
1,3-Dichlorobenzene	9.52	1.0	0.14	µg/L	10.0		95.2	70-130				
1,4-Dichlorobenzene	9.04	1.0	0.13	µg/L	10.0		90.4	70-130				
trans-1,4-Dichloro-2-butene	8.87	2.0	1.5	µg/L	10.0		88.7	70-130				
Dichlorodifluoromethane (Freon 12)	11.8	2.0	0.16	µg/L	10.0		118	40-160			V-20	†
1,1-Dichloroethane	10.4	1.0	0.14	µg/L	10.0		104	70-130				
1,2-Dichloroethane	10.3	1.0	0.30	µg/L	10.0		103	70-130				
1,1-Dichloroethylene	10.2	1.0	0.14	µg/L	10.0		102	70-130				
cis-1,2-Dichloroethylene	10.6	1.0	0.14	µg/L	10.0		106	70-130				
trans-1,2-Dichloroethylene	9.77	1.0	0.17	µg/L	10.0		97.7	70-130				
1,2-Dichloropropane	10.6	1.0	0.19	µg/L	10.0		106	70-130				
1,3-Dichloropropane	10.3	0.50	0.12	µg/L	10.0		103	70-130				
2,2-Dichloropropane	9.04	1.0	0.35	µg/L	10.0		90.4	40-130				†
1,1-Dichloropropene	10.2	2.0	0.15	µg/L	10.0		102	70-130				
cis-1,3-Dichloropropene	9.41	0.50	0.16	µg/L	10.0		94.1	70-130				
trans-1,3-Dichloropropene	9.59	0.50	0.14	µg/L	10.0		95.9	70-130				
Diethyl Ether	10.6	2.0	0.14	µg/L	10.0		106	70-130				
Diisopropyl Ether (DIPE)	11.2	0.50	0.20	µg/L	10.0		112	70-130				
1,4-Dioxane	87.7	50	18	µg/L	100		87.7	40-130				†
Ethylbenzene	9.73	1.0	0.22	µg/L	10.0		97.3	70-130				
Hexachlorobutadiene	10.2	0.60	0.47	µg/L	10.0		102	70-130				
2-Hexanone (MBK)	99.1	10	1.2	µg/L	100		99.1	70-160				†
Isopropylbenzene (Cumene)	9.21	1.0	0.15	µg/L	10.0		92.1	70-130				
p-Isopropyltoluene (p-Cymene)	9.62	1.0	0.13	µg/L	10.0		96.2	70-130				
Methyl Acetate	8.90	1.0	0.61	µg/L	10.0		89.0	70-130				
Methyl tert-Butyl Ether (MTBE)	10.3	1.0	0.17	µg/L	10.0		103	70-130				
Methyl Cyclohexane	10.4	1.0	0.16	µg/L	10.0		104	70-130				
Methylene Chloride	10.0	5.0	0.18	µg/L	10.0		100	70-130				
4-Methyl-2-pentanone (MIBK)	100	10	1.3	µg/L	100		100	70-160				†
Naphthalene UJ, LCSL	5.95	2.0	0.38	µg/L	10.0		59.5	40-130			V-05	†
n-Propylbenzene	9.27	1.0	0.12	µg/L	10.0		92.7	70-130				
Styrene	9.46	1.0	0.15	µg/L	10.0		94.6	70-130				
1,1,1,2-Tetrachloroethane	9.79	1.0	0.16	µg/L	10.0		97.9	70-130				
1,1,2,2-Tetrachloroethane	8.37	0.50	0.14	µg/L	10.0		83.7	70-130				
Tetrachloroethylene	9.83	1.0	0.17	µg/L	10.0		98.3	70-130				
Tetrahydrofuran	11.1	10	0.49	µg/L	10.0		111	70-130			V-20	
Toluene	9.93	1.0	0.22	µg/L	10.0		99.3	70-130				
1,2,3-Trichlorobenzene	7.91	5.0	0.34	µg/L	10.0		79.1	70-130				
1,2,4-Trichlorobenzene	8.05	1.0	0.30	µg/L	10.0		80.5	70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
								70-130				
Batch B337731 - SW-846 5030B												
LCS Dup (B337731-BSD1)					Prepared & Analyzed: 04/20/23							
1,1-Dichloroethane	10.0	1.0	0.14	µg/L	10.0		100	70-130	3.43	25		
1,2-Dichloroethane	10.9	1.0	0.30	µg/L	10.0		109	70-130	5.00	25		
1,1-Dichloroethylene	9.72	1.0	0.14	µg/L	10.0		97.2	70-130	4.62	25		
cis-1,2-Dichloroethylene	9.83	1.0	0.14	µg/L	10.0		98.3	70-130	7.07	25		
trans-1,2-Dichloroethylene	9.21	1.0	0.17	µg/L	10.0		92.1	70-130	5.90	25		
1,2-Dichloropropane	11.2	1.0	0.19	µg/L	10.0		112	70-130	5.53	25		
1,3-Dichloropropane	10.5	0.50	0.12	µg/L	10.0		105	70-130	2.41	25		
2,2-Dichloropropane	8.82	1.0	0.35	µg/L	10.0		88.2	40-130	2.46	25		†
1,1-Dichloropropene	10.0	2.0	0.15	µg/L	10.0		100	70-130	1.88	25		
cis-1,3-Dichloropropene	9.85	0.50	0.16	µg/L	10.0		98.5	70-130	4.57	25		
trans-1,3-Dichloropropene	9.56	0.50	0.14	µg/L	10.0		95.6	70-130	0.313	25		
Diethyl Ether	10.6	2.0	0.14	µg/L	10.0		106	70-130	0.377	25		
Diisopropyl Ether (DIPE)	10.9	0.50	0.20	µg/L	10.0		109	70-130	1.99	25		
1,4-Dioxane	102	50	18	µg/L	100		102	40-130	15.4	50		† ‡
Ethylbenzene	9.39	1.0	0.22	µg/L	10.0		93.9	70-130	3.56	25		
Hexachlorobutadiene	9.95	0.60	0.47	µg/L	10.0		99.5	70-130	2.29	25		
2-Hexanone (MBK)	95.0	10	1.2	µg/L	100		95.0	70-160	4.25	25		†
Isopropylbenzene (Cumene)	9.06	1.0	0.15	µg/L	10.0		90.6	70-130	1.64	25		
p-Isopropyltoluene (p-Cymene)	9.25	1.0	0.13	µg/L	10.0		92.5	70-130	3.92	25		
Methyl Acetate	8.39	1.0	0.61	µg/L	10.0		83.9	70-130	5.90	25		
Methyl tert-Butyl Ether (MTBE)	10.1	1.0	0.17	µg/L	10.0		101	70-130	1.87	25		
Methyl Cyclohexane	10.6	1.0	0.16	µg/L	10.0		106	70-130	2.19	25		
Methylene Chloride	9.60	5.0	0.18	µg/L	10.0		96.0	70-130	4.38	25		
4-Methyl-2-pentanone (MIBK)	99.1	10	1.3	µg/L	100		99.1	70-160	1.22	25		†
Naphthalene UJ, LCSL	6.15	2.0	0.38	µg/L	10.0		61.5	40-130	3.31	25	V-05	†
n-Propylbenzene	9.25	1.0	0.12	µg/L	10.0		92.5	70-130	0.216	25		
Styrene	9.19	1.0	0.15	µg/L	10.0		91.9	70-130	2.90	25		
1,1,1,2-Tetrachloroethane	9.32	1.0	0.16	µg/L	10.0		93.2	70-130	4.92	25		
1,1,2,2-Tetrachloroethane	8.70	0.50	0.14	µg/L	10.0		87.0	70-130	3.87	25		
Tetrachloroethylene	9.52	1.0	0.17	µg/L	10.0		95.2	70-130	3.20	25		
Tetrahydrofuran	11.0	10	0.49	µg/L	10.0		110	70-130	0.362	25	V-20	
Toluene	9.93	1.0	0.22	µg/L	10.0		99.3	70-130	0.00	25		
1,2,3-Trichlorobenzene	7.85	5.0	0.34	µg/L	10.0		78.5	70-130	0.761	25		
1,2,4-Trichlorobenzene	7.81	1.0	0.30	µg/L	10.0		78.1	70-130	3.03	25		
1,3,5-Trichlorobenzene	9.92	1.0	0.21	µg/L	10.0		99.2	70-130	0.803	25		
1,1,1-Trichloroethane	10.3	1.0	0.15	µg/L	10.0		103	70-130	3.15	25		
1,1,2-Trichloroethane	10.4	1.0	0.19	µg/L	10.0		104	70-130	4.72	25		
Trichloroethylene	10.2	1.0	0.17	µg/L	10.0		102	70-130	3.85	25		
Trichlorofluoromethane (Freon 11)	10.2	2.0	0.15	µg/L	10.0		102	70-130	6.57	25		
1,2,3-Trichloropropane	11.1	2.0	0.28	µg/L	10.0		111	70-130	4.49	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.31	1.0	0.21	µg/L	10.0		93.1	70-130	11.3	25		
1,2,4-Trimethylbenzene	9.49	1.0	0.20	µg/L	10.0		94.9	70-130	2.35	25		
1,3,5-Trimethylbenzene	9.03	1.0	0.15	µg/L	10.0		90.3	70-130	1.87	25		
Vinyl Chloride	10.8	2.0	0.24	µg/L	10.0		108	40-160	7.30	25		†
m+p Xylene	18.5	2.0	0.49	µg/L	20.0		92.5	70-130	2.88	25		
o-Xylene	9.00	1.0	0.24	µg/L	10.0		90.0	70-130	4.67	25		
Surrogate: 1,2-Dichloroethane-d4	*27.7*			µg/L	25.0		111	70-130				
Surrogate: Toluene-d8	*25.6*			µg/L	25.0		102	70-130				
Surrogate: 4-Bromofluorobenzene	*23.5*			µg/L	25.0		94.1	70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B337731 - SW-846 5030B									70-130			
Matrix Spike (B337731-MS1)		**Source: 23D1781-01**				Prepared: 04/20/23 Analyzed: 04/21/23						
Acetone	89.5	50	2.0	µg/L	100	ND	89.5		70-130			
Acrylonitrile	8.92	5.0	0.47	µg/L	10.0	ND	89.2		70-130			
tert-Amyl Methyl Ether (TAME)	9.10	0.50	0.13	µg/L	10.0	ND	91.0		70-130			
Benzene	9.20	1.0	0.18	µg/L	10.0	ND	92.0		70-130			
Bromobenzene	8.17	1.0	0.15	µg/L	10.0	ND	81.7		70-130			
Bromochloromethane	9.88	1.0	0.28	µg/L	10.0	ND	98.8		70-130			
Bromodichloromethane	9.23	0.50	0.16	µg/L	10.0	ND	92.3		70-130			
Bromoform UJ, MSL	6.65	1.0	0.41	µg/L	10.0	ND	**66.5**	*	70-130			MS-24
Bromomethane	9.15	2.0	1.3	µg/L	10.0	ND	91.5		70-130			
2-Butanone (MEK)	92.2	20	1.7	µg/L	100	ND	92.2		70-130			
tert-Butyl Alcohol (TBA)	71.9	20	4.3	µg/L	100	ND	71.9		70-130			
n-Butylbenzene	7.85	1.0	0.15	µg/L	10.0	ND	78.5		70-130			
sec-Butylbenzene	8.28	1.0	0.13	µg/L	10.0	ND	82.8		70-130			
tert-Butylbenzene	8.14	1.0	0.14	µg/L	10.0	ND	81.4		70-130			
tert-Butyl Ethyl Ether (TBEE)	9.43	0.50	0.15	µg/L	10.0	ND	94.3		70-130			
Carbon Disulfide	83.0	5.0	1.6	µg/L	100	ND	83.0		70-130			
Carbon Tetrachloride	9.46	5.0	0.16	µg/L	10.0	ND	94.6		70-130			
Chlorobenzene	8.15	1.0	0.12	µg/L	10.0	ND	81.5		70-130			
Chlorodibromomethane	8.15	0.50	0.20	µg/L	10.0	ND	81.5		70-130			
Chloroethane	8.71	2.0	0.34	µg/L	10.0	ND	87.1		70-130			
Chloroform	9.14	2.0	0.14	µg/L	10.0	ND	91.4		70-130			
Chloromethane	8.50	2.0	0.50	µg/L	10.0	ND	85.0		70-130			
2-Chlorotoluene	7.67	1.0	0.15	µg/L	10.0	ND	76.7		70-130			
4-Chlorotoluene	7.99	1.0	0.15	µg/L	10.0	ND	79.9		70-130			
1,2-Dibromo-3-chloropropane (DBCP)	7.48	5.0	0.85	µg/L	10.0	ND	74.8		70-130			
1,2-Dibromoethane (EDB)	8.76	0.50	0.16	µg/L	10.0	ND	87.6		70-130			
Dibromomethane	8.63	1.0	0.32	µg/L	10.0	ND	86.3		70-130			
1,2-Dichlorobenzene	8.17	1.0	0.13	µg/L	10.0	ND	81.7		70-130			
1,3-Dichlorobenzene	8.01	1.0	0.14	µg/L	10.0	ND	80.1		70-130			
1,4-Dichlorobenzene	7.89	1.0	0.13	µg/L	10.0	ND	78.9		70-130			
trans-1,4-Dichloro-2-butene UJ, MSL	6.56	2.0	1.5	µg/L	10.0	ND	**65.6**	*	70-130			MS-24
Dichlorodifluoromethane (Freon 12)	11.7	2.0	0.16	µg/L	10.0	ND	117		70-130			
1,1-Dichloroethane	9.20	1.0	0.14	µg/L	10.0	ND	92.0		70-130			
1,2-Dichloroethane	9.59	1.0	0.30	µg/L	10.0	ND	95.9		70-130			
1,1-Dichloroethylene	9.16	1.0	0.14	µg/L	10.0	ND	91.6		70-130			
cis-1,2-Dichloroethylene	14.5	1.0	0.14	µg/L	10.0	6.24	82.8		70-130			
trans-1,2-Dichloroethylene	8.65	1.0	0.17	µg/L	10.0	ND	86.5		70-130			
1,2-Dichloropropane	9.04	1.0	0.19	µg/L	10.0	ND	90.4		70-130			
1,3-Dichloropropane	9.26	0.50	0.12	µg/L	10.0	ND	92.6		70-130			
2,2-Dichloropropane UJ, MSL	6.19	1.0	0.35	µg/L	10.0	ND	**61.9**	*	70-130			MS-09
1,1-Dichloropropene	9.56	2.0	0.15	µg/L	10.0	ND	95.6		70-130			
cis-1,3-Dichloropropene	7.98	0.50	0.16	µg/L	10.0	ND	79.8		70-130			
trans-1,3-Dichloropropene	7.90	0.50	0.14	µg/L	10.0	ND	79.0		70-130			
Diethyl Ether	9.33	2.0	0.14	µg/L	10.0	ND	93.3		70-130			
Diisopropyl Ether (DIPE)	9.80	0.50	0.20	µg/L	10.0	ND	98.0		70-130			
1,4-Dioxane	76.9	50	18	µg/L	100	ND	76.9		70-130			
Ethylbenzene	8.16	1.0	0.22	µg/L	10.0	ND	81.6		70-130			
Hexachlorobutadiene	8.22	0.60	0.47	µg/L	10.0	ND	82.2		70-130			
2-Hexanone (MBK)	79.8	10	1.2	µg/L	100	ND	79.8		70-130			
Isopropylbenzene (Cumene)	7.96	1.0	0.15	µg/L	10.0	ND	79.6		70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B337731 - SW-846 5030B									70-130			
Matrix Spike (B337731-MS1)		**Source: 23D1781-01**			Prepared: 04/20/23 Analyzed: 04/21/23							
p-Isopropyltoluene (p-Cymene)	7.98	1.0	0.13	µg/L	10.0	ND	79.8		70-130			
Methyl Acetate UJ, MSL	5.75	1.0	0.61	µg/L	10.0	ND	**57.5**	*	70-130			MS-09
Methyl tert-Butyl Ether (MTBE)	9.18	1.0	0.17	µg/L	10.0	ND	91.8		70-130			
Methyl Cyclohexane	9.43	1.0	0.16	µg/L	10.0	ND	94.3		70-130			
Methylene Chloride	8.86	5.0	0.18	µg/L	10.0	0.230	86.3		70-130			
4-Methyl-2-pentanone (MIBK)	79.1	10	1.3	µg/L	100	ND	79.1		70-130			
Naphthalene UJ, MSL	4.70	2.0	0.38	µg/L	10.0	ND	**47.0**	*	70-130			MS-09
n-Propylbenzene	7.92	1.0	0.12	µg/L	10.0	ND	79.2		70-130			
Styrene	7.61	1.0	0.15	µg/L	10.0	ND	76.1		70-130			
1,1,1,2-Tetrachloroethane	8.46	1.0	0.16	µg/L	10.0	ND	84.6		70-130			
1,1,2,2-Tetrachloroethane	7.49	0.50	0.14	µg/L	10.0	ND	74.9		70-130			
Tetrachloroethylene	45.7	1.0	0.17	µg/L	10.0	35.9	98.7		70-130			
Tetrahydrofuran	9.88	10	0.49	µg/L	10.0	ND	98.8		70-130			J
Toluene	8.60	1.0	0.22	µg/L	10.0	ND	86.0		70-130			
1,2,3-Trichlorobenzene UJ, MSL	5.86	5.0	0.34	µg/L	10.0	ND	**58.6**	*	70-130			MS-09
1,2,4-Trichlorobenzene UJ, MSL	6.35	1.0	0.30	µg/L	10.0	ND	**63.5**	*	70-130			MS-24
1,3,5-Trichlorobenzene	8.39	1.0	0.21	µg/L	10.0	ND	83.9		70-130			
1,1,1-Trichloroethane	9.83	1.0	0.15	µg/L	10.0	ND	98.3		70-130			
1,1,2-Trichloroethane	8.97	1.0	0.19	µg/L	10.0	ND	89.7		70-130			
Trichloroethylene	12.8	1.0	0.17	µg/L	10.0	3.88	89.5		70-130			
Trichlorofluoromethane (Freon 11)	9.97	2.0	0.15	µg/L	10.0	ND	99.7		70-130			
1,2,3-Trichloropropane	9.28	2.0	0.28	µg/L	10.0	ND	92.8		70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.19	1.0	0.21	µg/L	10.0	ND	91.9		70-130			
1,2,4-Trimethylbenzene	7.89	1.0	0.20	µg/L	10.0	ND	78.9		70-130			
1,3,5-Trimethylbenzene	7.88	1.0	0.15	µg/L	10.0	ND	78.8		70-130			
Vinyl Chloride	11.9	2.0	0.24	µg/L	10.0	1.33	106		70-130			
m+p Xylene	16.0	2.0	0.49	µg/L	20.0	ND	80.1		70-130			
o-Xylene	7.91	1.0	0.24	µg/L	10.0	ND	79.1		70-130			
Surrogate: 1,2-Dichloroethane-d4	*27.6*			µg/L	25.0		111		70-130			
Surrogate: Toluene-d8	*24.8*			µg/L	25.0		99.1		70-130			
Surrogate: 4-Bromofluorobenzene	*22.6*			µg/L	25.0		90.6		70-130			
Matrix Spike (B337731-MS2)		**Source: 23D1781-03**			Prepared: 04/20/23 Analyzed: 04/21/23							
Acetone	81.5	50	2.0	µg/L	100	ND	81.5		70-130			
Acrylonitrile	8.38	5.0	0.47	µg/L	10.0	ND	83.8		70-130			
tert-Amyl Methyl Ether (TAME)	8.79	0.50	0.13	µg/L	10.0	ND	87.9		70-130			
Benzene	9.13	1.0	0.18	µg/L	10.0	ND	91.3		70-130			
Bromobenzene	8.51	1.0	0.15	µg/L	10.0	ND	85.1		70-130			
Bromochloromethane	9.67	1.0	0.28	µg/L	10.0	ND	96.7		70-130			
Bromodichloromethane	9.24	0.50	0.16	µg/L	10.0	ND	92.4		70-130			
Bromoform UJ, MSL	6.77	1.0	0.41	µg/L	10.0	ND	**67.7**	*	70-130			MS-24
Bromomethane	8.12	2.0	1.3	µg/L	10.0	ND	81.2		70-130			
2-Butanone (MEK)	84.8	20	1.7	µg/L	100	ND	84.8		70-130			
tert-Butyl Alcohol (TBA) UJ, MSL	62.2	20	4.3	µg/L	100	ND	**62.2**	*	70-130			MS-24
n-Butylbenzene	8.44	1.0	0.15	µg/L	10.0	ND	84.4		70-130			
sec-Butylbenzene	8.84	1.0	0.13	µg/L	10.0	ND	88.4		70-130			
tert-Butylbenzene	8.60	1.0	0.14	µg/L	10.0	ND	86.0		70-130			
tert-Butyl Ethyl Ether (TBEE)	9.43	0.50	0.15	µg/L	10.0	ND	94.3		70-130			
Carbon Disulfide	86.3	5.0	1.6	µg/L	100	ND	86.3		70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
									70-130			
Batch B337731 - SW-846 5030B												
Matrix Spike (B337731-MS2)		**Source: 23D1781-03**			Prepared: 04/20/23 Analyzed: 04/21/23							
Carbon Tetrachloride	10.2	5.0	0.16	µg/L	10.0	ND	102		70-130			
Chlorobenzene	8.60	1.0	0.12	µg/L	10.0	ND	86.0		70-130			
Chlorodibromomethane	8.46	0.50	0.20	µg/L	10.0	ND	84.6		70-130			
Chloroethane	10.1	2.0	0.34	µg/L	10.0	ND	101		70-130			
Chloroform	9.23	2.0	0.14	µg/L	10.0	ND	92.3		70-130			
Chloromethane	8.79	2.0	0.50	µg/L	10.0	ND	87.9		70-130			
2-Chlorotoluene	8.82	1.0	0.15	µg/L	10.0	ND	88.2		70-130			
4-Chlorotoluene	8.52	1.0	0.15	µg/L	10.0	ND	85.2		70-130			
1,2-Dibromo-3-chloropropane (DBCP) UJ, MSL	3.50	5.0	0.85	µg/L	10.0	ND	**35.0**	*	70-130			MS-23, J
1,2-Dibromoethane (EDB)	9.02	0.50	0.16	µg/L	10.0	ND	90.2		70-130			
Dibromomethane	8.05	1.0	0.32	µg/L	10.0	ND	80.5		70-130			
1,2-Dichlorobenzene	8.81	1.0	0.13	µg/L	10.0	ND	88.1		70-130			
1,3-Dichlorobenzene	8.68	1.0	0.14	µg/L	10.0	ND	86.8		70-130			
1,4-Dichlorobenzene	8.09	1.0	0.13	µg/L	10.0	ND	80.9		70-130			
trans-1,4-Dichloro-2-butene UJ, MSL	4.80	2.0	1.5	µg/L	10.0	ND	**48.0**	*	70-130			MS-09
Dichlorodifluoromethane (Freon 12)	12.1	2.0	0.16	µg/L	10.0	ND	121		70-130			
1,1-Dichloroethane	9.22	1.0	0.14	µg/L	10.0	ND	92.2		70-130			
1,2-Dichloroethane	10.2	1.0	0.30	µg/L	10.0	ND	102		70-130			
1,1-Dichloroethylene	9.47	1.0	0.14	µg/L	10.0	ND	94.7		70-130			
cis-1,2-Dichloroethylene	9.23	1.0	0.14	µg/L	10.0	ND	92.3		70-130			
trans-1,2-Dichloroethylene	9.01	1.0	0.17	µg/L	10.0	ND	90.1		70-130			
1,2-Dichloropropane	9.48	1.0	0.19	µg/L	10.0	ND	94.8		70-130			
1,3-Dichloropropane	9.68	0.50	0.12	µg/L	10.0	ND	96.8		70-130			
2,2-Dichloropropane UJ, MSL	6.02	1.0	0.35	µg/L	10.0	ND	**60.2**	*	70-130			MS-09
1,1-Dichloropropene	9.45	2.0	0.15	µg/L	10.0	ND	94.5		70-130			
cis-1,3-Dichloropropene	8.20	0.50	0.16	µg/L	10.0	ND	82.0		70-130			
trans-1,3-Dichloropropene	7.75	0.50	0.14	µg/L	10.0	ND	77.5		70-130			
Diethyl Ether	9.36	2.0	0.14	µg/L	10.0	ND	93.6		70-130			
Diisopropyl Ether (DIPE)	9.76	0.50	0.20	µg/L	10.0	ND	97.6		70-130			
1,4-Dioxane	72.4	50	18	µg/L	100	ND	72.4		70-130			
Ethylbenzene	8.87	1.0	0.22	µg/L	10.0	ND	88.7		70-130			
Hexachlorobutadiene	8.70	0.60	0.47	µg/L	10.0	ND	87.0		70-130			
2-Hexanone (MBK)	71.1	10	1.2	µg/L	100	ND	71.1		70-130			
Isopropylbenzene (Cumene)	8.50	1.0	0.15	µg/L	10.0	ND	85.0		70-130			
p-Isopropyltoluene (p-Cymene)	8.51	1.0	0.13	µg/L	10.0	ND	85.1		70-130			
Methyl Acetate UJ, MSL	5.20	1.0	0.61	µg/L	10.0	ND	**52.0**	*	70-130			MS-09
Methyl tert-Butyl Ether (MTBE)	8.89	1.0	0.17	µg/L	10.0	ND	88.9		70-130			
Methyl Cyclohexane	10.2	1.0	0.16	µg/L	10.0	ND	102		70-130			
Methylene Chloride	9.11	5.0	0.18	µg/L	10.0	ND	91.1		70-130			
4-Methyl-2-pentanone (MIBK)	80.2	10	1.3	µg/L	100	ND	80.2		70-130			
Naphthalene UJ, MSL	5.04	2.0	0.38	µg/L	10.0	ND	**50.4**	*	70-130			MS-09
n-Propylbenzene	8.73	1.0	0.12	µg/L	10.0	ND	87.3		70-130			
Styrene	8.04	1.0	0.15	µg/L	10.0	ND	80.4		70-130			
1,1,1,2-Tetrachloroethane	8.98	1.0	0.16	µg/L	10.0	ND	89.8		70-130			
1,1,2,2-Tetrachloroethane	7.49	0.50	0.14	µg/L	10.0	ND	74.9		70-130			
Tetrachloroethylene	9.58	1.0	0.17	µg/L	10.0	ND	95.8		70-130			
Tetrahydrofuran	8.62	10	0.49	µg/L	10.0	ND	86.2		70-130			J
Toluene	9.48	1.0	0.22	µg/L	10.0	ND	94.8		70-130			
1,2,3-Trichlorobenzene UJ, MSL	6.57	5.0	0.34	µg/L	10.0	ND	**65.7**	*	70-130			MS-24
1,2,4-Trichlorobenzene UJ, MSL	6.85	1.0	0.30	µg/L	10.0	ND	**68.5**	*	70-130			MS-24

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B337731 - SW-846 5030B													
Matrix Spike (B337731-MS2)	**Source: 23D1781-03**				Prepared: 04/20/23 Analyzed: 04/21/23								
1,3,5-Trichlorobenzene	8.71	1.0	0.21	µg/L	10.0	ND	87.1		70-130				
1,1,1-Trichloroethane	10.1	1.0	0.15	µg/L	10.0	ND	101		70-130				
1,1,2-Trichloroethane	8.99	1.0	0.19	µg/L	10.0	ND	89.9		70-130				
Trichloroethylene	9.36	1.0	0.17	µg/L	10.0	ND	93.6		70-130				
Trichlorofluoromethane (Freon 11)	9.73	2.0	0.15	µg/L	10.0	ND	97.3		70-130				
1,2,3-Trichloropropane	8.83	2.0	0.28	µg/L	10.0	ND	88.3		70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.26	1.0	0.21	µg/L	10.0	ND	92.6		70-130				
1,2,4-Trimethylbenzene	8.39	1.0	0.20	µg/L	10.0	ND	83.9		70-130				
1,3,5-Trimethylbenzene	8.54	1.0	0.15	µg/L	10.0	ND	85.4		70-130				
Vinyl Chloride	10.9	2.0	0.24	µg/L	10.0	ND	109		70-130				
m+p Xylene	17.3	2.0	0.49	µg/L	20.0	ND	86.6		70-130				
o-Xylene	8.43	1.0	0.24	µg/L	10.0	ND	84.3		70-130				
Surrogate: 1,2-Dichloroethane-d4	*27.9*			µg/L	25.0		111		70-130				
Surrogate: Toluene-d8	*25.7*			µg/L	25.0		103		70-130				
Surrogate: 4-Bromofluorobenzene	*23.7*			µg/L	25.0		95.0		70-130				
Matrix Spike Dup (B337731-MSD1)	**Source: 23D1781-01**				Prepared: 04/20/23 Analyzed: 04/21/23								
Acetone	102	50	2.0	µg/L	100	ND	102		70-130	12.7		30	
Acrylonitrile	4.66	5.0	0.47	µg/L	10.0	ND	**46.6**	*	70-130	**62.7**	*	30	MS-23, J
tert-Amyl Methyl Ether (TAME)	9.56	0.50	0.13	µg/L	10.0	ND	95.6		70-130	4.93		30	
Benzene	9.22	1.0	0.18	µg/L	10.0	ND	92.2		70-130	0.217		30	
Bromobenzene	8.25	1.0	0.15	µg/L	10.0	ND	82.5		70-130	0.974		30	
Bromochloromethane	10.3	1.0	0.28	µg/L	10.0	ND	103		70-130	4.07		30	
Bromodichloromethane	9.08	0.50	0.16	µg/L	10.0	ND	90.8		70-130	1.64		30	
Bromoform	7.08	1.0	0.41	µg/L	10.0	ND	70.8		70-130	6.26		30	
Bromomethane	9.15	2.0	1.3	µg/L	10.0	ND	91.5		70-130	0.00		30	
2-Butanone (MEK)	107	20	1.7	µg/L	100	ND	107		70-130	14.5		30	
tert-Butyl Alcohol (TBA)	85.1	20	4.3	µg/L	100	ND	85.1		70-130	16.8		30	
n-Butylbenzene	8.54	1.0	0.15	µg/L	10.0	ND	85.4		70-130	8.42		30	
sec-Butylbenzene	8.72	1.0	0.13	µg/L	10.0	ND	87.2		70-130	5.18		30	
tert-Butylbenzene	8.58	1.0	0.14	µg/L	10.0	ND	85.8		70-130	5.26		30	
tert-Butyl Ethyl Ether (TBEE)	9.78	0.50	0.15	µg/L	10.0	ND	97.8		70-130	3.64		30	
Carbon Disulfide	86.7	5.0	1.6	µg/L	100	ND	86.7		70-130	4.35		30	
Carbon Tetrachloride	9.56	5.0	0.16	µg/L	10.0	ND	95.6		70-130	1.05		30	
Chlorobenzene	8.04	1.0	0.12	µg/L	10.0	ND	80.4		70-130	1.36		30	
Chlorodibromomethane	8.45	0.50	0.20	µg/L	10.0	ND	84.5		70-130	3.61		30	
Chloroethane	9.12	2.0	0.34	µg/L	10.0	ND	91.2		70-130	4.60		30	
Chloroform	9.27	2.0	0.14	µg/L	10.0	ND	92.7		70-130	1.41		30	
Chloromethane	9.10	2.0	0.50	µg/L	10.0	ND	91.0		70-130	6.82		30	
2-Chlorotoluene	8.19	1.0	0.15	µg/L	10.0	ND	81.9		70-130	6.56		30	
4-Chlorotoluene	8.29	1.0	0.15	µg/L	10.0	ND	82.9		70-130	3.69		30	
1,2-Dibromo-3-chloropropane (DBCP)	8.79	5.0	0.85	µg/L	10.0	ND	87.9		70-130	16.1		30	
1,2-Dibromoethane (EDB)	9.07	0.50	0.16	µg/L	10.0	ND	90.7		70-130	3.48		30	
Dibromomethane	9.08	1.0	0.32	µg/L	10.0	ND	90.8		70-130	5.08		30	
1,2-Dichlorobenzene	8.68	1.0	0.13	µg/L	10.0	ND	86.8		70-130	6.05		30	
1,3-Dichlorobenzene	8.58	1.0	0.14	µg/L	10.0	ND	85.8		70-130	6.87		30	
1,4-Dichlorobenzene	7.92	1.0	0.13	µg/L	10.0	ND	79.2		70-130	0.380		30	
trans-1,4-Dichloro-2-butene	7.31	2.0	1.5	µg/L	10.0	ND	73.1		70-130	10.8		30	
Dichlorodifluoromethane (Freon 12)	12.0	2.0	0.16	µg/L	10.0	ND	120		70-130	2.28		30	

UJ, MSL, MSRPD

RPD = 20

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
									70-130			
Batch B337731 - SW-846 5030B												
Matrix Spike Dup (B337731-MSD1)		**Source: 23D1781-01**			Prepared: 04/20/23 Analyzed: 04/21/23					RPD = 20		
1,1-Dichloroethane	9.55	1.0	0.14	µg/L	10.0	ND	95.5		70-130	3.73	30	
1,2-Dichloroethane	9.68	1.0	0.30	µg/L	10.0	ND	96.8		70-130	0.934	30	
1,1-Dichloroethylene	9.66	1.0	0.14	µg/L	10.0	ND	96.6		70-130	5.31	30	
cis-1,2-Dichloroethylene	14.1	1.0	0.14	µg/L	10.0	6.24	78.2		70-130	3.22	30	
trans-1,2-Dichloroethylene	9.11	1.0	0.17	µg/L	10.0	ND	91.1		70-130	5.18	30	
1,2-Dichloropropane	9.40	1.0	0.19	µg/L	10.0	ND	94.0		70-130	3.90	30	
1,3-Dichloropropane	9.63	0.50	0.12	µg/L	10.0	ND	96.3		70-130	3.92	30	
2,2-Dichloropropane UJ, MSL	6.23	1.0	0.35	µg/L	10.0	ND	**62.3**	*	70-130	0.644	30	MS-09
1,1-Dichloropropene	9.57	2.0	0.15	µg/L	10.0	ND	95.7		70-130	0.105	30	
cis-1,3-Dichloropropene	8.14	0.50	0.16	µg/L	10.0	ND	81.4		70-130	1.99	30	
trans-1,3-Dichloropropene	7.92	0.50	0.14	µg/L	10.0	ND	79.2		70-130	0.253	30	
Diethyl Ether	9.64	2.0	0.14	µg/L	10.0	ND	96.4		70-130	3.27	30	
Diisopropyl Ether (DIPE)	9.98	0.50	0.20	µg/L	10.0	ND	99.8		70-130	1.82	30	
1,4-Dioxane	89.6	50	18	µg/L	100	ND	89.6		70-130	15.2	30	
Ethylbenzene	8.55	1.0	0.22	µg/L	10.0	ND	85.5		70-130	4.67	30	
Hexachlorobutadiene	8.62	0.60	0.47	µg/L	10.0	ND	86.2		70-130	4.75	30	
2-Hexanone (MBK)	98.3	10	1.2	µg/L	100	ND	98.3		70-130	20.8	30	
Isopropylbenzene (Cumene)	8.18	1.0	0.15	µg/L	10.0	ND	81.8		70-130	2.73	30	
p-Isopropyltoluene (p-Cymene)	8.39	1.0	0.13	µg/L	10.0	ND	83.9		70-130	5.01	30	
Methyl Acetate UJ, MSL	6.17	1.0	0.61	µg/L	10.0	ND	**61.7**	*	70-130	7.05	30	MS-09
Methyl tert-Butyl Ether (MTBE)	9.52	1.0	0.17	µg/L	10.0	ND	95.2		70-130	3.64	30	
Methyl Cyclohexane	9.91	1.0	0.16	µg/L	10.0	ND	99.1		70-130	4.96	30	
Methylene Chloride	9.23	5.0	0.18	µg/L	10.0	0.230	90.0		70-130	4.09	30	
4-Methyl-2-pentanone (MIBK)	93.1	10	1.3	µg/L	100	ND	93.1		70-130	16.3	30	
Naphthalene UJ, MSL	5.84	2.0	0.38	µg/L	10.0	ND	**58.4**	*	70-130	21.6	30	MS-09
n-Propylbenzene	8.37	1.0	0.12	µg/L	10.0	ND	83.7		70-130	5.52	30	
Styrene	7.74	1.0	0.15	µg/L	10.0	ND	77.4		70-130	1.69	30	
1,1,1,2-Tetrachloroethane	8.50	1.0	0.16	µg/L	10.0	ND	85.0		70-130	0.472	30	
1,1,2,2-Tetrachloroethane	8.22	0.50	0.14	µg/L	10.0	ND	82.2		70-130	9.29	30	
Tetrachloroethylene J-, MSL	40.7	1.0	0.17	µg/L	10.0	35.9	**48.1**	*	70-130	11.7	30	MS-19
Tetrahydrofuran	10.2	10	0.49	µg/L	10.0	ND	102		70-130	3.68	30	
Toluene	8.98	1.0	0.22	µg/L	10.0	ND	89.8		70-130	4.32	30	
1,2,3-Trichlorobenzene UJ, MSL	6.92	5.0	0.34	µg/L	10.0	ND	**69.2**	*	70-130	16.6	30	MS-09
1,2,4-Trichlorobenzene	7.34	1.0	0.30	µg/L	10.0	ND	73.4		70-130	14.5	30	
1,3,5-Trichlorobenzene	8.80	1.0	0.21	µg/L	10.0	ND	88.0		70-130	4.77	30	
1,1,1-Trichloroethane	9.89	1.0	0.15	µg/L	10.0	ND	98.9		70-130	0.609	30	
1,1,2-Trichloroethane	9.11	1.0	0.19	µg/L	10.0	ND	91.1		70-130	1.55	30	
Trichloroethylene	11.9	1.0	0.17	µg/L	10.0	3.88	80.2		70-130	7.52	30	
Trichlorofluoromethane (Freon 11)	10.2	2.0	0.15	µg/L	10.0	ND	102		70-130	2.67	30	
1,2,3-Trichloropropane	10.3	2.0	0.28	µg/L	10.0	ND	103		70-130	10.2	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.44	1.0	0.21	µg/L	10.0	ND	94.4		70-130	2.68	30	
1,2,4-Trimethylbenzene	8.10	1.0	0.20	µg/L	10.0	ND	81.0		70-130	2.63	30	
1,3,5-Trimethylbenzene	7.94	1.0	0.15	µg/L	10.0	ND	79.4		70-130	0.759	30	
Vinyl Chloride	12.4	2.0	0.24	µg/L	10.0	1.33	110		70-130	3.88	30	
m+p Xylene	16.8	2.0	0.49	µg/L	20.0	ND	83.8		70-130	4.51	20	
o-Xylene	8.14	1.0	0.24	µg/L	10.0	ND	81.4		70-130	2.87	30	
Surrogate: 1,2-Dichloroethane-d4	*28.3*			µg/L	25.0		113		70-130			
Surrogate: Toluene-d8	*24.5*			µg/L	25.0		98.2		70-130			
Surrogate: 4-Bromofluorobenzene	*23.2*			µg/L	25.0		92.6		70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

70-130

rpd = 20

Batch B337731 - SW-846 5030B

Matrix Spike Dup (B337731-MSD2) **Source: 23D1781-03** Prepared: 04/20/23 Analyzed: 04/21/23

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Acetone	96.8	50	2.0	µg/L	100	ND	96.8		70-130	17.2	30	
Acrylonitrile	9.03	5.0	0.47	µg/L	10.0	ND	90.3		70-130	7.47	30	
tert-Amyl Methyl Ether (TAME)	9.41	0.50	0.13	µg/L	10.0	ND	94.1		70-130	6.81	30	
Benzene	9.21	1.0	0.18	µg/L	10.0	ND	92.1		70-130	0.872	30	
Bromobenzene	8.51	1.0	0.15	µg/L	10.0	ND	85.1		70-130	0.00	30	
Bromochloromethane	10.5	1.0	0.28	µg/L	10.0	ND	105		70-130	8.04	30	
Bromodichloromethane	9.49	0.50	0.16	µg/L	10.0	ND	94.9		70-130	2.67	30	
Bromoform	7.34	1.0	0.41	µg/L	10.0	ND	73.4		70-130	8.08	30	
Bromomethane	7.17	2.0	1.3	µg/L	10.0	ND	71.7		70-130	12.4	30	
2-Butanone (MEK)	98.6	20	1.7	µg/L	100	ND	98.6		70-130	15.1	30	
tert-Butyl Alcohol (TBA) J, MSL, MSRPD	79.1	20	4.3	µg/L	100	ND	79.1		70-130	23.9	30	
n-Butylbenzene	8.57	1.0	0.15	µg/L	10.0	ND	85.7		70-130	1.53	30	
sec-Butylbenzene	8.86	1.0	0.13	µg/L	10.0	ND	88.6		70-130	0.226	30	
tert-Butylbenzene	8.65	1.0	0.14	µg/L	10.0	ND	86.5		70-130	0.580	30	
tert-Butyl Ethyl Ether (TBEE)	9.75	0.50	0.15	µg/L	10.0	ND	97.5		70-130	3.34	30	
Carbon Disulfide	88.4	5.0	1.6	µg/L	100	ND	88.4		70-130	2.34	30	
Carbon Tetrachloride	10.1	5.0	0.16	µg/L	10.0	ND	101		70-130	1.28	30	
Chlorobenzene	8.31	1.0	0.12	µg/L	10.0	ND	83.1		70-130	3.43	30	
Chlorodibromomethane	8.61	0.50	0.20	µg/L	10.0	ND	86.1		70-130	1.76	30	
Chloroethane	9.59	2.0	0.34	µg/L	10.0	ND	95.9		70-130	5.38	30	
Chloroform	9.54	2.0	0.14	µg/L	10.0	ND	95.4		70-130	3.30	30	
Chloromethane	8.08	2.0	0.50	µg/L	10.0	ND	80.8		70-130	8.42	30	
2-Chlorotoluene	8.57	1.0	0.15	µg/L	10.0	ND	85.7		70-130	2.88	30	
4-Chlorotoluene	8.51	1.0	0.15	µg/L	10.0	ND	85.1		70-130	0.117	30	
1,2-Dibromo-3-chloropropane (DBCP) UJ, MSRPD	8.16	5.0	0.85	µg/L	10.0	ND	81.6		70-130	**79.9**	30	MS-23
1,2-Dibromoethane (EDB)	9.14	0.50	0.16	µg/L	10.0	ND	91.4		70-130	1.32	30	
Dibromomethane	8.97	1.0	0.32	µg/L	10.0	ND	89.7		70-130	10.8	30	
1,2-Dichlorobenzene	8.72	1.0	0.13	µg/L	10.0	ND	87.2		70-130	1.03	30	
1,3-Dichlorobenzene	8.63	1.0	0.14	µg/L	10.0	ND	86.3		70-130	0.578	30	
1,4-Dichlorobenzene	8.19	1.0	0.13	µg/L	10.0	ND	81.9		70-130	1.23	30	
trans-1,4-Dichloro-2-butene UJ, MSL	4.08	2.0	1.5	µg/L	10.0	ND	**40.8**	*	70-130	16.2	30	MS-09
Dichlorodifluoromethane (Freon 12)	12.1	2.0	0.16	µg/L	10.0	ND	121		70-130	0.496	30	
1,1-Dichloroethane	9.50	1.0	0.14	µg/L	10.0	ND	95.0		70-130	2.99	30	
1,2-Dichloroethane	9.94	1.0	0.30	µg/L	10.0	ND	99.4		70-130	2.19	30	
1,1-Dichloroethylene	9.79	1.0	0.14	µg/L	10.0	ND	97.9		70-130	3.32	30	
cis-1,2-Dichloroethylene	9.30	1.0	0.14	µg/L	10.0	ND	93.0		70-130	0.756	30	
trans-1,2-Dichloroethylene	9.08	1.0	0.17	µg/L	10.0	ND	90.8		70-130	0.774	30	
1,2-Dichloropropane	9.14	1.0	0.19	µg/L	10.0	ND	91.4		70-130	3.65	30	
1,3-Dichloropropane	9.53	0.50	0.12	µg/L	10.0	ND	95.3		70-130	1.56	30	
2,2-Dichloropropane UJ, MSL	6.46	1.0	0.35	µg/L	10.0	ND	**64.6**	*	70-130	7.05	30	MS-09
1,1-Dichloropropene	9.54	2.0	0.15	µg/L	10.0	ND	95.4		70-130	0.948	30	
cis-1,3-Dichloropropene	8.28	0.50	0.16	µg/L	10.0	ND	82.8		70-130	0.971	30	
trans-1,3-Dichloropropene	8.27	0.50	0.14	µg/L	10.0	ND	82.7		70-130	6.49	30	
Diethyl Ether	9.34	2.0	0.14	µg/L	10.0	ND	93.4		70-130	0.214	30	
Diisopropyl Ether (DIPE)	10.1	0.50	0.20	µg/L	10.0	ND	101		70-130	3.32	30	
1,4-Dioxane	79.9	50	18	µg/L	100	ND	79.9		70-130	9.94	30	
Ethylbenzene	8.87	1.0	0.22	µg/L	10.0	ND	88.7		70-130	0.00	30	
Hexachlorobutadiene	9.73	0.60	0.47	µg/L	10.0	ND	97.3		70-130	11.2	30	
2-Hexanone (MBK) sample ND, %R ok - no quals	91.2	10	1.2	µg/L	100	ND	91.2		70-130	24.8	30	
Isopropylbenzene (Cumene)	8.50	1.0	0.15	µg/L	10.0	ND	85.0		70-130	0.00	30	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
							70-130					
Batch B337731 - SW-846 5030B												
Matrix Spike Dup (B337731-MSD2)	**Source: 23D1781-03**				Prepared: 04/20/23 Analyzed: 04/21/23							
p-Isopropyltoluene (p-Cymene)	8.61	1.0	0.13	µg/L	10.0	ND	86.1		70-130	1.17	30	
Methyl Acetate UJ, MSL	5.89	1.0	0.61	µg/L	10.0	ND	**58.9**	*	70-130	12.4	30	MS-09
Methyl tert-Butyl Ether (MTBE)	9.38	1.0	0.17	µg/L	10.0	ND	93.8		70-130	5.36	30	
Methyl Cyclohexane	9.69	1.0	0.16	µg/L	10.0	ND	96.9		70-130	4.74	30	
Methylene Chloride	9.68	5.0	0.18	µg/L	10.0	ND	96.8		70-130	6.07	30	
4-Methyl-2-pentanone (MIBK)	92.4	10	1.3	µg/L	100	ND	92.4		70-130	14.1	30	
Naphthalene UJ, MSL	5.49	2.0	0.38	µg/L	10.0	ND	**54.9**	*	70-130	8.55	30	MS-09
n-Propylbenzene	8.53	1.0	0.12	µg/L	10.0	ND	85.3		70-130	2.32	30	
Styrene	7.97	1.0	0.15	µg/L	10.0	ND	79.7		70-130	0.874	30	
1,1,1,2-Tetrachloroethane	8.89	1.0	0.16	µg/L	10.0	ND	88.9		70-130	1.01	30	
1,1,2,2-Tetrachloroethane	8.20	0.50	0.14	µg/L	10.0	ND	82.0		70-130	9.05	30	
Tetrachloroethylene	9.96	1.0	0.17	µg/L	10.0	ND	99.6		70-130	3.89	30	
Tetrahydrofuran	9.66	10	0.49	µg/L	10.0	ND	96.6		70-130	11.4	30	J
Toluene	9.43	1.0	0.22	µg/L	10.0	ND	94.3		70-130	0.529	30	
1,2,3-Trichlorobenzene	7.04	5.0	0.34	µg/L	10.0	ND	70.4		70-130	6.91	30	
1,2,4-Trichlorobenzene	7.42	1.0	0.30	µg/L	10.0	ND	74.2		70-130	7.99	30	
1,3,5-Trichlorobenzene	9.05	1.0	0.21	µg/L	10.0	ND	90.5		70-130	3.83	30	
1,1,1-Trichloroethane	9.94	1.0	0.15	µg/L	10.0	ND	99.4		70-130	1.70	30	
1,1,2-Trichloroethane	9.41	1.0	0.19	µg/L	10.0	ND	94.1		70-130	4.57	30	
Trichloroethylene	9.08	1.0	0.17	µg/L	10.0	ND	90.8		70-130	3.04	30	
Trichlorofluoromethane (Freon 11)	10.4	2.0	0.15	µg/L	10.0	ND	104		70-130	6.56	30	
1,2,3-Trichloropropane	9.38	2.0	0.28	µg/L	10.0	ND	93.8		70-130	6.04	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.77	1.0	0.21	µg/L	10.0	ND	97.7		70-130	5.36	30	
1,2,4-Trimethylbenzene	8.72	1.0	0.20	µg/L	10.0	ND	87.2		70-130	3.86	30	
1,3,5-Trimethylbenzene	8.36	1.0	0.15	µg/L	10.0	ND	83.6		70-130	2.13	30	
Vinyl Chloride	11.0	2.0	0.24	µg/L	10.0	ND	110		70-130	1.64	30	
m+p Xylene	17.6	2.0	0.49	µg/L	20.0	ND	87.8		70-130	1.43	20	
o-Xylene	8.27	1.0	0.24	µg/L	10.0	ND	82.7		70-130	1.92	30	
Surrogate: 1,2-Dichloroethane-d4	*28.5*			µg/L	25.0		114		70-130			
Surrogate: Toluene-d8	*25.7*			µg/L	25.0		103		70-130			
Surrogate: 4-Bromofluorobenzene	*23.4*			µg/L	25.0		93.7		70-130			

RPD < 50 - all within limits

Sample ID: 828120MW210015/DUP 828120

Compund	Result	LabQual	Dup	LabQual	RPD
cis-1,2-Dichloroethene	6.2		5.7		8.403361
Tetrachloroethene	36		36		0
Trichloroethene	3.9		3.3		16.66667
Vinyl chloride	1.3	J	1.4	J	7.407407

The following laboratory data qualifiers or data review qualifiers are used in the final data presentation:

U = target analyte is not detected at or above the reporting limit
J = concentration is estimated
UJ = target analyte is not detected, value is estimated
J+ = concentration is estimated, potentially biased high
J- = concentration is estimated, potentially biased low

Results are interpreted to be usable as reported by the laboratory or as qualified in the following section.

2.0 POTENTIAL DATA LIMITATIONS

Based on the Category A Review the data meet the data quality objectives; however, the following potential limitations were identified:

VOCs by 8260D

Reporting limits for bromomethane in sample 828120HA114012 and its associated field duplicate, 828120DUP, were qualified estimated (UJ) based on low recovery in the associated MS/MSD. The qualified results are included in Table 3 with reason code MSL.

Reporting limits for 1,2,3-trichlorobenzene, chloromethane, dichlorodifluoromethane (Freon 12), 1,1-dichloroethene, and 2,2-dichloropropane in sample 828120MW210012 and its associated field duplicate, 828120DUP2, were qualified estimated (UJ) based on low recovery in the associated MS/MSD. The qualified results are included in Table 3 with reason code MSL.

Results for vinyl chloride in sample 828120MW210012 and its associated field duplicate, 828120DUP2, were qualified estimated (J+) with potential high bias based on high recoveries in the associated MS/MSD and LCS/LCSD. Qualified results are included in Table 3 with reason code MSH.

Results for cis-1,2-dichloroethene in sample 828120MW210012 and its associated field duplicate, 828120DUP2, were qualified estimated (J-) with potential low bias based on low recovery in the associated MS/MSD. Qualified results are included in Table 3 with reason code MSL.

3.0 ADDITIONAL QC EXCEEDANCES AND OBSERVATIONS

Reporting limits in samples 828120MW06B018, 828120MW08B019, and 828120MW06009 are elevated due to dilutions as indicated in Table 2.

Reference:

NYSDEC, 2005. "Analytical Services Protocols"; July 2005.

Data Validator: Kassidy Patoine

Date: 12/2/2022

Reviewed by: Casey Cormier

Date: 1/23/2023

Reviewed by: Julie Ricardi

Date: 2/9/2023

Standard Table Notes:

Sample Type (QC Code)

FS – field sample

FD – field duplicate

TB – trip blank

EB – equipment blank

FB – field blank

Matrix

GW – ground water

BW – blank water

TW – tap water

SV – soil vapor

SED - sediment

Units

mg/L – milligrams per liter

ng/L – nanograms per liter

µg/L – micrograms per liter

mg/kg – milligrams per kilogram

µg/kg – micrograms per kilogram

µg/m^3 – micrograms per cubic meter

Qualifiers

U – not detected above quantitation limit

J – estimated quantity

J+ - estimated quantity, biased high

J- - estimated quantity, biased low

R – data unusable

Fraction

T – total

D – dissolved

N – normal

Qualification Reason Codes

BL1 – method blank qualifier

BL2 – field or trip blank qualifier

CCV – continuing calibration verification recovery outside limits

CCV%D – continuing calibration verification percent difference exceeds goal

CCVRRF – continuing calibration relative response factor low

CI – chromatographic interference present

DCPD – dual column percent difference exceeds limit

E – result exceeds calibration range

FD – field duplicate precision goal exceeded

FP – false positive interference

HT – holding time for prep or analysis exceeded

HTG – holding time for prep or analysis grossly exceeded

ICV – initial calibration verification recovery outside limit

ICVRRF – initial calibration verification relative response factor low

ICVRSD – initial calibration verification % relative standard deviation exceeds goal

ISH – internal standard response greater than limit

ISL – internal standard response less than limit

LCSH – laboratory control sample recovery high

LCSL – laboratory control sample recovery low

LCSRPD – laboratory control sample/duplicate relative % difference precision goal exceeded

LD – lab duplicate precision goal exceeded

MSH – matrix spike and/or MS duplicate recovery high

MSL – matrix spike and/or MS duplicate recovery low

MSRPD – matrix spike/duplicate relative % difference precision goal exceeded

N – analyte identification is not certain

PEM – performance evaluation mixture exceeds limit

PM – sample percent moisture exceeds EPA guideline

SD – serial dilution result exceeds percent difference limit

SP – sample preservation/collection does not meet method requirement

SSH – surrogate recovery high

SSL – surrogate recovery low

TD – dissolved concentration exceeds total

TABLE 1 - SUMMARY OF SAMPLES AND ANALYTICAL METHODS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

					Analysis Method	SW8260	SW6010	SW6010	RSK175	E300.0	SM2320B
					Method Class	VOCs	Metals	Metals	Diss Gases	Anions	Alkalinity
					Fraction	N	D	T	N	N	N
SDG	**Location**	**Field Sample ID**	**Media**	**Sample Date**	**Qc Code**	Count	Count	Count	Count	Count	Count
22J3631	HA-114	828120DUP	GW	10/25/2022	FD	78					
22J3631	HA-114	828120HA114012	GW	10/25/2022	FS	78	1	2	3	3	1
22J3631	MW-6B	828120MW06B018	GW	10/25/2022	FS	78					
22J3631	MW-8B	828120MW08B019	GW	10/25/2022	FS	78					
22J3631	QC	828120FB	BW	10/25/2022	FB	78					
22J3631	QC	828120TB	BW	10/25/2022	TB	78					
22J3896	MW-111I	828120MW111I020	GW	10/26/2022	FS	78	1	2	3	3	1
22J3896	MW-210	828120DUP2	GW	10/26/2022	FD	78					
22J3896	MW-210	828120MW210012	GW	10/26/2022	FS	78	1	2	3	3	1
22J3896	MW-6	828120MW06009	GW	10/26/2022	FS	78					
22J3896	MW-9B	828120MW09B018	GW	10/26/2022	FS	78					
22J3896	QC	828120FB2	BW	10/26/2022	FB	78					
22J4221	EW-1	828120EW01026	GW	10/27/2022	FS	78	1	2	3	2	1
22J4221	MW-9	828120MW09008	GW	10/27/2022	FS	78	1	2	3	2	1
22J4221	QC	828120FB3	BW	10/27/2022	FB	78					

Created by: KLD 1/9/23
Checked by: KRP 1/17/23

TABLE 1 - SUMMARY OF SAMPLES AND ANALYTICAL METHODS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

					Analysis Method	SM4500 CL B	SM4500-S2-F	SM5310B
					Method Class	Chloride	Sulfide	TOC
					Fraction	N	N	N
SDG	**Location**	**Field Sample ID**	**Media**	**Sample Date**	**Qc Code**	Count	Count	Count
22J3631	HA-114	828120DUP	GW	10/25/2022	FD			
22J3631	HA-114	828120HA114012	GW	10/25/2022	FS		1	1
22J3631	MW-6B	828120MW06B018	GW	10/25/2022	FS			
22J3631	MW-8B	828120MW08B019	GW	10/25/2022	FS			
22J3631	QC	828120FB	BW	10/25/2022	FB			
22J3631	QC	828120TB	BW	10/25/2022	TB			
22J3896	MW-111I	828120MW111I020	GW	10/26/2022	FS		1	1
22J3896	MW-210	828120DUP2	GW	10/26/2022	FD			
22J3896	MW-210	828120MW210012	GW	10/26/2022	FS		1	1
22J3896	MW-6	828120MW06009	GW	10/26/2022	FS			
22J3896	MW-9B	828120MW09B018	GW	10/26/2022	FS			
22J3896	QC	828120FB2	BW	10/26/2022	FB			
22J4221	EW-1	828120EW01026	GW	10/27/2022	FS	1	1	1
22J4221	MW-9	828120MW09008	GW	10/27/2022	FS	1	1	1
22J4221	QC	828120FB3	BW	10/27/2022	FB			

Created by: KLD 1/9/23
Checked by: KRP 1/17/23

TABLE 2 - SUMMARY ANALYTICAL RESULTS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	EW-1		HA-114		HA-114		MW-111I	
		Lab SDG	22J4221		22J3631		22J3631		22J3896	
		Field Sample Date	10/27/2022		10/25/2022		10/25/2022		10/26/2022	
		Field Sample ID	828120EW01026		828120DUP		828120HA114012		828120MW111I020	
		QC Code	FS		FD		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	1,1,1,2-Tetrachloroethane	UG/L	1	U	1	U	1	U	1	U
SW8260	1,1,1-Trichloroethane	UG/L	1	U	1	U	1	U	1	U
SW8260	1,1,2,2-Tetrachloroethane	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	UG/L	2	U	1	U	1	U	2	U
SW8260	1,1,2-Trichloroethane	UG/L	1	U	1	U	1	U	1	U
SW8260	1,1-Dichloroethane	UG/L	1	U	1	U	1	U	1	U
SW8260	1,1-Dichloroethene	UG/L	1	U	1	U	1	U	0.22	J
SW8260	1,1-Dichloropropene	UG/L	2	U	2	U	2	U	2	U
SW8260	1,2,3-Trichlorobenzene	UG/L	5	U	5	U	5	U	5	U
SW8260	1,2,3-Trichloropropane	UG/L	2	U	2	U	2	U	2	U
SW8260	1,2,4-Trichlorobenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	1,2,4-Trimethylbenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	1,2-Dibromo-3-chloropropane	UG/L	5	U	5	U	5	U	5	U
SW8260	1,2-Dibromoethane	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	1,2-Dichlorobenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	1,2-Dichloroethane	UG/L	1	U	1	U	1	U	1	U
SW8260	1,2-Dichloropropane	UG/L	1	U	1	U	1	U	1	U
SW8260	1,3,5-Trichlorobenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	1,3,5-Trimethylbenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	1,3-Dichlorobenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	1,3-Dichloropropane	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	1,4-Dichlorobenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	1,4-Dioxane	UG/L	50	U	50	U	50	U	50	U
SW8260	2,2-Dichloropropane	UG/L	1	U	1	U	1	U	1	U
SW8260	2-Butanone	UG/L	20	U	20	U	20	U	20	U

TABLE 2 - SUMMARY ANALYTICAL RESULTS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	EW-1		HA-114		HA-114		MW-111I	
		Lab SDG	22J4221		22J3631		22J3631		22J3896	
		Field Sample Date	10/27/2022		10/25/2022		10/25/2022		10/26/2022	
		Field Sample ID	828120EW01026		828120DUP		828120HA114012		828120MW111I020	
		QC Code	FS		FD		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	2-Chlorotoluene	UG/L	1	U	1	U	1	U	1	U
SW8260	2-Hexanone	UG/L	10	U	10	U	10	U	10	U
SW8260	4-Chlorotoluene	UG/L	1	U	1	U	1	U	1	U
SW8260	4-iso-Propyltoluene	UG/L	1	U	1	U	1	U	1	U
SW8260	4-Methyl-2-pentanone	UG/L	10	U	10	U	10	U	10	U
SW8260	Acetic acid, methyl ester	UG/L	1	U	1	U	1	U	1	U
SW8260	Acetone	UG/L	50	U	50	U	50	U	50	U
SW8260	Acrylonitrile	UG/L	5	U	5	U	5	U	5	U
SW8260	Benzene	UG/L	1	U	1	U	1	U	1	U
SW8260	Bromobenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	Bromochloromethane	UG/L	1	U	1	U	1	U	1	U
SW8260	Bromodichloromethane	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	Bromoform	UG/L	2	U	1	U	1	U	2	U
SW8260	Bromomethane	UG/L	2	U	2	UJ	2	UJ	2	U
SW8260	Butane, 2-methoxy-2-methyl-	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	Carbon disulfide	UG/L	5	U	5	U	5	U	5	U
SW8260	Carbon tetrachloride	UG/L	5	U	5	U	5	U	5	U
SW8260	Chlorobenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	Chloroethane	UG/L	2	U	2	U	2	U	2	U
SW8260	Chloroform	UG/L	2	U	2	U	2	U	2	U
SW8260	Chloromethane	UG/L	2	U	2	U	2	U	2	U
SW8260	cis-1,2-Dichloroethene	UG/L	0.68	J	31		31		110	
SW8260	cis-1,3-Dichloropropene	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	Dibromochloromethane	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	Dibromomethane	UG/L	1	U	1	U	1	U	1	U

TABLE 2 - SUMMARY ANALYTICAL RESULTS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	EW-1		HA-114		HA-114		MW-111I	
		Lab SDG	22J4221		22J3631		22J3631		22J3896	
		Field Sample Date	10/27/2022		10/25/2022		10/25/2022		10/26/2022	
		Field Sample ID	828120EW01026		828120DUP		828120HA114012		828120MW111I020	
		QC Code	FS		FD		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	Dichlorodifluoromethane	UG/L	2	U	2	U	2	U	2	U
SW8260	Diethyl ether	UG/L	2	U	2	U	2	U	2	U
SW8260	Ethyl-t-Butyl Ether	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	Ethylbenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	Hexachlorobutadiene	UG/L	0.6	U	0.6	U	0.6	U	0.6	U
SW8260	Isopropyl ether	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	Isopropylbenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	Methyl cyclohexane	UG/L	1	U	1	U	1	U	0.26	J
SW8260	Methyl Tertbutyl Ether	UG/L	1	U	1	U	1	U	1	U
SW8260	Methylene chloride	UG/L	5	U	5	U	5	U	5	U
SW8260	n-Butylbenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	Naphthalene	UG/L	2	U	2	U	2	U	2	U
SW8260	Propylbenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	sec-Butylbenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	Styrene	UG/L	1	U	1	U	1	U	1	U
SW8260	t-Butyl alcohol	UG/L	20	U	20	U	20	U	20	U
SW8260	tert-Butylbenzene	UG/L	1	U	1	U	1	U	1	U
SW8260	Tetrachloroethene	UG/L	45		170		170		140	
SW8260	Tetrahydrofuran	UG/L	10	U	10	U	10	U	10	U
SW8260	Toluene	UG/L	1	U	1	U	1	U	1	U
SW8260	trans-1,2-Dichloroethene	UG/L	1	U	0.39	J	0.45	J	1	U
SW8260	trans-1,3-Dichloropropene	UG/L	0.5	U	0.5	U	0.5	U	0.5	U
SW8260	trans-1,4-Dichloro-2-butene	UG/L	2	U	2	U	2	U	2	U
SW8260	Trichloroethene	UG/L	1.4		30		31		40	
SW8260	Trichlorofluoromethane	UG/L	2	U	2	U	2	U	2	U

TABLE 2 - SUMMARY ANALYTICAL RESULTS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	EW-1		HA-114		HA-114		MW-111I	
		Lab SDG	22J4221		22J3631		22J3631		22J3896	
		Field Sample Date	10/27/2022		10/25/2022		10/25/2022		10/26/2022	
		Field Sample ID	828120EW01026		828120DUP		828120HA114012		828120MW111I020	
		QC Code	FS		FD		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	Vinyl chloride	UG/L	2	U	1.3	J	1.4	J	14	
SW8260	Xylene, o	UG/L	1	U	1	U	1	U	1	U
SW8260	Xylenes (m&p)	UG/L	2	U	2	U	2	U	2	U

TABLE 2 - SUMMARY ANALYTICAL RESULTS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	MW-210		MW-210		MW-6		MW-6B	
		Lab SDG	22J3896		22J3896		22J3896		22J3631	
		Field Sample Date	10/26/2022		10/26/2022		10/26/2022		10/25/2022	
		Field Sample ID	828120DUP2		828120MW210012		828120MW06009		828120MW06B018	
		QC Code	FD		FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	1,1,1,2-Tetrachloroethane	UG/L	1	U	1	U	50	U	10	U
SW8260	1,1,1-Trichloroethane	UG/L	1	U	1	U	50	U	10	U
SW8260	1,1,2,2-Tetrachloroethane	UG/L	0.5	U	0.5	U	25	U	5	U
SW8260	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	UG/L	2	U	2	U	50	U	10	U
SW8260	1,1,2-Trichloroethane	UG/L	1	U	1	U	50	U	10	U
SW8260	1,1-Dichloroethane	UG/L	1	U	1	U	50	U	10	U
SW8260	1,1-Dichloroethene	UG/L	1	UJ	1	UJ	50	U	10	U
SW8260	1,1-Dichloropropene	UG/L	2	U	2	U	100	U	20	U
SW8260	1,2,3-Trichlorobenzene	UG/L	5	UJ	5	UJ	250	U	50	U
SW8260	1,2,3-Trichloropropane	UG/L	2	U	2	U	100	U	20	U
SW8260	1,2,4-Trichlorobenzene	UG/L	1	U	1	U	50	U	10	U
SW8260	1,2,4-Trimethylbenzene	UG/L	1	U	1	U	50	U	10	U
SW8260	1,2-Dibromo-3-chloropropane	UG/L	5	U	5	U	250	U	50	U
SW8260	1,2-Dibromoethane	UG/L	0.5	U	0.5	U	25	U	5	U
SW8260	1,2-Dichlorobenzene	UG/L	1	U	1	U	50	U	10	U
SW8260	1,2-Dichloroethane	UG/L	1	U	1	U	50	U	10	U
SW8260	1,2-Dichloropropane	UG/L	1	U	1	U	50	U	10	U
SW8260	1,3,5-Trichlorobenzene	UG/L	1	U	1	U	50	U	10	U
SW8260	1,3,5-Trimethylbenzene	UG/L	1	U	1	U	50	U	10	U
SW8260	1,3-Dichlorobenzene	UG/L	1	U	1	U	50	U	10	U
SW8260	1,3-Dichloropropane	UG/L	0.5	U	0.5	U	25	U	5	U
SW8260	1,4-Dichlorobenzene	UG/L	1	U	1	U	50	U	10	U
SW8260	1,4-Dioxane	UG/L	50	U	50	U	2500	U	500	U
SW8260	2,2-Dichloropropane	UG/L	1	UJ	1	UJ	50	U	10	U
SW8260	2-Butanone	UG/L	20	U	20	U	1000	U	200	U

TABLE 2 - SUMMARY ANALYTICAL RESULTS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	MW-210		MW-210		MW-6		MW-6B	
		Lab SDG	22J3896		22J3896		22J3896		22J3631	
		Field Sample Date	10/26/2022		10/26/2022		10/26/2022		10/25/2022	
		Field Sample ID	828120DUP2		828120MW210012		828120MW06009		828120MW06B018	
		QC Code	FD		FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	2-Chlorotoluene	UG/L	1	U	1	U	50	U	10	U
SW8260	2-Hexanone	UG/L	10	U	10	U	500	U	100	U
SW8260	4-Chlorotoluene	UG/L	1	U	1	U	50	U	10	U
SW8260	4-iso-Propyltoluene	UG/L	1	U	1	U	50	U	10	U
SW8260	4-Methyl-2-pentanone	UG/L	10	U	10	U	500	U	100	U
SW8260	Acetic acid, methyl ester	UG/L	1	U	1	U	50	U	10	U
SW8260	Acetone	UG/L	50	U	50	U	2500	U	31	J
SW8260	Acrylonitrile	UG/L	5	U	5	U	250	U	50	U
SW8260	Benzene	UG/L	1	U	1	U	50	U	10	U
SW8260	Bromobenzene	UG/L	1	U	1	U	50	U	10	U
SW8260	Bromochloromethane	UG/L	1	U	1	U	50	U	10	U
SW8260	Bromodichloromethane	UG/L	0.5	U	0.5	U	25	U	5	U
SW8260	Bromoform	UG/L	2	U	2	U	50	U	10	U
SW8260	Bromomethane	UG/L	2	U	2	U	100	U	20	U
SW8260	Butane, 2-methoxy-2-methyl-	UG/L	0.5	U	0.5	U	25	U	5	U
SW8260	Carbon disulfide	UG/L	5	U	5	U	250	U	50	U
SW8260	Carbon tetrachloride	UG/L	5	U	5	U	250	U	50	U
SW8260	Chlorobenzene	UG/L	1	U	1	U	50	U	10	U
SW8260	Chloroethane	UG/L	2	U	2	U	100	U	10	J
SW8260	Chloroform	UG/L	2	U	2	U	100	U	20	U
SW8260	Chloromethane	UG/L	2	UJ	2	UJ	100	U	20	U
SW8260	cis-1,2-Dichloroethene	UG/L	15	J-	16	J-	150		50	
SW8260	cis-1,3-Dichloropropene	UG/L	0.5	U	0.5	U	25	U	5	U
SW8260	Dibromochloromethane	UG/L	0.5	U	0.5	U	25	U	5	U
SW8260	Dibromomethane	UG/L	1	U	1	U	50	U	10	U

TABLE 2 - SUMMARY ANALYTICAL RESULTS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	MW-210		MW-210		MW-6		MW-6B	
		Lab SDG	22J3896		22J3896		22J3896		22J3631	
		Field Sample Date	10/26/2022		10/26/2022		10/26/2022		10/25/2022	
		Field Sample ID	828120DUP2		828120MW210012		828120MW06009		828120MW06B018	
		QC Code	FD		FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	Dichlorodifluoromethane	UG/L	2	UJ	2	UJ	100	U	20	U
SW8260	Diethyl ether	UG/L	2	U	2	U	100	U	20	U
SW8260	Ethyl-t-Butyl Ether	UG/L	0.5	U	0.5	U	25	U	5	U
SW8260	Ethylbenzene	UG/L	1	U	1	U	50	U	10	U
SW8260	Hexachlorobutadiene	UG/L	0.6	U	0.6	U	30	U	6	U
SW8260	Isopropyl ether	UG/L	0.5	U	0.5	U	25	U	5	U
SW8260	Isopropylbenzene	UG/L	1	U	1	U	50	U	10	U
SW8260	Methyl cyclohexane	UG/L	1	U	1	U	50	U	10	U
SW8260	Methyl Tertbutyl Ether	UG/L	1	U	1	U	50	U	10	U
SW8260	Methylene chloride	UG/L	5	U	5	U	250	U	50	U
SW8260	n-Butylbenzene	UG/L	1	U	1	U	50	U	10	U
SW8260	Naphthalene	UG/L	2	U	2	U	100	U	20	U
SW8260	Propylbenzene	UG/L	1	U	1	U	50	U	10	U
SW8260	sec-Butylbenzene	UG/L	1	U	1	U	50	U	10	U
SW8260	Styrene	UG/L	1	U	1	U	50	U	10	U
SW8260	t-Butyl alcohol	UG/L	20	U	20	U	1000	U	200	U
SW8260	tert-Butylbenzene	UG/L	1	U	1	U	50	U	10	U
SW8260	Tetrachloroethene	UG/L	49		50		2000		990	
SW8260	Tetrahydrofuran	UG/L	10	U	10	U	500	U	100	U
SW8260	Toluene	UG/L	1	U	1	U	50	U	10	U
SW8260	trans-1,2-Dichloroethene	UG/L	1	U	1	U	50	U	10	U
SW8260	trans-1,3-Dichloropropene	UG/L	0.5	U	0.5	U	25	U	5	U
SW8260	trans-1,4-Dichloro-2-butene	UG/L	2	U	2	U	100	U	20	U
SW8260	Trichloroethene	UG/L	9.8		9.8		240		63	
SW8260	Trichlorofluoromethane	UG/L	2	U	2	U	100	U	20	U

TABLE 2 - SUMMARY ANALYTICAL RESULTS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	MW-210		MW-210		MW-6		MW-6B	
		Lab SDG	22J3896		22J3896		22J3896		22J3631	
		Field Sample Date	10/26/2022		10/26/2022		10/26/2022		10/25/2022	
		Field Sample ID	828120DUP2		828120MW210012		828120MW06009		828120MW06B018	
		QC Code	FD		FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	Vinyl chloride	UG/L	3.4	J+	3.8	J+	26	J	3.7	J
SW8260	Xylene, o	UG/L	1	U	1	U	50	U	10	U
SW8260	Xylenes (m&p)	UG/L	2	U	2	U	100	U	20	U

TABLE 2 - SUMMARY ANALYTICAL RESULTS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	MW-8B		MW-9		MW-9B		QC	
		Lab SDG	22J3631		22J4221		22J3896		22J3631	
		Field Sample Date	10/25/2022		10/27/2022		10/26/2022		10/25/2022	
		Field Sample ID	828120MW08B019		828120MW09008		828120MW09B018		828120TB	
		QC Code	FS		FS		FS		TB	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	1,1,1,2-Tetrachloroethane	UG/L	5	U	1	U	1	U	1	U
SW8260	1,1,1-Trichloroethane	UG/L	5	U	1	U	1	U	1	U
SW8260	1,1,2,2-Tetrachloroethane	UG/L	2.5	U	0.5	U	0.5	U	0.5	U
SW8260	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	UG/L	5	U	2	U	1	U	1	U
SW8260	1,1,2-Trichloroethane	UG/L	5	U	1	U	1	U	1	U
SW8260	1,1-Dichloroethane	UG/L	5	U	1	U	1	U	1	U
SW8260	1,1-Dichloroethene	UG/L	5	U	1	U	1	U	1	U
SW8260	1,1-Dichloropropene	UG/L	10	U	2	U	2	U	2	U
SW8260	1,2,3-Trichlorobenzene	UG/L	25	U	5	U	5	U	5	U
SW8260	1,2,3-Trichloropropane	UG/L	10	U	2	U	2	U	2	U
SW8260	1,2,4-Trichlorobenzene	UG/L	5	U	1	U	1	U	1	U
SW8260	1,2,4-Trimethylbenzene	UG/L	5	U	1	U	1	U	1	U
SW8260	1,2-Dibromo-3-chloropropane	UG/L	25	U	5	U	5	U	5	U
SW8260	1,2-Dibromoethane	UG/L	2.5	U	0.5	U	0.5	U	0.5	U
SW8260	1,2-Dichlorobenzene	UG/L	5	U	1	U	1	U	1	U
SW8260	1,2-Dichloroethane	UG/L	5	U	1	U	1	U	1	U
SW8260	1,2-Dichloropropane	UG/L	5	U	1	U	1	U	1	U
SW8260	1,3,5-Trichlorobenzene	UG/L	5	U	1	U	1	U	1	U
SW8260	1,3,5-Trimethylbenzene	UG/L	5	U	1	U	1	U	1	U
SW8260	1,3-Dichlorobenzene	UG/L	5	U	1	U	1	U	1	U
SW8260	1,3-Dichloropropane	UG/L	2.5	U	0.5	U	0.5	U	0.5	U
SW8260	1,4-Dichlorobenzene	UG/L	5	U	1	U	1	U	1	U
SW8260	1,4-Dioxane	UG/L	250	U	50	U	50	U	50	U
SW8260	2,2-Dichloropropane	UG/L	5	U	1	U	1	U	1	U
SW8260	2-Butanone	UG/L	18	J	20	U	20	U	20	U

TABLE 2 - SUMMARY ANALYTICAL RESULTS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	MW-8B		MW-9		MW-9B		QC	
		Lab SDG	22J3631		22J4221		22J3896		22J3631	
		Field Sample Date	10/25/2022		10/27/2022		10/26/2022		10/25/2022	
		Field Sample ID	828120MW08B019		828120MW09008		828120MW09B018		828120TB	
		QC Code	FS		FS		FS		TB	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	2-Chlorotoluene	UG/L	5	U	1	U	1	U	1	U
SW8260	2-Hexanone	UG/L	50	U	10	U	10	U	10	U
SW8260	4-Chlorotoluene	UG/L	5	U	1	U	1	U	1	U
SW8260	4-iso-Propyltoluene	UG/L	5	U	1	U	1	U	1	U
SW8260	4-Methyl-2-pentanone	UG/L	50	U	10	U	10	U	10	U
SW8260	Acetic acid, methyl ester	UG/L	5	U	1	U	1	U	1	U
SW8260	Acetone	UG/L	14	J	50	U	50	U	50	U
SW8260	Acrylonitrile	UG/L	25	U	5	U	5	U	5	U
SW8260	Benzene	UG/L	5	U	1	U	1	U	1	U
SW8260	Bromobenzene	UG/L	5	U	1	U	1	U	1	U
SW8260	Bromochloromethane	UG/L	5	U	1	U	1	U	1	U
SW8260	Bromodichloromethane	UG/L	2.5	U	0.5	U	0.5	U	0.5	U
SW8260	Bromoform	UG/L	5	U	2	U	1	U	1	U
SW8260	Bromomethane	UG/L	10	U	2	U	2	U	2	U
SW8260	Butane, 2-methoxy-2-methyl-	UG/L	2.5	U	0.5	U	0.5	U	0.5	U
SW8260	Carbon disulfide	UG/L	25	U	5	U	5	U	5	U
SW8260	Carbon tetrachloride	UG/L	25	U	5	U	5	U	5	U
SW8260	Chlorobenzene	UG/L	5	U	1	U	1	U	1	U
SW8260	Chloroethane	UG/L	10	U	2	U	2	U	2	U
SW8260	Chloroform	UG/L	10	U	2	U	2	U	2	U
SW8260	Chloromethane	UG/L	10	U	2	U	2	U	2	U
SW8260	cis-1,2-Dichloroethene	UG/L	14		1	U	0.32	J	1	U
SW8260	cis-1,3-Dichloropropene	UG/L	2.5	U	0.5	U	0.5	U	0.5	U
SW8260	Dibromochloromethane	UG/L	2.5	U	0.5	U	0.5	U	0.5	U
SW8260	Dibromomethane	UG/L	5	U	1	U	1	U	1	U

TABLE 2 - SUMMARY ANALYTICAL RESULTS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	MW-8B		MW-9		MW-9B		QC	
		Lab SDG	22J3631		22J4221		22J3896		22J3631	
		Field Sample Date	10/25/2022		10/27/2022		10/26/2022		10/25/2022	
		Field Sample ID	828120MW08B019		828120MW09008		828120MW09B018		828120TB	
		QC Code	FS		FS		FS		TB	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	Dichlorodifluoromethane	UG/L	10	U	2	U	2	U	2	U
SW8260	Diethyl ether	UG/L	10	U	2	U	2	U	2	U
SW8260	Ethyl-t-Butyl Ether	UG/L	2.5	U	0.5	U	0.5	U	0.5	U
SW8260	Ethylbenzene	UG/L	5	U	1	U	1	U	1	U
SW8260	Hexachlorobutadiene	UG/L	3	U	0.6	U	0.6	U	0.6	U
SW8260	Isopropyl ether	UG/L	2.5	U	0.5	U	0.5	U	0.5	U
SW8260	Isopropylbenzene	UG/L	5	U	1	U	1	U	1	U
SW8260	Methyl cyclohexane	UG/L	5	U	1	U	1	U	1	U
SW8260	Methyl Tertbutyl Ether	UG/L	5	U	1	U	1	U	1	U
SW8260	Methylene chloride	UG/L	25	U	5	U	5	U	5	U
SW8260	n-Butylbenzene	UG/L	5	U	1	U	1	U	1	U
SW8260	Naphthalene	UG/L	10	U	2	U	2	U	2	U
SW8260	Propylbenzene	UG/L	5	U	1	U	1	U	1	U
SW8260	sec-Butylbenzene	UG/L	5	U	1	U	1	U	1	U
SW8260	Styrene	UG/L	5	U	1	U	1	U	1	U
SW8260	t-Butyl alcohol	UG/L	100	U	20	U	20	U	20	U
SW8260	tert-Butylbenzene	UG/L	5	U	1	U	1	U	1	U
SW8260	Tetrachloroethene	UG/L	380		4.6		1	U	1	U
SW8260	Tetrahydrofuran	UG/L	50	U	10	U	10	U	10	U
SW8260	Toluene	UG/L	5	U	1	U	1	U	1	U
SW8260	trans-1,2-Dichloroethene	UG/L	5	U	1	U	1	U	1	U
SW8260	trans-1,3-Dichloropropene	UG/L	2.5	U	0.5	U	0.5	U	0.5	U
SW8260	trans-1,4-Dichloro-2-butene	UG/L	10	U	2	U	2	U	2	U
SW8260	Trichloroethene	UG/L	16		0.51	J	1	U	1	U
SW8260	Trichlorofluoromethane	UG/L	10	U	2	U	2	U	2	U

TABLE 2 - SUMMARY ANALYTICAL RESULTS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	MW-8B		MW-9		MW-9B		QC	
		Lab SDG	22J3631		22J4221		22J3896		22J3631	
		Field Sample Date	10/25/2022		10/27/2022		10/26/2022		10/25/2022	
		Field Sample ID	828120MW08B019		828120MW09008		828120MW09B018		828120TB	
		QC Code	FS		FS		FS		TB	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	Vinyl chloride	UG/L	10	U	2	U	2	U	2	U
SW8260	Xylene, o	UG/L	5	U	1	U	1	U	1	U
SW8260	Xylenes (m&p)	UG/L	10	U	2	U	2	U	2	U

TABLE 2 - SUMMARY ANALYTICAL RESULTS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	QC		QC		QC	
		Lab SDG	22J3631		22J3896		22J4221	
		Field Sample Date	10/25/2022		10/26/2022		10/27/2022	
		Field Sample ID	828120FB		828120FB2		828120FB3	
		QC Code	FB		FB		FB	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	1,1,1,2-Tetrachloroethane	UG/L	1	U	1	U	1	U
SW8260	1,1,1-Trichloroethane	UG/L	1	U	1	U	1	U
SW8260	1,1,2,2-Tetrachloroethane	UG/L	0.5	U	0.5	U	0.5	U
SW8260	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	UG/L	1	U	2	U	2	U
SW8260	1,1,2-Trichloroethane	UG/L	1	U	1	U	1	U
SW8260	1,1-Dichloroethane	UG/L	1	U	1	U	1	U
SW8260	1,1-Dichloroethene	UG/L	1	U	1	U	1	U
SW8260	1,1-Dichloropropene	UG/L	2	U	2	U	2	U
SW8260	1,2,3-Trichlorobenzene	UG/L	5	U	5	U	5	U
SW8260	1,2,3-Trichloropropane	UG/L	2	U	2	U	2	U
SW8260	1,2,4-Trichlorobenzene	UG/L	1	U	1	U	1	U
SW8260	1,2,4-Trimethylbenzene	UG/L	1	U	1	U	1	U
SW8260	1,2-Dibromo-3-chloropropane	UG/L	5	U	5	U	5	U
SW8260	1,2-Dibromoethane	UG/L	0.5	U	0.5	U	0.5	U
SW8260	1,2-Dichlorobenzene	UG/L	1	U	1	U	1	U
SW8260	1,2-Dichloroethane	UG/L	1	U	1	U	1	U
SW8260	1,2-Dichloropropane	UG/L	1	U	1	U	1	U
SW8260	1,3,5-Trichlorobenzene	UG/L	1	U	1	U	1	U
SW8260	1,3,5-Trimethylbenzene	UG/L	1	U	1	U	1	U
SW8260	1,3-Dichlorobenzene	UG/L	1	U	1	U	1	U
SW8260	1,3-Dichloropropane	UG/L	0.5	U	0.5	U	0.5	U
SW8260	1,4-Dichlorobenzene	UG/L	1	U	1	U	1	U
SW8260	1,4-Dioxane	UG/L	50	U	50	U	50	U
SW8260	2,2-Dichloropropane	UG/L	1	U	1	U	1	U
SW8260	2-Butanone	UG/L	20	U	20	U	20	U

TABLE 2 - SUMMARY ANALYTICAL RESULTS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	QC		QC		QC	
		Lab SDG	22J3631		22J3896		22J4221	
		Field Sample Date	10/25/2022		10/26/2022		10/27/2022	
		Field Sample ID	828120FB		828120FB2		828120FB3	
		QC Code	FB		FB		FB	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	2-Chlorotoluene	UG/L	1	U	1	U	1	U
SW8260	2-Hexanone	UG/L	10	U	10	U	10	U
SW8260	4-Chlorotoluene	UG/L	1	U	1	U	1	U
SW8260	4-iso-Propyltoluene	UG/L	1	U	1	U	1	U
SW8260	4-Methyl-2-pentanone	UG/L	10	U	10	U	10	U
SW8260	Acetic acid, methyl ester	UG/L	1	U	1	U	1	U
SW8260	Acetone	UG/L	50	U	50	U	50	U
SW8260	Acrylonitrile	UG/L	5	U	5	U	5	U
SW8260	Benzene	UG/L	1	U	1	U	1	U
SW8260	Bromobenzene	UG/L	1	U	1	U	1	U
SW8260	Bromochloromethane	UG/L	1	U	1	U	1	U
SW8260	Bromodichloromethane	UG/L	0.5	U	0.44	J	0.5	U
SW8260	Bromoform	UG/L	1	U	2	U	2	U
SW8260	Bromomethane	UG/L	2	U	2	U	2	U
SW8260	Butane, 2-methoxy-2-methyl-	UG/L	0.5	U	0.5	U	0.5	U
SW8260	Carbon disulfide	UG/L	5	U	5	U	5	U
SW8260	Carbon tetrachloride	UG/L	5	U	5	U	5	U
SW8260	Chlorobenzene	UG/L	1	U	1	U	1	U
SW8260	Chloroethane	UG/L	2	U	2	U	2	U
SW8260	Chloroform	UG/L	18		23		18	
SW8260	Chloromethane	UG/L	2	U	2	U	2	U
SW8260	cis-1,2-Dichloroethene	UG/L	1	U	1	U	1	U
SW8260	cis-1,3-Dichloropropene	UG/L	0.5	U	0.5	U	0.5	U
SW8260	Dibromochloromethane	UG/L	0.5	U	0.5	U	0.5	U
SW8260	Dibromomethane	UG/L	1	U	1	U	1	U

TABLE 2 - SUMMARY ANALYTICAL RESULTS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	QC		QC		QC	
		Lab SDG	22J3631		22J3896		22J4221	
		Field Sample Date	10/25/2022		10/26/2022		10/27/2022	
		Field Sample ID	828120FB		828120FB2		828120FB3	
		QC Code	FB		FB		FB	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	Dichlorodifluoromethane	UG/L	2	U	2	U	2	U
SW8260	Diethyl ether	UG/L	2	U	2	U	2	U
SW8260	Ethyl-t-Butyl Ether	UG/L	0.5	U	0.5	U	0.5	U
SW8260	Ethylbenzene	UG/L	1	U	1	U	1	U
SW8260	Hexachlorobutadiene	UG/L	0.6	U	0.6	U	0.6	U
SW8260	Isopropyl ether	UG/L	0.5	U	0.5	U	0.5	U
SW8260	Isopropylbenzene	UG/L	1	U	1	U	1	U
SW8260	Methyl cyclohexane	UG/L	1	U	1	U	1	U
SW8260	Methyl Tertbutyl Ether	UG/L	1	U	1	U	1	U
SW8260	Methylene chloride	UG/L	5	U	5	U	5	U
SW8260	n-Butylbenzene	UG/L	1	U	1	U	1	U
SW8260	Naphthalene	UG/L	2	U	2	U	2	U
SW8260	Propylbenzene	UG/L	1	U	1	U	1	U
SW8260	sec-Butylbenzene	UG/L	1	U	1	U	1	U
SW8260	Styrene	UG/L	1	U	1	U	1	U
SW8260	t-Butyl alcohol	UG/L	20	U	20	U	20	U
SW8260	tert-Butylbenzene	UG/L	1	U	1	U	1	U
SW8260	Tetrachloroethene	UG/L	1	U	1	U	1	U
SW8260	Tetrahydrofuran	UG/L	10	U	10	U	10	U
SW8260	Toluene	UG/L	1	U	1	U	1	U
SW8260	trans-1,2-Dichloroethene	UG/L	1	U	1	U	1	U
SW8260	trans-1,3-Dichloropropene	UG/L	0.5	U	0.5	U	0.5	U
SW8260	trans-1,4-Dichloro-2-butene	UG/L	2	U	2	U	2	U
SW8260	Trichloroethene	UG/L	1	U	1	U	1	U
SW8260	Trichlorofluoromethane	UG/L	2	U	2	U	2	U

Created by: KLD 1/17/23
Checked by: KRP 1/17/23

TABLE 2 - SUMMARY ANALYTICAL RESULTS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

		Location	QC		QC		QC	
		Lab SDG	22J3631		22J3896		22J4221	
		Field Sample Date	10/25/2022		10/26/2022		10/27/2022	
		Field Sample ID	828120FB		828120FB2		828120FB3	
		QC Code	FB		FB		FB	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	Vinyl chloride	UG/L	2	U	2	U	2	U
SW8260	Xylene, o	UG/L	1	U	1	U	1	U
SW8260	Xylenes (m&p)	UG/L	2	U	2	U	2	U

TABLE 2 - SUMMARY ANALYTICAL RESULTS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

			Location	EW-1		HA-114		MW-111I		MW-210		MW-9	
			Lab SDG	22J4221		22J3631		22J3896		22J3896		22J4221	
			Field Sample Date	10/27/2022		10/25/2022		10/26/2022		10/26/2022		10/27/2022	
			Field Sample ID	828120EW01026		828120HA114012		828120MW111I020		828120MW210012		828120MW09008	
			QC Code	FS		FS		FS		FS		FS	
Method	**Parameter**	**Fraction**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
RSK175	Ethane	N	MG/L	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U
RSK175	Ethene	N	MG/L	0.017	U	0.017	U	0.017	U	0.017	U	0.017	U
RSK175	Methane	N	MG/L	0.007	U	0.0082		0.0051	J	0.0041	J	0.007	U
E300	Chloride	N	MG/L			480		170		210			
E300	Nitrate as N	N	MG/L	1.2		0.53		0.63		0.65		1.1	
E300	Sulfate	N	MG/L	25		55		69		54		110	
SM2320B	Total Alkalinity, as CaCO3	N	MG/L	270		400		350		370		400	
SM4500 CL	Chloride	N	MG/L	95								610	
SM4500-S2	Sulfide	N	MG/L	2		2	U	2	U	2	U	1.2	J
SM5310B	Total Organic Carbon	N	MG/L	3		22		6.3		10		33	
SW6010	Iron	D	MG/L	0.04	J	0.034	J	0.046	J	0.29		0.049	J
SW6010	Iron	T	MG/L	1.4		0.57		0.21		1.3		0.77	
SW6010	Manganese	T	MG/L	0.027		0.057		0.14		0.096		0.26	

Created by: KLD 1/17/23
Checked by: KRP 1/17/23

TABLE 3 - SUMMARY OF QUALIFICATION ACTIONS
CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

Lab SDG	Method	Lab Sample ID	Field Sample ID	Param Name	Lab Result	Lab Qualifier	Final Result	Final Qualifier	Val Reason Code	Units
22J3631	SW8260	22J3631-03	828120HA114012	Bromomethane	2	U	2	UJ	MSL	UG/L
22J3631	SW8260	22J3631-04	828120DUP	Bromomethane	2	U	2	UJ	MSL	UG/L
22J3896	SW8260	22J3896-04	828120MW210012	1,1-Dichloroethene	1	U	1	UJ	MSL	UG/L
22J3896	SW8260	22J3896-04	828120MW210012	1,2,3-Trichlorobenzene	5	U	5	UJ	MSL	UG/L
22J3896	SW8260	22J3896-04	828120MW210012	2,2-Dichloropropane	1	U	1	UJ	MSL	UG/L
22J3896	SW8260	22J3896-04	828120MW210012	Chloromethane	2	U	2	UJ	MSL	UG/L
22J3896	SW8260	22J3896-04	828120MW210012	cis-1,2-Dichloroethene	16		16	J-	MSL	UG/L
22J3896	SW8260	22J3896-04	828120MW210012	Dichlorodifluoromethane	2	U	2	UJ	MSL	UG/L
22J3896	SW8260	22J3896-04	828120MW210012	Vinyl chloride	3.8		3.8	J+	MSH, LCSH	UG/L
22J3896	SW8260	22J3896-05	828120DUP2	1,1-Dichloroethene	1	U	1	UJ	MSL	UG/L
22J3896	SW8260	22J3896-05	828120DUP2	1,2,3-Trichlorobenzene	5	U	5	UJ	MSL	UG/L
22J3896	SW8260	22J3896-05	828120DUP2	2,2-Dichloropropane	1	U	1	UJ	MSL	UG/L
22J3896	SW8260	22J3896-05	828120DUP2	Chloromethane	2	U	2	UJ	MSL	UG/L
22J3896	SW8260	22J3896-05	828120DUP2	cis-1,2-Dichloroethene	15		15	J-	MSL	UG/L
22J3896	SW8260	22J3896-05	828120DUP2	Dichlorodifluoromethane	2	U	2	UJ	MSL	UG/L
22J3896	SW8260	22J3896-05	828120DUP2	Vinyl chloride	3.4		3.4	J+	MSH, LCSH	UG/L

Created by: KLD 1/17/23
Checked by: KRP 1/17/23

CATEGORY A REVIEW
OCTOBER 2022 GROUNDWATER SAMPLING
CARRIAGE CLEANERS
BRIGHTON, NEW YORK

ATTACHMENT A

VOCs

PROJECT CATEGORY A REVIEW RECORD
Project: Carriage Cleaners Oct 2022 GW
Method : SW-846 8260C
Laboratory: Con-test **SDG(s): 22J3631, 22J3896, & 22J4221**
Date: 12/2/2022
Reviewer: Kassidy Patoine
Review Level [X] CATEGORY A

1. [X] Case **Narrative Review and COC/Data Package Completeness** COMMENTS
   Were problems noted? Yes

   Were all the samples on the COC analyzed for the requested analyses? YES NO (circle one)

   Are Field Sample IDs and Locations assigned correctly? YES NO (circle one)

2. [X] **Holding time and Sample Collection**
   All samples were analyzed within the 14 day holding time. YES NO (circle one)
3. [X] **QC Blanks**
   Are method blanks free of contamination? YES NO (circle one)

   Are Trip blanks free of contamination? YES NO (circle one)

   Are Rinse blanks free of contamination? YES NO NA (circle one)
   22J3631-06 – chloroform detection U, BL2
   22J3896-06 – chloroform detection U, BL2
   22J4221-03 – chloroform detection U, BL2
4. [X] **Matrix Spike** - Region II limits (water and soil 70-130%, water RPD 20, soil RPD 35)
   Were MS/MSDs submitted/analyzed? YES NO

   Were all results within the Region II limits? YES NO NA (circle one)
   22J3631-03 Bromomethane, UJ, MSL
   22J3896 – see attached UJ, MSL, J-, MSL, J+, MSH
5. [X] **Laboratory Control Sample Results** - Region II (Water and soil 70-130%)

   Were all results within Region II control limits? YES NO (circle one)
   22J3896 – see attached J+, LCSH
   22J4221 – see attached, no quals
6. [X] **Surrogate Recovery** - Region II limits (water 80-120%, soil 70-130%)

   Were all results within Region II limits? YES NO (circle one)

7. [X] **Field Duplicates** - Region II Limits (water RPD 50, soil RPD 100)
   Were Field Duplicates submitted/analyzed? YES NO

   Were all results within Region II Limits? YES NO NA (circle one)

8. [X] **Reporting Limits:** Were samples analyzed at a dilution? YES NO (circle one)
   22J3631-01 was run at a 10x dilution, 22J3631-02 was run at a 5x dilution, 22J3896-01 was run at a 50x dilution
9. [X] **Electronic Data Review and Edits**
   Does the EDD match the Form Is? YES NO (circle one)

10. [X] **Table Review**
    Table 1 (Samples and Analytical Methods)
    Table 2 (Analytical Results)
    Table 3 (Qualification Actions)
    Were all tables produced and reviewed? YES NO (circle one)

    Table 4 (TICs) Did lab report TICs? YES NO (circle one)

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EPA 300.0

Qualifications:

E

Reported result is estimated. Value reported over verified calibration range.

Analyte & Samples(s) Qualified:

Chloride
B321543-MS1, B321543-MSD1

MS-07

Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery.Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

Chloride
22J3631-03[828120HA114012], B321543-MS1, B321543-MSD1

SM 21-23 5310B

Qualifications:

MS-07A

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

Total Organic Carbon
22J3631-03[828120HA114012], B322110-MS1, B322110-MSD1

SM21-23 2320B

Qualifications:

PR-18

Headspace present in sample container.

Analyte & Samples(s) Qualified:

Alkalinity
22J3631-03[828120HA114012], B322011-MS1, B322011-MSD1

SW-846 8260D

Qualifications:

MS-07A

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

Bromomethane
22J3631-03[828120HA114012], B321309-MS1, B321309-MSD1

MS-19

Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

Analyte & Samples(s) Qualified:

Tetrachloroethylene
22J3631-03[828120HA114012], B321309-MS1, B321309-MSD1

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

22J3631-01[828120MW06B018], 22J3631-02[828120MW08B019]

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified: outside of scope

1,2-Dibromo-3-chloropropane (DB
22J3631-01[828120MW06B018], 22J3631-02[828120MW08B019], 22J3631-03[828120HA 114012], 22J3631-04[828120DUP], 22J3631-05[828120TB], 22J3631-06[828120FB], B321309-BLK1, B321309-BS1, B321309-BSD1, B321309-MS1, B321309-MSD1, S078583-CCV1

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V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

outside of scope

Analyte & Samples(s) Qualified:

Chloroethane

B321309-BS1, B321309-BSD1, B321309-MS1, B321309-MSD1, S078583-CCV1

Dichlorodifluoromethane (Freon 12

B321309-BS1, B321309-BSD1, B321309-MS1, B321309-MSD1, S078583-CCV1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Meghan E. Kelley
Reporting Specialist

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B322011 - SM21-23 2320B												
Blank (B322011-BLK1)					Prepared & Analyzed: 11/03/22							
Alkalinity	ND	1.0	0.65	mg/L								
LCS (B322011-BS1)					Prepared & Analyzed: 11/03/22							
Alkalinity	58	1.0	0.65	mg/L	61.2		95.6		85.8-110			
LCS Dup (B322011-BSD1)					Prepared & Analyzed: 11/03/22							
Alkalinity	58	1.0	0.65	mg/L	61.2		94.0		85.8-110	1.72	6.91	
MRL Check (B322011-MRL1)					Prepared & Analyzed: 11/03/22							
Alkalinity	1.00	1.0	0.65	mg/L	1.00		100		0-200			
MRL Check (B322011-MRL2)					Prepared & Analyzed: 11/03/22							
Alkalinity	1.00	1.0	0.65	mg/L	1.00		100		0-200			
Matrix Spike (B322011-MS1)		**Source: 22J3631-03**			Prepared & Analyzed: 11/03/22							
Alkalinity	450	1.0	0.65	mg/L	50.0	400	98.0		81.4-115			PR-18
Matrix Spike Dup (B322011-MSD1)		**Source: 22J3631-03**			Prepared & Analyzed: 11/03/22							
Alkalinity	460	1.0	0.65	mg/L	50.0	400	108		81.4-115	1.10	20	PR-18
Batch B322110 - SM 21-23 5310B												
Blank (B322110-BLK1)					Prepared & Analyzed: 11/07/22							
Total Organic Carbon	ND	1.0	0.54	mg/L								
LCS (B322110-BS1)					Prepared & Analyzed: 11/07/22							
Total Organic Carbon	10.1	1.0	0.54	mg/L	10.0		101		88.2-114			
LCS Dup (B322110-BSD1)					Prepared & Analyzed: 11/07/22							
Total Organic Carbon	10.3	1.0	0.54	mg/L	10.0		103		88.2-114	1.82	11.1	
Matrix Spike (B322110-MS1)		**Source: 22J3631-03**			Prepared & Analyzed: 11/07/22							
Total Organic Carbon	21.4	1.0	0.54	mg/L	9.99	21.8	**-3.70**	*	10-164			MS-07A
Matrix Spike Dup (B322110-MSD1)		**Source: 22J3631-03**			Prepared & Analyzed: 11/07/22							
Total Organic Carbon	22.6	1.0	0.54	mg/L	9.99	21.8	**8.13**	*	10-164	5.37	20	MS-07A

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B321242 - EPA 300.0												
Blank (B321242-BLK1)					Prepared & Analyzed: 10/26/22							
Nitrate as N	ND	0.10	0.042	mg/L								
LCS (B321242-BS1)					Prepared & Analyzed: 10/26/22							
Nitrate as N	0.94	0.10	0.042	mg/L	1.00		94.4		90-110			
LCS Dup (B321242-BSD1)					Prepared & Analyzed: 10/26/22							
Nitrate as N	0.94	0.10	0.042	mg/L	1.00		94.4		90-110	0.0106	20	
Matrix Spike (B321242-MS1)		**Source: 22J3631-03**			Prepared & Analyzed: 10/26/22							
Nitrate as N	1.5	0.10	0.042	mg/L	1.00	0.53	96.2		80-120			
Matrix Spike Dup (B321242-MSD1)		**Source: 22J3631-03**			Prepared & Analyzed: 10/26/22							
Nitrate as N	1.6	0.10	0.042	mg/L	1.00	0.53	103		80-120	4.19	20	
Batch B321420 - SM21-23 4500S-F												
Blank (B321420-BLK1)					Prepared & Analyzed: 10/28/22							
Sulfide	ND	2.0	1.1	mg/L								
LCS (B321420-BS1)					Prepared & Analyzed: 10/28/22							
Sulfide	8.8	2.0	1.1	mg/L	10.0		88.0		81-117			
Batch B321543 - EPA 300.0												
Blank (B321543-BLK1)					Prepared & Analyzed: 10/29/22							
Chloride	ND	1.0	0.56	mg/L								
Sulfate	ND	1.0	0.55	mg/L								
LCS (B321543-BS1)					Prepared & Analyzed: 10/29/22							
Chloride	10	1.0	0.56	mg/L	10.0		104		90-110			
Sulfate	10	1.0	0.55	mg/L	10.0		103		90-110			
LCS Dup (B321543-BSD1)					Prepared & Analyzed: 10/29/22							
Chloride	10	1.0	0.56	mg/L	10.0		105		90-110	0.209	20	
Sulfate	10	1.0	0.55	mg/L	10.0		103		90-110	0.445	20	
Matrix Spike (B321543-MS1)		**Source: 22J3631-03**			Prepared & Analyzed: 10/29/22							
Chloride	520	10	5.6	mg/L	100	480	**42.9**	*	80-120			E, MS-07
Sulfate	150	10	5.5	mg/L	100	55	98.2		80-120			
Matrix Spike Dup (B321543-MSD1)		**Source: 22J3631-03**			Prepared & Analyzed: 10/29/22							
Chloride	520	10	5.6	mg/L	100	480	**41.8**	*	80-120	0.206	20	E, MS-07
Sulfate	150	10	5.5	mg/L	100	55	98.0		80-120	0.109	20	

Parent sample concentration is 4x greater than spike concentration, no quals

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B321309 - SW-846 5030B												
Matrix Spike Dup (B321309-MSD1)	**Source: 22J3631-03**				Prepared & Analyzed: 10/27/22							
Tetrachloroethylene	174	1.0	0.19	µg/L	10.0	168	**61.9**	*	70-130	1.09	30	MS-19
Tetrahydrofuran	10.1	10	0.49	µg/L	10.0	ND	101		70-130	11.4	30	parent sample concentration is greater than 4x the spike concentration, no quals
Toluene	10.7	1.0	0.22	µg/L	10.0	ND	107		70-130	1.02	30	
1,2,3-Trichlorobenzene	8.74	5.0	0.30	µg/L	10.0	ND	87.4		70-130	1.96	30	
1,2,4-Trichlorobenzene	8.93	1.0	0.25	µg/L	10.0	ND	89.3		70-130	1.81	30	
1,3,5-Trichlorobenzene	8.95	1.0	0.21	µg/L	10.0	ND	89.5		70-130	1.22	30	
1,1,1-Trichloroethane	10.7	1.0	0.17	µg/L	10.0	ND	107		70-130	0.742	30	
1,1,2-Trichloroethane	10.1	1.0	0.18	µg/L	10.0	ND	101		70-130	2.09	30	
Trichloroethylene	40.6	1.0	0.19	µg/L	10.0	30.6	100		70-130	1.66	30	
Trichlorofluoromethane (Freon 11)	11.7	2.0	0.18	µg/L	10.0	ND	117		70-130	1.12	30	
1,2,3-Trichloropropane	9.98	2.0	0.28	µg/L	10.0	ND	99.8		70-130	2.57	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.5	1.0	0.23	µg/L	10.0	ND	115		70-130	2.91	30	
1,2,4-Trimethylbenzene	9.25	1.0	0.20	µg/L	10.0	ND	92.5		70-130	2.35	30	
1,3,5-Trimethylbenzene	10.3	1.0	0.11	µg/L	10.0	ND	103		70-130	0.675	30	
Vinyl Chloride	13.1	2.0	0.21	µg/L	10.0	1.35	117		70-130	1.85	30	
m+p Xylene	21.2	2.0	0.46	µg/L	20.0	ND	106		70-130	0.940	20	
o-Xylene	10.4	1.0	0.23	µg/L	10.0	ND	104		70-130	0.289	30	
Surrogate: 1,2-Dichloroethane-d4	*24.0*			µg/L	25.0		96.2		70-130			
Surrogate: Toluene-d8	*25.0*			µg/L	25.0		100		70-130			
Surrogate: 4-Bromofluorobenzene	*25.3*			µg/L	25.0		101		70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B321309 - SW-846 5030B												
Matrix Spike (B321309-MS1)	**Source: 22J3631-03**				Prepared & Analyzed: 10/27/22							
1,4-Dioxane	78.4	50	21	µg/L	100	ND	78.4		70-130			
Ethylbenzene	10.7	1.0	0.21	µg/L	10.0	ND	107		70-130			
Hexachlorobutadiene	9.31	0.60	0.46	µg/L	10.0	ND	93.1		70-130			
2-Hexanone (MBK)	103	10	1.1	µg/L	100	ND	103		70-130			
Isopropylbenzene (Cumene)	10.4	1.0	0.11	µg/L	10.0	ND	104		70-130			
p-Isopropyltoluene (p-Cymene)	9.88	1.0	0.097	µg/L	10.0	ND	98.8		70-130			
Methyl Acetate	9.22	1.0	0.45	µg/L	10.0	ND	92.2		70-130			
Methyl tert-Butyl Ether (MTBE)	9.28	1.0	0.17	µg/L	10.0	ND	92.8		70-130			
Methyl Cyclohexane	10.0	1.0	0.24	µg/L	10.0	ND	100		70-130			
Methylene Chloride	11.1	5.0	0.23	µg/L	10.0	ND	111		70-130			
4-Methyl-2-pentanone (MIBK)	105	10	1.3	µg/L	100	ND	105		70-130			
Naphthalene	8.10	2.0	0.24	µg/L	10.0	ND	81.0		70-130			
n-Propylbenzene	10.5	1.0	0.086	µg/L	10.0	ND	105		70-130			
Styrene	10.3	1.0	0.11	µg/L	10.0	ND	103		70-130			
1,1,1,2-Tetrachloroethane	10.1	1.0	0.18	µg/L	10.0	ND	101		70-130			
1,1,2,2-Tetrachloroethane	9.40	0.50	0.13	µg/L	10.0	ND	94.0		70-130			parent sample concentration is greater than 4x spike conc, no quals
Tetrachloroethylene	172	1.0	0.19	µg/L	10.0	168	**43.1**	*	70-130			MS-19
Tetrahydrofuran	9.00	10	0.49	µg/L	10.0	ND	90.0		70-130			J
Toluene	10.8	1.0	0.22	µg/L	10.0	ND	108		70-130			
1,2,3-Trichlorobenzene	8.57	5.0	0.30	µg/L	10.0	ND	85.7		70-130			
1,2,4-Trichlorobenzene	8.77	1.0	0.25	µg/L	10.0	ND	87.7		70-130			
1,3,5-Trichlorobenzene	9.06	1.0	0.21	µg/L	10.0	ND	90.6		70-130			
1,1,1-Trichloroethane	10.8	1.0	0.17	µg/L	10.0	ND	108		70-130			
1,1,2-Trichloroethane	9.93	1.0	0.18	µg/L	10.0	ND	99.3		70-130			
Trichloroethylene	40.0	1.0	0.19	µg/L	10.0	30.6	93.6		70-130			
Trichlorofluoromethane (Freon 11)	11.6	2.0	0.18	µg/L	10.0	ND	116		70-130			
1,2,3-Trichloropropane	10.2	2.0	0.28	µg/L	10.0	ND	102		70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.2	1.0	0.23	µg/L	10.0	ND	112		70-130			
1,2,4-Trimethylbenzene	9.47	1.0	0.20	µg/L	10.0	ND	94.7		70-130			
1,3,5-Trimethylbenzene	10.4	1.0	0.11	µg/L	10.0	ND	104		70-130			
Vinyl Chloride	12.8	2.0	0.21	µg/L	10.0	1.35	115		70-130			
m+p Xylene	21.4	2.0	0.46	µg/L	20.0	ND	107		70-130			
o-Xylene	10.4	1.0	0.23	µg/L	10.0	ND	104		70-130			
Surrogate: 1,2-Dichloroethane-d4	*24.2*			µg/L	25.0		96.6		70-130			
Surrogate: Toluene-d8	*25.2*			µg/L	25.0		101		70-130			
Surrogate: 4-Bromofluorobenzene	*25.1*			µg/L	25.0		100		70-130			
Matrix Spike Dup (B321309-MSD1)	**Source: 22J3631-03**				Prepared & Analyzed: 10/27/22							
Acetone	107	50	2.0	µg/L	100	ND	107		70-130	0.755	30	
Acrylonitrile	10.3	5.0	0.55	µg/L	10.0	ND	103		70-130	7.22	30	
tert-Amyl Methyl Ether (TAME)	9.19	0.50	0.14	µg/L	10.0	ND	91.9		70-130	1.65	30	
Benzene	10.4	1.0	0.20	µg/L	10.0	ND	104		70-130	0.962	30	
Bromobenzene	9.80	1.0	0.15	µg/L	10.0	ND	98.0		70-130	0.102	30	
Bromochloromethane	11.2	1.0	0.31	µg/L	10.0	ND	112		70-130	2.72	30	
Bromodichloromethane	9.52	0.50	0.18	µg/L	10.0	ND	95.2		70-130	3.10	30	
Bromoform	8.69	1.0	0.38	µg/L	10.0	ND	86.9		70-130	2.09	30	
Bromomethane	6.79	2.0	1.5	µg/L	10.0	ND	**67.9**	*	70-130	28.8	30	UJ, MSL MS-07A
2-Butanone (MEK)	109	20	1.6	µg/L	100	ND	109		70-130	3.37	30	
tert-Butyl Alcohol (TBA)	91.2	20	4.7	µg/L	100	ND	91.2		70-130	0.274	30	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B321309 - SW-846 5030B												
LCS Dup (B321309-BSD1)					Prepared & Analyzed: 10/27/22							
Surrogate: 1,2-Dichloroethane-d4	*24.8*			µg/L	25.0		99.4		70-130			
Surrogate: Toluene-d8	*25.2*			µg/L	25.0		101		70-130			
Surrogate: 4-Bromofluorobenzene	*24.8*			µg/L	25.0		99.0		70-130			
Matrix Spike (B321309-MS1)	**Source: 22J3631-03**				Prepared & Analyzed: 10/27/22							
Acetone	108	50	2.0	µg/L	100	ND	108		70-130			
Acrylonitrile	9.61	5.0	0.55	µg/L	10.0	ND	96.1		70-130			
tert-Amyl Methyl Ether (TAME)	9.04	0.50	0.14	µg/L	10.0	ND	90.4		70-130			
Benzene	10.4	1.0	0.20	µg/L	10.0	ND	104		70-130			
Bromobenzene	9.79	1.0	0.15	µg/L	10.0	ND	97.9		70-130			
Bromochloromethane	11.5	1.0	0.31	µg/L	10.0	ND	115		70-130			
Bromodichloromethane	9.82	0.50	0.18	µg/L	10.0	ND	98.2		70-130			
Bromoform	8.51	1.0	0.38	µg/L	10.0	ND	85.1		70-130			
Bromomethane	5.08	2.0	1.5	µg/L	10.0	ND	**50.8**	*	70-130	UJ, MSL		MS-07A
2-Butanone (MEK)	106	20	1.6	µg/L	100	ND	106		70-130			
tert-Butyl Alcohol (TBA)	91.0	20	4.7	µg/L	100	ND	91.0		70-130			
n-Butylbenzene	9.62	1.0	0.15	µg/L	10.0	ND	96.2		70-130			
sec-Butylbenzene	9.72	1.0	0.11	µg/L	10.0	ND	97.2		70-130			
tert-Butylbenzene	9.92	1.0	0.13	µg/L	10.0	ND	99.2		70-130			
tert-Butyl Ethyl Ether (TBEE)	10.1	0.50	0.15	µg/L	10.0	ND	101		70-130			
Carbon Disulfide	111	5.0	1.4	µg/L	100	ND	111		70-130			
Carbon Tetrachloride	10.6	5.0	0.16	µg/L	10.0	ND	106		70-130			
Chlorobenzene	11.0	1.0	0.11	µg/L	10.0	ND	110		70-130			
Chlorodibromomethane	9.87	0.50	0.22	µg/L	10.0	ND	98.7		70-130			
Chloroethane	11.8	2.0	0.32	µg/L	10.0	ND	118		70-130			V-20
Chloroform	9.95	2.0	0.17	µg/L	10.0	ND	99.5		70-130			
Chloromethane	9.18	2.0	0.52	µg/L	10.0	ND	91.8		70-130			
2-Chlorotoluene	10.2	1.0	0.11	µg/L	10.0	ND	102		70-130			
4-Chlorotoluene	10.4	1.0	0.12	µg/L	10.0	ND	104		70-130			
1,2-Dibromo-3-chloropropane (DBCP)	7.51	5.0	0.80	µg/L	10.0	ND	75.1		70-130			V-05
1,2-Dibromoethane (EDB)	10.1	0.50	0.17	µg/L	10.0	ND	101		70-130			
Dibromomethane	10.8	1.0	0.35	µg/L	10.0	ND	108		70-130			
1,2-Dichlorobenzene	9.73	1.0	0.12	µg/L	10.0	ND	97.3		70-130			
1,3-Dichlorobenzene	9.52	1.0	0.12	µg/L	10.0	ND	95.2		70-130			
1,4-Dichlorobenzene	9.85	1.0	0.13	µg/L	10.0	ND	98.5		70-130			
trans-1,4-Dichloro-2-butene	7.06	2.0	1.6	µg/L	10.0	ND	70.6		70-130			
Dichlorodifluoromethane (Freon 12)	11.3	2.0	0.19	µg/L	10.0	ND	113		70-130			V-20
1,1-Dichloroethane	10.8	1.0	0.14	µg/L	10.0	ND	108		70-130			
1,2-Dichloroethane	10.7	1.0	0.31	µg/L	10.0	ND	107		70-130			
1,1-Dichloroethylene	11.5	1.0	0.14	µg/L	10.0	ND	115		70-130			
cis-1,2-Dichloroethylene	39.5	1.0	0.15	µg/L	10.0	31.0	85.4		70-130			
trans-1,2-Dichloroethylene	11.6	1.0	0.17	µg/L	10.0	0.450	112		70-130			
1,2-Dichloropropane	10.4	1.0	0.18	µg/L	10.0	ND	104		70-130			
1,3-Dichloropropane	10.2	0.50	0.13	µg/L	10.0	ND	102		70-130			
2,2-Dichloropropane	8.23	1.0	0.33	µg/L	10.0	ND	82.3		70-130			
1,1-Dichloropropene	10.7	2.0	0.15	µg/L	10.0	ND	107		70-130			
cis-1,3-Dichloropropene	9.00	0.50	0.16	µg/L	10.0	ND	90.0		70-130			
trans-1,3-Dichloropropene	8.82	0.50	0.17	µg/L	10.0	ND	88.2		70-130			
Diethyl Ether	10.5	2.0	0.18	µg/L	10.0	ND	105		70-130			
Diisopropyl Ether (DIPE)	10.7	0.50	0.13	µg/L	10.0	ND	107		70-130			

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Project Location: Brighton, NY | Sample Description: | Work Order: 22J3631

Date Received: 10/26/2022

Field Sample #: 828120FB | Sampled: 10/25/2022 16:00

Sample ID: 22J3631-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
Chloroform	18	2.0	0.17	µg/L	1	U, BL2	SW-846 8260D	10/27/22	10/27/22 13:16	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1	V-05	SW-846 8260D	10/27/22	10/27/22 13:16	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF
Diethyl Ether	ND	2.0	0.18	µg/L	1		SW-846 8260D	10/27/22	10/27/22 13:16	MFF

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EPA 300.0

Qualifications:

MS-07

Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery.Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

Chloride

22J3896-04[828120MW210012], B321546-MS1, B321546-MSD1

MS-09

Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:

Nitrate as N

B321392-MS1, B321392-MSD1

SM21-23 2320B

Qualifications:

MS-07

Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery.Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

Alkalinity

22J3896-04[828120MW210012], B322302-MS2

PR-18

Headspace present in sample container.

Analyte & Samples(s) Qualified:

Alkalinity

22J3896-03[828120MW111I020], 22J3896-04[828120MW210012], B322302-MS2, B322302-MSD2

SW-846 8260D

Qualifications:

L-06

Laboratory fortified blank/laboratory control sample recovery and/or duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the high side.

Analyte & Samples(s) Qualified:

Vinyl Chloride

22J3896-04[828120MW210012], 22J3896-05[828120DUP2], B321428-BS1, B321428-BSD1, B321428-MS1, B321428-MSD1

MS-12

Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:

Vinyl Chloride

22J3896-04[828120MW210012], B321428-MS1, B321428-MSD1

MS-15

Matrix spike and matrix spike duplicate recoveries are outside of control limits. Data validation is not affected since results for this compound in this sample are "not detected", and recovery bias is on the high side.

Analyte & Samples(s) Qualified:

Naphthalene

B321428-MS1, B321428-MSD1

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MS-23

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:

1,1-Dichloroethylene
B321428-MS1

Bromomethane
B321428-MSD1

Carbon Disulfide
B321428-MSD1

Chloromethane
B321428-MS1

Dichlorodifluoromethane (Freon 12
B321428-MS1

trans-1,2-Dichloroethylene
B321428-MSD1

MS-24

Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.

Analyte & Samples(s) Qualified:

1,2,3-Trichlorobenzene
B321428-MS1

2,2-Dichloropropane
B321428-MS1

cis-1,2-Dichloroethylene
B321428-MS1

Tetrachloroethylene
B321428-MS1

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B321428 - SW-846 5030B													
Matrix Spike Dup (B321428-MSD1)	**Source: 22J3896-04**				Prepared & Analyzed: 10/28/22								
Carbon Disulfide	137	5.0	1.4	µg/L	100	ND	**137**	*	70-130	**39.1**	*	30	MS-23, R-06, high bias, sample ND, no quals, V-20
Carbon Tetrachloride	10.5	5.0	0.16	µg/L	10.0	ND	105		70-130	29.5		30	
Chlorobenzene	10.7	1.0	0.11	µg/L	10.0	ND	107		70-130	14.9		30	
Chlorodibromomethane	9.88	0.50	0.22	µg/L	10.0	ND	98.8		70-130	3.19		30	
Chloroethane	11.3	2.0	0.32	µg/L	10.0	ND	113		70-130	26.9		30	
Chloroform	9.98	2.0	0.17	µg/L	10.0	ND	99.8		70-130	17.4		30	
Chloromethane	9.47	2.0	0.52	µg/L	10.0	ND	94.7		70-130	**45.2**	*	30	R-06, sample ND, no quals
2-Chlorotoluene	10.3	1.0	0.11	µg/L	10.0	ND	103		70-130	25.9		30	
4-Chlorotoluene	10.6	1.0	0.12	µg/L	10.0	ND	106		70-130	18.4		30	
1,2-Dibromo-3-chloropropane (DBCP)	8.62	5.0	0.80	µg/L	10.0	ND	86.2		70-130	9.71		30	
1,2-Dibromoethane (EDB)	10.3	0.50	0.17	µg/L	10.0	ND	103		70-130	1.36		30	
Dibromomethane	10.2	1.0	0.35	µg/L	10.0	ND	102		70-130	2.05		30	
1,2-Dichlorobenzene	10.3	1.0	0.12	µg/L	10.0	ND	103		70-130	10.8		30	
1,3-Dichlorobenzene	10.5	1.0	0.12	µg/L	10.0	ND	105		70-130	18.5		30	
1,4-Dichlorobenzene	10.2	1.0	0.13	µg/L	10.0	ND	102		70-130	22.1		30	
trans-1,4-Dichloro-2-butene	8.77	2.0	1.6	µg/L	10.0	ND	87.7		70-130	20.7		30	
Dichlorodifluoromethane (Freon 12)	8.21	2.0	0.19	µg/L	10.0	ND	82.1		70-130	**36.8**	*	30	R-06
1,1-Dichloroethane	9.70	1.0	0.14	µg/L	10.0	ND	97.0		70-130	24.5		30	sample ND, no quals
1,2-Dichloroethane	9.67	1.0	0.31	µg/L	10.0	ND	96.7		70-130	3.36		30	
1,1-Dichloroethylene	9.63	1.0	0.14	µg/L	10.0	ND	96.3		70-130	**33.3**	*	30	R-06, sample ND, no quals
cis-1,2-Dichloroethylene	24.7	1.0	0.15	µg/L	10.0	15.6	91.2		70-130	9.82		30	
trans-1,2-Dichloroethylene	13.1	1.0	0.17	µg/L	10.0	ND	**131**	*	70-130	**58.3**	*	30	MS-23, R-06, sample ND, no quals
1,2-Dichloropropane	10.3	1.0	0.18	µg/L	10.0	ND	103		70-130	15.3		30	
1,3-Dichloropropane	10.4	0.50	0.13	µg/L	10.0	ND	104		70-130	1.94		30	
2,2-Dichloropropane	8.15	1.0	0.33	µg/L	10.0	ND	81.5		70-130	25.1		30	
1,1-Dichloropropene	10.5	2.0	0.15	µg/L	10.0	ND	105		70-130	29.0		30	
cis-1,3-Dichloropropene	9.32	0.50	0.16	µg/L	10.0	ND	93.2		70-130	9.56		30	
trans-1,3-Dichloropropene	9.07	0.50	0.17	µg/L	10.0	ND	90.7		70-130	0.553		30	
Diethyl Ether	9.73	2.0	0.18	µg/L	10.0	ND	97.3		70-130	5.38		30	
Diisopropyl Ether (DIPE)	9.96	0.50	0.13	µg/L	10.0	ND	99.6		70-130	8.81		30	
1,4-Dioxane	96.2	50	21	µg/L	100	ND	96.2		70-130	26.8		30	
Ethylbenzene	11.4	1.0	0.21	µg/L	10.0	ND	114		70-130	26.4		30	
Hexachlorobutadiene	9.98	0.60	0.46	µg/L	10.0	ND	99.8		70-130	22.6		30	
2-Hexanone (MBK)	98.9	10	1.1	µg/L	100	ND	98.9		70-130	18.6		30	sample ND, no quals
Isopropylbenzene (Cumene)	11.2	1.0	0.11	µg/L	10.0	ND	112		70-130	**32.2**	*	30	R-06
p-Isopropyltoluene (p-Cymene)	10.6	1.0	0.097	µg/L	10.0	ND	106		70-130	**31.3**	*	30	R-06, sample ND, no quals
Methyl Acetate	12.2	1.0	0.45	µg/L	10.0	ND	122		70-130	3.39		30	
Methyl tert-Butyl Ether (MTBE)	10.2	1.0	0.17	µg/L	10.0	ND	102		70-130	3.45		30	V-06
Methyl Cyclohexane	11.4	1.0	0.24	µg/L	10.0	ND	114		70-130	**38.3**	*	30	R-06, sample ND, no quals
Methylene Chloride	9.63	5.0	0.23	µg/L	10.0	ND	96.3		70-130	19.4		30	
4-Methyl-2-pentanone (MIBK)	97.2	10	1.3	µg/L	100	ND	97.2		70-130	17.1		30	sample ND, no quals
Naphthalene	14.4	2.0	0.24	µg/L	10.0	ND	**144**	*	70-130	**50.6**	*	30	MS-15, R-06
n-Propylbenzene	10.8	1.0	0.086	µg/L	10.0	ND	108		70-130	**32.0**	*	30	R-06, sample ND, no quals
Styrene	11.1	1.0	0.11	µg/L	10.0	ND	111		70-130	19.1		30	
1,1,1,2-Tetrachloroethane	10.9	1.0	0.18	µg/L	10.0	ND	109		70-130	11.9		30	
1,1,2,2-Tetrachloroethane	10.6	0.50	0.13	µg/L	10.0	ND	106		70-130	4.42		30	
Tetrachloroethylene	59.5	1.0	0.19	µg/L	10.0	50.4	91.4		70-130	12.2		30	
Tetrahydrofuran	9.12	10	0.49	µg/L	10.0	ND	91.2		70-130	9.40		30	J
Toluene	10.2	1.0	0.22	µg/L	10.0	ND	102		70-130	23.7		30	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B321428 - SW-846 5030B													
Matrix Spike (B321428-MS1)	**Source: 22J3896-04**				Prepared & Analyzed: 10/28/22								
p-Isopropyltoluene (p-Cymene)	7.77	1.0	0.097	µg/L	10.0	ND	77.7		70-130				R-06
Methyl Acetate	12.6	1.0	0.45	µg/L	10.0	ND	126		70-130				
Methyl tert-Butyl Ether (MTBE)	10.6	1.0	0.17	µg/L	10.0	ND	106		70-130				V-06
Methyl Cyclohexane	7.76	1.0	0.24	µg/L	10.0	ND	77.6		70-130				R-06
Methylene Chloride	7.93	5.0	0.23	µg/L	10.0	ND	79.3		70-130				
4-Methyl-2-pentanone (MIBK)	115	10	1.3	µg/L	100	ND	115		70-130				
Naphthalene	24.1	2.0	0.24	µg/L	10.0	ND	**241**	*	70-130	sample ND, no quals			MS-15, R-06
n-Propylbenzene	7.82	1.0	0.086	µg/L	10.0	ND	78.2		70-130				R-06
Styrene	9.14	1.0	0.11	µg/L	10.0	ND	91.4		70-130				
1,1,1,2-Tetrachloroethane	9.69	1.0	0.18	µg/L	10.0	ND	96.9		70-130				
1,1,2,2-Tetrachloroethane	11.1	0.50	0.13	µg/L	10.0	ND	111		70-130				
Tetrachloroethylene	52.7	1.0	0.19	µg/L	10.0	50.4	**23.1**	*	70-130	parent sample concentration is greater than 4x spike concentration, no quals			MS-24
Tetrahydrofuran	10.0	10	0.49	µg/L	10.0	ND	100		70-130				
Toluene	8.01	1.0	0.22	µg/L	10.0	ND	80.1		70-130				
1,2,3-Trichlorobenzene	6.85	5.0	0.30	µg/L	10.0	ND	**68.5**	*	70-130	UJ, MSL			MS-24
1,2,4-Trichlorobenzene	7.15	1.0	0.25	µg/L	10.0	ND	71.5		70-130				
1,3,5-Trichlorobenzene	7.81	1.0	0.21	µg/L	10.0	ND	78.1		70-130				
1,1,1-Trichloroethane	8.00	1.0	0.17	µg/L	10.0	ND	80.0		70-130				
1,1,2-Trichloroethane	10.9	1.0	0.18	µg/L	10.0	ND	109		70-130				
Trichloroethylene	17.5	1.0	0.19	µg/L	10.0	9.80	77.1		70-130				
Trichlorofluoromethane (Freon 11)	7.42	2.0	0.18	µg/L	10.0	ND	74.2		70-130				R-06
1,2,3-Trichloropropane	11.3	2.0	0.28	µg/L	10.0	ND	113		70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.62	1.0	0.23	µg/L	10.0	ND	86.2		70-130				R-06
1,2,4-Trimethylbenzene	8.16	1.0	0.20	µg/L	10.0	ND	81.6		70-130				
1,3,5-Trimethylbenzene	8.34	1.0	0.11	µg/L	10.0	ND	83.4		70-130				
Vinyl Chloride	20.1	2.0	0.21	µg/L	10.0	3.79	**163**	*	70-130	J+, MSH			L-06, MS-12, R-06, V-06
m+p Xylene	17.1	2.0	0.46	µg/L	20.0	ND	85.6		70-130				R-06
o-Xylene	8.91	1.0	0.23	µg/L	10.0	ND	89.1		70-130				
Surrogate: 1,2-Dichloroethane-d4	*24.5*			µg/L	25.0		97.9		70-130				
Surrogate: Toluene-d8	*24.4*			µg/L	25.0		97.4		70-130				
Surrogate: 4-Bromofluorobenzene	*25.4*			µg/L	25.0		102		70-130				
Matrix Spike Dup (B321428-MSD1)	**Source: 22J3896-04**				Prepared & Analyzed: 10/28/22								
Acetone	88.5	50	2.0	µg/L	100	ND	88.5		70-130	18.9		30	
Acrylonitrile	8.43	5.0	0.55	µg/L	10.0	ND	84.3		70-130	7.31		30	V-05
tert-Amyl Methyl Ether (TAME)	9.57	0.50	0.14	µg/L	10.0	ND	95.7		70-130	0.729		30	
Benzene	9.32	1.0	0.20	µg/L	10.0	ND	93.2		70-130	21.2		30	
Bromobenzene	10.9	1.0	0.15	µg/L	10.0	ND	109		70-130	10.2		30	
Bromochloromethane	9.50	1.0	0.31	µg/L	10.0	ND	95.0		70-130	4.96		30	
Bromodichloromethane	9.80	0.50	0.18	µg/L	10.0	ND	98.0		70-130	9.40		30	
Bromoform	9.62	1.0	0.38	µg/L	10.0	ND	96.2		70-130	5.16		30	
Bromomethane	14.0	2.0	1.5	µg/L	10.0	ND	**140**	*	70-130	**32.3**	*	30	sample result ND, no quals MS-23, R-06, V-20
2-Butanone (MEK)	91.7	20	1.6	µg/L	100	ND	91.7		70-130	20.6		30	
tert-Butyl Alcohol (TBA)	84.7	20	4.7	µg/L	100	ND	84.7		70-130	20.0		30	
n-Butylbenzene	10.5	1.0	0.15	µg/L	10.0	ND	105		70-130	**35.2**	*	30	sample ND, no quals R-06
sec-Butylbenzene	10.4	1.0	0.11	µg/L	10.0	ND	104		70-130	**31.5**	*	30	R-06
tert-Butylbenzene	10.9	1.0	0.13	µg/L	10.0	ND	109		70-130	29.1		30	sample ND, no quals
tert-Butyl Ethyl Ether (TBEE)	10.2	0.50	0.15	µg/L	10.0	ND	102		70-130	4.21		30	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B321428 - SW-846 5030B												
Matrix Spike (B321428-MS1)	**Source: 22J3896-04**				Prepared & Analyzed: 10/28/22							
Acetone	107	50	2.0	µg/L	100	ND	107		70-130			
Acrylonitrile	9.07	5.0	0.55	µg/L	10.0	ND	90.7		70-130			V-05
tert-Amyl Methyl Ether (TAME)	9.64	0.50	0.14	µg/L	10.0	ND	96.4		70-130			
Benzene	7.53	1.0	0.20	µg/L	10.0	ND	75.3		70-130			
Bromobenzene	9.86	1.0	0.15	µg/L	10.0	ND	98.6		70-130			
Bromochloromethane	9.04	1.0	0.31	µg/L	10.0	ND	90.4		70-130			
Bromodichloromethane	8.92	0.50	0.18	µg/L	10.0	ND	89.2		70-130			
Bromoform	10.1	1.0	0.38	µg/L	10.0	ND	101		70-130			
Bromomethane	10.1	2.0	1.5	µg/L	10.0	ND	101		70-130			R-06, V-20
2-Butanone (MEK)	113	20	1.6	µg/L	100	ND	113		70-130			
tert-Butyl Alcohol (TBA)	103	20	4.7	µg/L	100	ND	103		70-130			
n-Butylbenzene	7.37	1.0	0.15	µg/L	10.0	ND	73.7		70-130			R-06
sec-Butylbenzene	7.54	1.0	0.11	µg/L	10.0	ND	75.4		70-130			R-06
tert-Butylbenzene	8.12	1.0	0.13	µg/L	10.0	ND	81.2		70-130			
tert-Butyl Ethyl Ether (TBEE)	9.77	0.50	0.15	µg/L	10.0	ND	97.7		70-130			
Carbon Disulfide	92.4	5.0	1.4	µg/L	100	ND	92.4		70-130			R-06, V-20
Carbon Tetrachloride	7.82	5.0	0.16	µg/L	10.0	ND	78.2		70-130			
Chlorobenzene	9.19	1.0	0.11	µg/L	10.0	ND	91.9		70-130			
Chlorodibromomethane	9.57	0.50	0.22	µg/L	10.0	ND	95.7		70-130			
Chloroethane	8.64	2.0	0.32	µg/L	10.0	ND	86.4		70-130			
Chloroform	8.38	2.0	0.17	µg/L	10.0	ND	83.8		70-130			
Chloromethane	5.98	2.0	0.52	µg/L	10.0	ND	**59.8**	*	70-130	UJ, MSL		MS-23, R-06
2-Chlorotoluene	7.97	1.0	0.11	µg/L	10.0	ND	79.7		70-130			
4-Chlorotoluene	8.82	1.0	0.12	µg/L	10.0	ND	88.2		70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.50	5.0	0.80	µg/L	10.0	ND	95.0		70-130			
1,2-Dibromoethane (EDB)	10.4	0.50	0.17	µg/L	10.0	ND	104		70-130			
Dibromomethane	10.4	1.0	0.35	µg/L	10.0	ND	104		70-130			
1,2-Dichlorobenzene	9.26	1.0	0.12	µg/L	10.0	ND	92.6		70-130			
1,3-Dichlorobenzene	8.70	1.0	0.12	µg/L	10.0	ND	87.0		70-130			
1,4-Dichlorobenzene	8.17	1.0	0.13	µg/L	10.0	ND	81.7		70-130			
trans-1,4-Dichloro-2-butene	10.8	2.0	1.6	µg/L	10.0	ND	108		70-130			
Dichlorodifluoromethane (Freon 12)	5.66	2.0	0.19	µg/L	10.0	ND	**56.6**	*	70-130	UJ, MSL		MS-23, R-06
1,1-Dichloroethane	7.58	1.0	0.14	µg/L	10.0	ND	75.8		70-130			
1,2-Dichloroethane	9.35	1.0	0.31	µg/L	10.0	ND	93.5		70-130			
1,1-Dichloroethylene	6.88	1.0	0.14	µg/L	10.0	ND	**68.8**	*	70-130	UJ, MSL		MS-23, R-06
cis-1,2-Dichloroethylene	22.4	1.0	0.15	µg/L	10.0	15.6	**68.1**	*	70-130	J-, MSL		MS-24
trans-1,2-Dichloroethylene	7.18	1.0	0.17	µg/L	10.0	ND	71.8		70-130			R-06
1,2-Dichloropropane	8.82	1.0	0.18	µg/L	10.0	ND	88.2		70-130			
1,3-Dichloropropane	10.2	0.50	0.13	µg/L	10.0	ND	102		70-130			
2,2-Dichloropropane	6.33	1.0	0.33	µg/L	10.0	ND	**63.3**	*	70-130	UJ, MSL		MS-24
1,1-Dichloropropene	7.81	2.0	0.15	µg/L	10.0	ND	78.1		70-130			
cis-1,3-Dichloropropene	8.47	0.50	0.16	µg/L	10.0	ND	84.7		70-130			
trans-1,3-Dichloropropene	9.02	0.50	0.17	µg/L	10.0	ND	90.2		70-130			
Diethyl Ether	9.22	2.0	0.18	µg/L	10.0	ND	92.2		70-130			
Diisopropyl Ether (DIPE)	9.12	0.50	0.13	µg/L	10.0	ND	91.2		70-130			
1,4-Dioxane	126	50	21	µg/L	100	ND	126		70-130			
Ethylbenzene	8.73	1.0	0.21	µg/L	10.0	ND	87.3		70-130			
Hexachlorobutadiene	7.95	0.60	0.46	µg/L	10.0	ND	79.5		70-130			
2-Hexanone (MBK)	119	10	1.1	µg/L	100	ND	119		70-130			
Isopropylbenzene (Cumene)	8.11	1.0	0.11	µg/L	10.0	ND	81.1		70-130			R-06

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B321428 - SW-846 5030B													
LCS Dup (B321428-BSD1)					Prepared & Analyzed: 10/28/22								
1,1-Dichloroethane	11.0	1.0	0.14	µg/L	10.0		110		70-130	5.52	25		
1,2-Dichloroethane	9.42	1.0	0.31	µg/L	10.0		94.2		70-130	2.91	25		
1,1-Dichloroethylene	7.72	1.0	0.14	µg/L	10.0		77.2		70-130	1.04	25		
cis-1,2-Dichloroethylene	8.88	1.0	0.15	µg/L	10.0		88.8		70-130	6.27	25		
trans-1,2-Dichloroethylene	10.7	1.0	0.17	µg/L	10.0		107		70-130	5.06	25		
1,2-Dichloropropane	9.14	1.0	0.18	µg/L	10.0		91.4		70-130	0.659	25		
1,3-Dichloropropane	9.44	0.50	0.13	µg/L	10.0		94.4		70-130	3.34	25		
2,2-Dichloropropane	8.74	1.0	0.33	µg/L	10.0		87.4		40-130	1.96	25		†
1,1-Dichloropropene	8.84	2.0	0.15	µg/L	10.0		88.4		70-130	0.451	25		
cis-1,3-Dichloropropene	9.39	0.50	0.16	µg/L	10.0		93.9		70-130	7.17	25		
trans-1,3-Dichloropropene	9.08	0.50	0.17	µg/L	10.0		90.8		70-130	2.79	25		
Diethyl Ether	8.26	2.0	0.18	µg/L	10.0		82.6		70-130	0.121	25		
Diisopropyl Ether (DIPE)	9.15	0.50	0.13	µg/L	10.0		91.5		70-130	2.55	25		
1,4-Dioxane	83.1	50	21	µg/L	100		83.1		40-130	5.03	50		† ‡
Ethylbenzene	10.2	1.0	0.21	µg/L	10.0		102		70-130	2.68	25		
Hexachlorobutadiene	9.83	0.60	0.46	µg/L	10.0		98.3		70-130	5.92	25		
2-Hexanone (MBK)	96.7	10	1.1	µg/L	100		96.7		70-160	5.48	25		†
Isopropylbenzene (Cumene)	10.0	1.0	0.11	µg/L	10.0		100		70-130	2.63	25		
p-Isopropyltoluene (p-Cymene)	9.73	1.0	0.097	µg/L	10.0		97.3		70-130	1.12	25		
Methyl Acetate	12.4	1.0	0.45	µg/L	10.0		124		70-130	2.53	25		
Methyl tert-Butyl Ether (MTBE)	12.5	1.0	0.17	µg/L	10.0		125		70-130	3.75	25	V-06	
Methyl Cyclohexane	10.2	1.0	0.24	µg/L	10.0		102		70-130	2.89	25		
Methylene Chloride	8.30	5.0	0.23	µg/L	10.0		83.0		70-130	8.02	25		
4-Methyl-2-pentanone (MIBK)	91.4	10	1.3	µg/L	100		91.4		70-160	1.74	25		†
Naphthalene	9.49	2.0	0.24	µg/L	10.0		94.9		40-130	0.953	25		†
n-Propylbenzene	9.82	1.0	0.086	µg/L	10.0		98.2		70-130	1.13	25		
Styrene	10.5	1.0	0.11	µg/L	10.0		105		70-130	2.13	25		
1,1,1,2-Tetrachloroethane	10.4	1.0	0.18	µg/L	10.0		104		70-130	2.04	25		
1,1,2,2-Tetrachloroethane	10.0	0.50	0.13	µg/L	10.0		100		70-130	5.31	25		
Tetrachloroethylene	9.75	1.0	0.19	µg/L	10.0		97.5		70-130	1.34	25		
Tetrahydrofuran	9.33	10	0.49	µg/L	10.0		93.3		70-130	9.19	25	J	
Toluene	9.08	1.0	0.22	µg/L	10.0		90.8		70-130	3.25	25		
1,2,3-Trichlorobenzene	9.97	5.0	0.30	µg/L	10.0		99.7		70-130	0.100	25		
1,2,4-Trichlorobenzene	9.59	1.0	0.25	µg/L	10.0		95.9		70-130	1.04	25		
1,3,5-Trichlorobenzene	9.96	1.0	0.21	µg/L	10.0		99.6		70-130	2.77	25		
1,1,1-Trichloroethane	9.08	1.0	0.17	µg/L	10.0		90.8		70-130	0.659	25		
1,1,2-Trichloroethane	9.89	1.0	0.18	µg/L	10.0		98.9		70-130	3.18	25		
Trichloroethylene	9.94	1.0	0.19	µg/L	10.0		99.4		70-130	2.86	25		
Trichlorofluoromethane (Freon 11)	8.63	2.0	0.18	µg/L	10.0		86.3		70-130	0.931	25		
1,2,3-Trichloropropane	9.94	2.0	0.28	µg/L	10.0		99.4		70-130	4.53	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.8	1.0	0.23	µg/L	10.0		108		70-130	0.465	25		
1,2,4-Trimethylbenzene	9.48	1.0	0.20	µg/L	10.0		94.8		70-130	2.50	25		
1,3,5-Trimethylbenzene	10.3	1.0	0.11	µg/L	10.0		103		70-130	1.37	25		
Vinyl Chloride	20.8	2.0	0.21	µg/L	10.0		**208**	*	40-160	1.24	25	L-06, V-06 J+, LCSH	†
m+p Xylene	20.3	2.0	0.46	µg/L	20.0		101		70-130	2.90	25		
o-Xylene	9.97	1.0	0.23	µg/L	10.0		99.7		70-130	0.503	25		
Surrogate: 1,2-Dichloroethane-d4	*24.1*			µg/L	25.0		96.4		70-130				
Surrogate: Toluene-d8	*24.2*			µg/L	25.0		96.6		70-130				
Surrogate: 4-Bromofluorobenzene	*26.0*			µg/L	25.0		104		70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B321428 - SW-846 5030B													
LCS (B321428-BS1)					Prepared & Analyzed: 10/28/22								
1,3,5-Trichlorobenzene	10.2	1.0	0.21	µg/L	10.0		102		70-130				
1,1,1-Trichloroethane	9.14	1.0	0.17	µg/L	10.0		91.4		70-130				
1,1,2-Trichloroethane	9.58	1.0	0.18	µg/L	10.0		95.8		70-130				
Trichloroethylene	9.66	1.0	0.19	µg/L	10.0		96.6		70-130				
Trichlorofluoromethane (Freon 11)	8.55	2.0	0.18	µg/L	10.0		85.5		70-130				
1,2,3-Trichloropropane	9.50	2.0	0.28	µg/L	10.0		95.0		70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.7	1.0	0.23	µg/L	10.0		107		70-130				
1,2,4-Trimethylbenzene	9.72	1.0	0.20	µg/L	10.0		97.2		70-130				
1,3,5-Trimethylbenzene	10.1	1.0	0.11	µg/L	10.0		101		70-130				
Vinyl Chloride	21.1	2.0	0.21	µg/L	10.0		**211**	*	40-160	J+, LCSH		L-06, V-06	†
m+p Xylene	19.7	2.0	0.46	µg/L	20.0		98.6		70-130				
o-Xylene	9.92	1.0	0.23	µg/L	10.0		99.2		70-130				
Surrogate: 1,2-Dichloroethane-d4	*23.6*			µg/L	25.0		94.6		70-130				
Surrogate: Toluene-d8	*23.6*			µg/L	25.0		94.4		70-130				
Surrogate: 4-Bromofluorobenzene	*25.1*			µg/L	25.0		100		70-130				
LCS Dup (B321428-BSD1)					Prepared & Analyzed: 10/28/22								
Acetone	85.2	50	2.0	µg/L	100		85.2		70-160	5.18	25		†
Acrylonitrile	7.65	5.0	0.55	µg/L	10.0		76.5		70-130	2.65	25	V-05	
tert-Amyl Methyl Ether (TAME)	8.97	0.50	0.14	µg/L	10.0		89.7		70-130	1.80	25		
Benzene	8.25	1.0	0.20	µg/L	10.0		82.5		70-130	0.852	25		
Bromobenzene	10.6	1.0	0.15	µg/L	10.0		106		70-130	2.97	25		
Bromochloromethane	8.71	1.0	0.31	µg/L	10.0		87.1		70-130	3.27	25		
Bromodichloromethane	9.20	0.50	0.18	µg/L	10.0		92.0		70-130	0.866	25		
Bromoform	9.61	1.0	0.38	µg/L	10.0		96.1		70-130	4.36	25		
Bromomethane	12.8	2.0	1.5	µg/L	10.0		128		40-160	6.85	25	V-20	†
2-Butanone (MEK)	90.5	20	1.6	µg/L	100		90.5		40-160	1.82	25		†
tert-Butyl Alcohol (TBA)	84.0	20	4.7	µg/L	100		84.0		40-160	8.71	25		†
n-Butylbenzene	9.64	1.0	0.15	µg/L	10.0		96.4		70-130	2.66	25		
sec-Butylbenzene	9.36	1.0	0.11	µg/L	10.0		93.6		70-130	4.90	25		
tert-Butylbenzene	9.83	1.0	0.13	µg/L	10.0		98.3		70-130	2.91	25		
tert-Butyl Ethyl Ether (TBEE)	9.52	0.50	0.15	µg/L	10.0		95.2		70-130	1.80	25		
Carbon Disulfide	117	5.0	1.4	µg/L	100		117		70-130	2.81	25	V-20	
Carbon Tetrachloride	9.16	5.0	0.16	µg/L	10.0		91.6		70-130	0.218	25		
Chlorobenzene	10.0	1.0	0.11	µg/L	10.0		100		70-130	1.81	25		
Chlorodibromomethane	9.72	0.50	0.22	µg/L	10.0		97.2		70-130	2.50	25		
Chloroethane	9.22	2.0	0.32	µg/L	10.0		92.2		70-130	1.75	25		
Chloroform	9.16	2.0	0.17	µg/L	10.0		91.6		70-130	2.32	25		
Chloromethane	10.1	2.0	0.52	µg/L	10.0		101		40-160	0.798	25		†
2-Chlorotoluene	9.73	1.0	0.11	µg/L	10.0		97.3		70-130	5.06	25		
4-Chlorotoluene	9.83	1.0	0.12	µg/L	10.0		98.3		70-130	1.33	25		
1,2-Dibromo-3-chloropropane (DBCP)	9.62	5.0	0.80	µg/L	10.0		96.2		70-130	1.78	25		
1,2-Dibromoethane (EDB)	9.65	0.50	0.17	µg/L	10.0		96.5		70-130	2.94	25		
Dibromomethane	9.49	1.0	0.35	µg/L	10.0		94.9		70-130	1.88	25		
1,2-Dichlorobenzene	9.73	1.0	0.12	µg/L	10.0		97.3		70-130	3.04	25		
1,3-Dichlorobenzene	9.78	1.0	0.12	µg/L	10.0		97.8		70-130	2.62	25		
1,4-Dichlorobenzene	9.52	1.0	0.13	µg/L	10.0		95.2		70-130	0.527	25		
trans-1,4-Dichloro-2-butene	9.76	2.0	1.6	µg/L	10.0		97.6		70-130	1.76	25		
Dichlorodifluoromethane (Freon 12)	7.93	2.0	0.19	µg/L	10.0		79.3		40-160	0.887	25		†

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B321392 - EPA 300.0												
Blank (B321392-BLK1)					Prepared & Analyzed: 10/27/22							
Nitrate as N	ND	0.10	0.042	mg/L								
LCS (B321392-BS1)					Prepared & Analyzed: 10/27/22							
Nitrate as N	0.94	0.10	0.042	mg/L	1.00		93.5		90-110			
LCS Dup (B321392-BSD1)					Prepared & Analyzed: 10/27/22							
Nitrate as N	0.93	0.10	0.042	mg/L	1.00		93.0		90-110	0.525	20	
Matrix Spike (B321392-MS1)		**Source: 22J3896-04**			Prepared & Analyzed: 10/27/22							
Nitrate as N	0.90	0.10	0.042	mg/L	1.00	0.65	**25.2**	*	80-120	outside of scope		MS-09
Matrix Spike Dup (B321392-MSD1)		**Source: 22J3896-04**			Prepared & Analyzed: 10/27/22							
Nitrate as N	0.97	0.10	0.042	mg/L	1.00	0.65	**32.4**	*	80-120	7.75	20	MS-09
Batch B321420 - SM21-23 4500S-F												
Blank (B321420-BLK1)					Prepared & Analyzed: 10/28/22							
Sulfide	ND	2.0	1.1	mg/L								
LCS (B321420-BS1)					Prepared & Analyzed: 10/28/22							
Sulfide	8.8	2.0	1.1	mg/L	10.0		88.0		81-117			
Batch B321546 - EPA 300.0												
Blank (B321546-BLK1)					Prepared & Analyzed: 10/29/22							
Chloride	ND	1.0	0.56	mg/L								
Sulfate	ND	1.0	0.55	mg/L								
LCS (B321546-BS1)					Prepared & Analyzed: 10/29/22							
Chloride	10	1.0	0.56	mg/L	10.0		104		90-110			
Sulfate	10	1.0	0.55	mg/L	10.0		102		90-110			
LCS Dup (B321546-BSD1)					Prepared & Analyzed: 10/30/22							
Chloride	10	1.0	0.56	mg/L	10.0		104		90-110	0.193	20	
Sulfate	10	1.0	0.55	mg/L	10.0		102		90-110	0.218	20	
Matrix Spike (B321546-MS1)		**Source: 22J3896-04**			Prepared & Analyzed: 10/30/22							
Chloride	290	10	5.6	mg/L	100	210	**77.6**	*	80-120	outside of scope		MS-07
Sulfate	150	10	5.5	mg/L	100	54	94.7		80-120			
Matrix Spike Dup (B321546-MSD1)		**Source: 22J3896-04**			Prepared & Analyzed: 10/30/22							
Chloride	290	10	5.6	mg/L	100	210	**77.6**	*	80-120	0.0188	20	MS-07
Sulfate	150	10	5.5	mg/L	100	54	95.2		80-120	0.302	20	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SM21-23 2320B

Qualifications:

PR-18

Headspace present in sample container.

Analyte & Samples(s) Qualified:

Alkalinity
22J4221-01[828120MW09008], 22J4221-02[828120EW01026]

SM21-23 4500S-F

Qualifications:

SM-01

Sample container does not satisfy method specifications.

Analyte & Samples(s) Qualified:

Sulfide
22J4221-01[828120MW09008], 22J4221-02[828120EW01026]

SW-846 8260D

Qualifications:

L-02

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:

Carbon Disulfide
B321735-BS1, B321735-BSD1, S078754-CCV1

Methyl Acetate
B321735-BS1, B321735-BSD1, S078754-CCV1

Vinyl Chloride
B321735-BS1, B321735-BSD1, S078754-CCV1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

outside of scope

1,1,2-Trichloro-1,2,2-trifluoroethan
B321735-BS1, B321735-BSD1, S078754-CCV1

Bromomethane
B321735-BS1, B321735-BSD1, S078754-CCV1

Carbon Disulfide
B321735-BS1, B321735-BSD1, S078754-CCV1

Methyl Acetate
B321735-BS1, B321735-BSD1, S078754-CCV1

trans-1,2-Dichloroethylene
B321735-BS1, B321735-BSD1, S078754-CCV1

Vinyl Chloride
B321735-BS1, B321735-BSD1, S078754-CCV1

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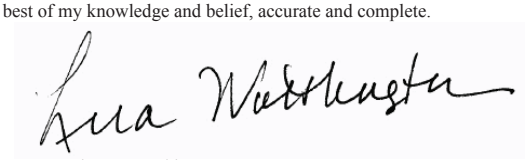
The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B321735 - SW-846 5030B													
LCS Dup (B321735-BSD1)					Prepared: 11/01/22 Analyzed: 11/02/22								
1,1-Dichloroethane	8.95	1.0	0.14	µg/L	10.0		89.5		70-130	6.17	25		
1,2-Dichloroethane	9.42	1.0	0.31	µg/L	10.0		94.2		70-130	4.46	25		
1,1-Dichloroethylene	9.24	1.0	0.14	µg/L	10.0		92.4		70-130	6.59	25		
cis-1,2-Dichloroethylene	9.14	1.0	0.15	µg/L	10.0		91.4		70-130	5.12	25		
trans-1,2-Dichloroethylene	12.9	1.0	0.17	µg/L	10.0		129		70-130	1.96	25	V-20	
1,2-Dichloropropane	9.08	1.0	0.18	µg/L	10.0		90.8		70-130	5.05	25		
1,3-Dichloropropane	9.56	0.50	0.13	µg/L	10.0		95.6		70-130	0.937	25		
2,2-Dichloropropane	7.73	1.0	0.33	µg/L	10.0		77.3		40-130	4.67	25		†
1,1-Dichloropropene	9.46	2.0	0.15	µg/L	10.0		94.6		70-130	3.33	25		
cis-1,3-Dichloropropene	8.79	0.50	0.16	µg/L	10.0		87.9		70-130	3.79	25		
trans-1,3-Dichloropropene	8.99	0.50	0.17	µg/L	10.0		89.9		70-130	1.23	25		
Diethyl Ether	9.71	2.0	0.18	µg/L	10.0		97.1		70-130	7.53	25		
Diisopropyl Ether (DIPE)	9.59	0.50	0.13	µg/L	10.0		95.9		70-130	2.57	25		
1,4-Dioxane	78.8	50	21	µg/L	100		78.8		40-130	5.32	50		† ‡
Ethylbenzene	9.95	1.0	0.21	µg/L	10.0		99.5		70-130	0.701	25		
Hexachlorobutadiene	9.27	0.60	0.46	µg/L	10.0		92.7		70-130	4.41	25		
2-Hexanone (MBK)	99.6	10	1.1	µg/L	100		99.6		70-160	4.83	25		†
Isopropylbenzene (Cumene)	9.65	1.0	0.11	µg/L	10.0		96.5		70-130	3.86	25		
p-Isopropyltoluene (p-Cymene)	9.14	1.0	0.097	µg/L	10.0		91.4		70-130	0.549	25	sample results ND, no quals	
Methyl Acetate	15.2	1.0	0.45	µg/L	10.0		**152**	*	70-130	12.0	25	L-02, V-20	
Methyl tert-Butyl Ether (MTBE)	10.6	1.0	0.17	µg/L	10.0		106		70-130	5.90	25		
Methyl Cyclohexane	9.94	1.0	0.24	µg/L	10.0		99.4		70-130	0.502	25		
Methylene Chloride	9.72	5.0	0.23	µg/L	10.0		97.2		70-130	1.23	25		
4-Methyl-2-pentanone (MIBK)	94.6	10	1.3	µg/L	100		94.6		70-160	0.625	25		†
Naphthalene	9.16	2.0	0.24	µg/L	10.0		91.6		40-130	3.43	25		†
n-Propylbenzene	9.51	1.0	0.086	µg/L	10.0		95.1		70-130	1.15	25		
Styrene	9.86	1.0	0.11	µg/L	10.0		98.6		70-130	0.506	25		
1,1,1,2-Tetrachloroethane	10.1	1.0	0.18	µg/L	10.0		101		70-130	0.798	25		
1,1,2,2-Tetrachloroethane	9.04	0.50	0.13	µg/L	10.0		90.4		70-130	1.65	25		
Tetrachloroethylene	9.64	1.0	0.19	µg/L	10.0		96.4		70-130	4.16	25		
Tetrahydrofuran	9.82	10	0.49	µg/L	10.0		98.2		70-130	4.37	25	J	
Toluene	9.34	1.0	0.22	µg/L	10.0		93.4		70-130	1.17	25		
1,2,3-Trichlorobenzene	9.22	5.0	0.30	µg/L	10.0		92.2		70-130	4.21	25		
1,2,4-Trichlorobenzene	8.58	1.0	0.25	µg/L	10.0		85.8		70-130	2.72	25		
1,3,5-Trichlorobenzene	8.82	1.0	0.21	µg/L	10.0		88.2		70-130	1.80	25		
1,1,1-Trichloroethane	9.83	1.0	0.17	µg/L	10.0		98.3		70-130	4.38	25		
1,1,2-Trichloroethane	9.86	1.0	0.18	µg/L	10.0		98.6		70-130	1.02	25		
Trichloroethylene	10.4	1.0	0.19	µg/L	10.0		104		70-130	3.11	25		
Trichlorofluoromethane (Freon 11)	10.3	2.0	0.18	µg/L	10.0		103		70-130	5.74	25		
1,2,3-Trichloropropane	9.28	2.0	0.28	µg/L	10.0		92.8		70-130	1.50	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.4	1.0	0.23	µg/L	10.0		124		70-130	1.44	25	V-20	
1,2,4-Trimethylbenzene	9.27	1.0	0.20	µg/L	10.0		92.7		70-130	2.84	25		
1,3,5-Trimethylbenzene	9.86	1.0	0.11	µg/L	10.0		98.6		70-130	1.31	25		
Vinyl Chloride	22.6	2.0	0.21	µg/L	10.0		**226**	*	40-160	6.39	25	L-02, V-20	†
m+p Xylene	19.8	2.0	0.46	µg/L	20.0		99.0		70-130	1.60	25	sample results ND no quals	
o-Xylene	9.87	1.0	0.23	µg/L	10.0		98.7		70-130	1.51	25		
Surrogate: 1,2-Dichloroethane-d4	*25.7*			µg/L	25.0		103		70-130				
Surrogate: Toluene-d8	*24.5*			µg/L	25.0		97.8		70-130				
Surrogate: 4-Bromofluorobenzene	*25.7*			µg/L	25.0		103		70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B321735 - SW-846 5030B													
LCS (B321735-BS1)					Prepared: 11/01/22 Analyzed: 11/02/22								
1,3,5-Trichlorobenzene	8.98	1.0	0.21	µg/L	10.0		89.8		70-130				
1,1,1-Trichloroethane	10.3	1.0	0.17	µg/L	10.0		103		70-130				
1,1,2-Trichloroethane	9.76	1.0	0.18	µg/L	10.0		97.6		70-130				
Trichloroethylene	10.8	1.0	0.19	µg/L	10.0		108		70-130				
Trichlorofluoromethane (Freon 11)	10.9	2.0	0.18	µg/L	10.0		109		70-130				
1,2,3-Trichloropropane	9.42	2.0	0.28	µg/L	10.0		94.2		70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.6	1.0	0.23	µg/L	10.0		126		70-130			V-20	
1,2,4-Trimethylbenzene	9.01	1.0	0.20	µg/L	10.0		90.1		70-130				
1,3,5-Trimethylbenzene	9.99	1.0	0.11	µg/L	10.0		99.9		70-130				
Vinyl Chloride	24.1	2.0	0.21	µg/L	10.0		**241**	*	40-160	sample result ND, no quals		L-02, V-20	†
m+p Xylene	20.1	2.0	0.46	µg/L	20.0		101		70-130				
o-Xylene	10.0	1.0	0.23	µg/L	10.0		100		70-130				
Surrogate: 1,2-Dichloroethane-d4	*24.8*			µg/L	25.0		99.0		70-130				
Surrogate: Toluene-d8	*24.4*			µg/L	25.0		97.7		70-130				
Surrogate: 4-Bromofluorobenzene	*25.8*			µg/L	25.0		103		70-130				
LCS Dup (B321735-BSD1)					Prepared: 11/01/22 Analyzed: 11/02/22								
Acetone	100	50	2.0	µg/L	100		100		70-160	1.57	25		†
Acrylonitrile	8.55	5.0	0.55	µg/L	10.0		85.5		70-130	4.01	25		
tert-Amyl Methyl Ether (TAME)	9.09	0.50	0.14	µg/L	10.0		90.9		70-130	0.985	25		
Benzene	8.96	1.0	0.20	µg/L	10.0		89.6		70-130	0.556	25		
Bromobenzene	9.93	1.0	0.15	µg/L	10.0		99.3		70-130	2.78	25		
Bromochloromethane	9.25	1.0	0.31	µg/L	10.0		92.5		70-130	5.16	25		
Bromodichloromethane	9.81	0.50	0.18	µg/L	10.0		98.1		70-130	2.22	25		
Bromoform	9.41	1.0	0.38	µg/L	10.0		94.1		70-130	0.318	25		
Bromomethane	13.8	2.0	1.5	µg/L	10.0		138		40-160	10.2	25	V-20	†
2-Butanone (MEK)	95.8	20	1.6	µg/L	100		95.8		40-160	1.06	25		†
tert-Butyl Alcohol (TBA)	88.6	20	4.7	µg/L	100		88.6		40-160	3.94	25		†
n-Butylbenzene	8.88	1.0	0.15	µg/L	10.0		88.8		70-130	0.225	25		
sec-Butylbenzene	9.01	1.0	0.11	µg/L	10.0		90.1		70-130	0.222	25		
tert-Butylbenzene	9.28	1.0	0.13	µg/L	10.0		92.8		70-130	0.430	25		
tert-Butyl Ethyl Ether (TBEE)	9.45	0.50	0.15	µg/L	10.0		94.5		70-130	2.20	25		
Carbon Disulfide	138	5.0	1.4	µg/L	100		**138**	*	70-130	7.64	25	L-02, V-20	
Carbon Tetrachloride	9.93	5.0	0.16	µg/L	10.0		99.3		70-130	4.53	25	sample results ND, no quals	
Chlorobenzene	9.76	1.0	0.11	µg/L	10.0		97.6		70-130	0.307	25		
Chlorodibromomethane	9.27	0.50	0.22	µg/L	10.0		92.7		70-130	9.16	25		
Chloroethane	11.4	2.0	0.32	µg/L	10.0		114		70-130	2.52	25		
Chloroform	9.64	2.0	0.17	µg/L	10.0		96.4		70-130	5.15	25		
Chloromethane	11.8	2.0	0.52	µg/L	10.0		118		40-160	7.77	25		†
2-Chlorotoluene	8.87	1.0	0.11	µg/L	10.0		88.7		70-130	5.16	25		
4-Chlorotoluene	9.36	1.0	0.12	µg/L	10.0		93.6		70-130	5.41	25		
1,2-Dibromo-3-chloropropane (DBCP)	8.20	5.0	0.80	µg/L	10.0		82.0		70-130	1.23	25		
1,2-Dibromoethane (EDB)	9.71	0.50	0.17	µg/L	10.0		97.1		70-130	0.308	25		
Dibromomethane	9.74	1.0	0.35	µg/L	10.0		97.4		70-130	4.61	25		
1,2-Dichlorobenzene	9.37	1.0	0.12	µg/L	10.0		93.7		70-130	0.965	25		
1,3-Dichlorobenzene	9.15	1.0	0.12	µg/L	10.0		91.5		70-130	1.95	25		
1,4-Dichlorobenzene	9.26	1.0	0.13	µg/L	10.0		92.6		70-130	3.18	25		
trans-1,4-Dichloro-2-butene	9.22	2.0	1.6	µg/L	10.0		92.2		70-130	4.66	25		
Dichlorodifluoromethane (Freon 12)	9.42	2.0	0.19	µg/L	10.0		94.2		40-160	2.69	25		†

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B321735 - SW-846 5030B													
LCS (B321735-BS1)					Prepared: 11/01/22 Analyzed: 11/02/22								
Carbon Tetrachloride	10.4	5.0	0.16	µg/L	10.0		104		70-130				
Chlorobenzene	9.79	1.0	0.11	µg/L	10.0		97.9		70-130				
Chlorodibromomethane	10.2	0.50	0.22	µg/L	10.0		102		70-130				
Chloroethane	11.7	2.0	0.32	µg/L	10.0		117		70-130				
Chloroform	10.2	2.0	0.17	µg/L	10.0		102		70-130				
Chloromethane	10.9	2.0	0.52	µg/L	10.0		109		40-160				†
2-Chlorotoluene	9.34	1.0	0.11	µg/L	10.0		93.4		70-130				
4-Chlorotoluene	9.88	1.0	0.12	µg/L	10.0		98.8		70-130				
1,2-Dibromo-3-chloropropane (DBCP)	8.10	5.0	0.80	µg/L	10.0		81.0		70-130				
1,2-Dibromoethane (EDB)	9.74	0.50	0.17	µg/L	10.0		97.4		70-130				
Dibromomethane	10.2	1.0	0.35	µg/L	10.0		102		70-130				
1,2-Dichlorobenzene	9.28	1.0	0.12	µg/L	10.0		92.8		70-130				
1,3-Dichlorobenzene	9.33	1.0	0.12	µg/L	10.0		93.3		70-130				
1,4-Dichlorobenzene	8.97	1.0	0.13	µg/L	10.0		89.7		70-130				
trans-1,4-Dichloro-2-butene	8.80	2.0	1.6	µg/L	10.0		88.0		70-130				
Dichlorodifluoromethane (Freon 12)	9.17	2.0	0.19	µg/L	10.0		91.7		40-160				†
1,1-Dichloroethane	9.52	1.0	0.14	µg/L	10.0		95.2		70-130				
1,2-Dichloroethane	9.85	1.0	0.31	µg/L	10.0		98.5		70-130				
1,1-Dichloroethylene	9.87	1.0	0.14	µg/L	10.0		98.7		70-130				
cis-1,2-Dichloroethylene	9.62	1.0	0.15	µg/L	10.0		96.2		70-130				
trans-1,2-Dichloroethylene	12.6	1.0	0.17	µg/L	10.0		126		70-130			V-20	
1,2-Dichloropropane	9.55	1.0	0.18	µg/L	10.0		95.5		70-130				
1,3-Dichloropropane	9.65	0.50	0.13	µg/L	10.0		96.5		70-130				
2,2-Dichloropropane	8.10	1.0	0.33	µg/L	10.0		81.0		40-130				†
1,1-Dichloropropene	9.78	2.0	0.15	µg/L	10.0		97.8		70-130				
cis-1,3-Dichloropropene	9.13	0.50	0.16	µg/L	10.0		91.3		70-130				
trans-1,3-Dichloropropene	8.88	0.50	0.17	µg/L	10.0		88.8		70-130				
Diethyl Ether	10.5	2.0	0.18	µg/L	10.0		105		70-130				
Diisopropyl Ether (DIPE)	9.84	0.50	0.13	µg/L	10.0		98.4		70-130				
1,4-Dioxane	83.2	50	21	µg/L	100		83.2		40-130				†
Ethylbenzene	10.0	1.0	0.21	µg/L	10.0		100		70-130				
Hexachlorobutadiene	8.87	0.60	0.46	µg/L	10.0		88.7		70-130				
2-Hexanone (MBK)	94.9	10	1.1	µg/L	100		94.9		70-160				†
Isopropylbenzene (Cumene)	10.0	1.0	0.11	µg/L	10.0		100		70-130				
p-Isopropyltoluene (p-Cymene)	9.09	1.0	0.097	µg/L	10.0		90.9		70-130				
Methyl Acetate	17.2	1.0	0.45	µg/L	10.0		**172**	*	70-130	sample result ND, no quals		L-02, V-20	
Methyl tert-Butyl Ether (MTBE)	10.0	1.0	0.17	µg/L	10.0		100		70-130				
Methyl Cyclohexane	9.99	1.0	0.24	µg/L	10.0		99.9		70-130				
Methylene Chloride	9.84	5.0	0.23	µg/L	10.0		98.4		70-130				
4-Methyl-2-pentanone (MIBK)	94.0	10	1.3	µg/L	100		94.0		70-160				†
Naphthalene	9.48	2.0	0.24	µg/L	10.0		94.8		40-130				†
n-Propylbenzene	9.62	1.0	0.086	µg/L	10.0		96.2		70-130				
Styrene	9.91	1.0	0.11	µg/L	10.0		99.1		70-130				
1,1,1,2-Tetrachloroethane	9.98	1.0	0.18	µg/L	10.0		99.8		70-130				
1,1,2,2-Tetrachloroethane	9.19	0.50	0.13	µg/L	10.0		91.9		70-130				
Tetrachloroethylene	10.0	1.0	0.19	µg/L	10.0		100		70-130				
Tetrahydrofuran	9.40	10	0.49	µg/L	10.0		94.0		70-130			J	
Toluene	9.45	1.0	0.22	µg/L	10.0		94.5		70-130				
1,2,3-Trichlorobenzene	8.84	5.0	0.30	µg/L	10.0		88.4		70-130				
1,2,4-Trichlorobenzene	8.35	1.0	0.25	µg/L	10.0		83.5		70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B321735 - SW-846 5030B													
Blank (B321735-BLK1)					Prepared: 11/01/22 Analyzed: 11/02/22								
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.097	µg/L									
Methyl Acetate	ND	1.0	0.45	µg/L									
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L									
Methyl Cyclohexane	ND	1.0	0.24	µg/L									
Methylene Chloride	ND	5.0	0.23	µg/L									
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L									
Naphthalene	ND	2.0	0.24	µg/L									
n-Propylbenzene	ND	1.0	0.086	µg/L									
Styrene	ND	1.0	0.11	µg/L									
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L									
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L									
Tetrachloroethylene	ND	1.0	0.19	µg/L									
Tetrahydrofuran	ND	10	0.49	µg/L									
Toluene	ND	1.0	0.22	µg/L									
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L									
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L									
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L									
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L									
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L									
Trichloroethylene	ND	1.0	0.19	µg/L									
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L									
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L									
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L									
1,3,5-Trimethylbenzene	ND	1.0	0.11	µg/L									
Vinyl Chloride	ND	2.0	0.21	µg/L									
m+p Xylene	ND	2.0	0.46	µg/L									
o-Xylene	ND	1.0	0.23	µg/L									
Surrogate: 1,2-Dichloroethane-d4	*26.0*			µg/L	25.0		104		70-130				
Surrogate: Toluene-d8	*24.8*			µg/L	25.0		99.1		70-130				
Surrogate: 4-Bromofluorobenzene	*24.6*			µg/L	25.0		98.6		70-130				
LCS (B321735-BS1)					Prepared: 11/01/22 Analyzed: 11/02/22								
Acetone	102	50	2.0	µg/L	100		102		70-160				†
Acrylonitrile	8.90	5.0	0.55	µg/L	10.0		89.0		70-130				
tert-Amyl Methyl Ether (TAME)	9.18	0.50	0.14	µg/L	10.0		91.8		70-130				
Benzene	9.01	1.0	0.20	µg/L	10.0		90.1		70-130				
Bromobenzene	10.2	1.0	0.15	µg/L	10.0		102		70-130				
Bromochloromethane	9.74	1.0	0.31	µg/L	10.0		97.4		70-130				
Bromodichloromethane	10.0	0.50	0.18	µg/L	10.0		100		70-130				
Bromoform	9.44	1.0	0.38	µg/L	10.0		94.4		70-130				
Bromomethane	15.3	2.0	1.5	µg/L	10.0		153		40-160			V-20	†
2-Butanone (MEK)	96.8	20	1.6	µg/L	100		96.8		40-160				†
tert-Butyl Alcohol (TBA)	92.2	20	4.7	µg/L	100		92.2		40-160				†
n-Butylbenzene	8.90	1.0	0.15	µg/L	10.0		89.0		70-130				
sec-Butylbenzene	9.03	1.0	0.11	µg/L	10.0		90.3		70-130				
tert-Butylbenzene	9.32	1.0	0.13	µg/L	10.0		93.2		70-130				
tert-Butyl Ethyl Ether (TBEE)	9.66	0.50	0.15	µg/L	10.0		96.6		70-130				
Carbon Disulfide	149	5.0	1.4	µg/L	100		**149**	*	70-130	sample results ND, no quals		L-02, V-20	

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Project Location: Brighton, NY | Sample Description: | Work Order: 22J4221

Date Received: 10/28/2022

Field Sample #: 828120FB3 | Sampled: 10/27/2022 10:30

Sample ID: 22J4221-03

Sample Matrix: Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
Bromoform	ND	2.0	0.38	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
Chloroform	18	2.0	0.17	µg/L	1	U, BL2	SW-846 8260D	11/1/22	11/2/22 2:45	EEH
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH
Diethyl Ether	ND	2.0	0.18	µg/L	1		SW-846 8260D	11/1/22	11/2/22 2:45	EEH

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Project Location: Brighton, NY | Sample Description: | Work Order: 22J3896

Date Received: 10/27/2022

Field Sample #: 828120FB2 | Sampled: 10/26/2022 14:30

Sample ID: 22J3896-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
Acrylonitrile	ND	5.0	0.55	µg/L	1	V-05	SW-846 8260D	10/28/22	10/28/22 14:02	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
Bromodichloromethane	0.44	0.50	0.18	µg/L	1	sample results ND, no quals J	SW-846 8260D	10/28/22	10/28/22 14:02	EEH
Bromoform	ND	2.0	0.38	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
Chloroform	23	2.0	0.17	µg/L	1	U, BL2	SW-846 8260D	10/28/22	10/28/22 14:02	EEH
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH
Diethyl Ether	ND	2.0	0.18	µg/L	1		SW-846 8260D	10/28/22	10/28/22 14:02	EEH

APPENDIX D

LOW FLOW GROUNDWATER DATA RECORDS

LOW FLOW GROUNDWATER SAMPLING RECORD

MACTEC

511 Congress Street
Suite 200
Portland, Maine 04101

PROJECT NAME: Carriage Cleaners		LOCATION ID: MW-6B	DATE: 10/25/2022
PROJECT NUMBER: 36162061B		START TIME: 0840	END TIME: 0915
SAMPLE ID: 828120MW06B018	SAMPLE TIME: 0912	SITE NAME/INSTALLATION: NYSDEC Site 828120	PAGE: 1 OF 1

WELL DIAMETER (IN.): ☐ 1 ☐ 2 ☒ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☒ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	9.35 FT	FINAL DTW (BMP)	9.38 FT	PROT. CASING STICKUP (AGS)	NA FT	TOC/TOR DIFFERENCE	— FT
WELL DEPTH (BMP)	29.19 FT	SCREEN INTERVAL	UNK FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	19.84 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	0.02 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (water column X well diameter² X 0.041)	13.015 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.365 GAL	DRAWDOWN/ TOTAL PURGED	0.015	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C) ±3%	SP. CONDUCTANCE (mS/cm) ±3%	DISS. O_2 (mg/L) ±10% or 3 values <0.5 mg/L	pH (units) ±0.1	REDOX (mv) ±10 mv	TURBIDITY (ntu) ±10% and <10 ntu or 3 values <5 ntu	PUMP INTAKE DEPTH (ft)	COMMENTS
0840	BEGIN PURGING									
0845	9.37	175	14.2	0.98	1.50	6.91	11.6	41.7	18'	
0850	9.38	175	14.6	0.99	0.71	6.95	-7.4	20.0	18'	
0855	9.38	175	14.2	0.99	1.51	6.96	-6.9	9.51	"	
0900	9.38	175	14.2	0.99	1.50	6.96	-9.0	8.06	"	
0905	9.38	175	14.2	0.99	1.52	6.97	-9.7	8.17	"	
0910	9.38	175	14.2	0.99	1.51	6.97	-8.9	8.02	"	colorless + odorless

FINAL STABILIZED FIELD PARAMETERS (rounded to appropriate significant figures)

	14.2	0.99	1.51	6.97	-8.9	8.02

TEMP: nearest degree (ex. 10.1 - 10)
COND: 3 significant figure max (ex. 1.686 - 1.69)
pH: nearest tenth (ex. 5.53 - 5.5)
DO: nearest tenth (ex. 3.51 - 3.5)
TURB: 3SF max, nearest tenth (0.19 - 0.2, 10.1 - 10.1)
ORP: 2SF (44.1 - 44, 191 - 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP:
- ☑ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED:
- ☑ ALCONOX
- ☑ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS:
- ☑ SILICON TUBING
- ☑ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED:
- ☑ WL METER
- ☐ PID
- ☑ WQ METER YSI
- ☑ TURB. METER Hach
- ☑ PUMP Peristaltic
- ☐ OTHER
- ☐ FILTERS NO. ✓ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	ANALYTE LIST	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	QC COLLECTED
☑	VOC			No			No
	MNA			No			No

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☑
NO-PURGE METHOD UTILIZED	☐	☑

NUMBER OF GALLONS GENERATED: 1.365

NOTES: colorless + odorless sample

Sampler Signature: [signature] Print Name: Isaac Moses

Checked By: [signature] Date: 8/21/23

DEVIATIONS FROM THE WORK PLAN: N/A

REV. 3.29.2019

LOW FLOW GROUNDWATER SAMPLING RECORD

MACTEC

511 Congress Street
Suite 200
Portland, Maine 04101

PROJECT NAME	Carriage Cleaners
PROJECT NUMBER	361620611 8
SAMPLE ID	828120MW08B019
SAMPLE TIME	1057
LOCATION ID	MW-8B
DATE	10/25/22
START TIME	1000
END TIME	1100
SITE NAME/INSTALLATION	NYSDEC 828120
PAGE	1 OF 1

WELL DIAMETER (IN.): ☐ 1 ☐ 2 ☑ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☑ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☑ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	9.79 FT	FINAL DTW (BMP)	9.82 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	— FT
WELL DEPTH (BMP)	27.65 FT	SCREEN INTERVAL	UNK FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	17.86 FT	DRAWDOWN VOLUME (final DTW- initial DTW X well diam. squared X 0.041)	0.020 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (water column X well diameter² X 0.041) 0.6528 gal	11.716 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.56 GAL	DRAWDOWN/ TOTAL PURGED	0.0128	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C) ±3%	SP. CONDUCTANCE (mS/cm) ±3%	DISS. O_2 (mg/L) ±10% or 3 values <0.5 mg/L	pH (units) ±0.1	REDOX (mv) ±10 mv	TURBIDITY (ntu) ±10% and <10 ntu or 3 values <5 ntu	PUMP INTAKE DEPTH (ft)	COMMENTS
1025	BEGIN PURGING									
1030	9.82	200	14.9	0.92	0.70	7.22	1.5	31.4	19'	Colorless + Odorless
1035	9.82	200	14.9	0.92	0.35	7.04	7.8	20.1	19'	" "
1040	9.82	200	14.9	0.92	0.12	7.02	8.5	15.2	19'	" "
1045	9.82	200	14.9	0.93	0.00	7.03	5.4	10.9	19'	" "
1050	9.82	200	15.0	0.93	0.00	7.04	4.0	10.7	19'	" "
1055	9.82	200	15.0	0.93	0.00	7.05	2.8	11.0	19'	" "

FINAL STABILIZED FIELD PARAMETERS (rounded to appropriate significant figures)

	15.0	0.93	0.00	7.05	2.8	11.0

TEMP: nearest degree (ex. 10.1 → 10)
COND: 3 significant figure max (ex. 1.686 → 1.69)
pH: nearest tenth (ex. 5.53 → 5.5)
DO: nearest tenth (ex. 3.51 → 3.5)
TURB: 3 SF max; nearest tenth (6.19 → 6.2; 101 → 101)
ORP: 2 SF (44.1 → 44; 191 → 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
☑ PERISTALTIC
☐ SUBMERSIBLE
☐ BLADDER
☐ WATTERA
☐ OTHER
☐ OTHER

DECON FLUIDS USED
☑ ALCONOX
☑ DEIONIZED WATER
☐ POTABLE WATER
☐ NITRIC ACID
☐ HEXANE
☐ METHANOL
☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
☑ SILICON TUBING
☐ HDPE TUBING
☐ LDPE TUBING
☐ OTHER
☐ OTHER

☐ S. STEEL PUMP MATERIAL
☐ PVC PUMP MATERIAL
☐ GEOPROBE SCREEN
☐ OTHER
☐ OTHER
☐ OTHER

EQUIPMENT USED
☑ WL METER Solonist
☐ PID
☑ WQ METER YSI
☑ TURB. METER Hach
☑ PUMP Peristaltic
☐ OTHER
☐ FILTERS NO. X TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	ANALYTE LIST	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	QC COLLECTED
☑	VOC	8260B		NO	HCl	80 mL	NO
☐							
☐							
☐							
☐							
☐							
☐							

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☑	☐
NO-PURGE METHOD UTILIZED	☐	☑

NUMBER OF GALLONS GENERATED: 1.6

NOTES: Sampled @ 1057, colorless, odorless

Sampler Signature: [signature] Print Name: Isaac Moore

Checked By: [signature] Date: 8/21/23

DEVIATIONS FROM THE WORK PLAN: N/A

REV. 3/29/2019

LOW FLOW GROUNDWATER SAMPLING RECORD

MACTEC
511 Congress Street
Suite 200
Portland, Maine 04101

PROJECT NAME	LOCATION ID	DATE
Carriage Cleaners	HA 114	10/25/22
PROJECT NUMBER: 3616204118	START TIME: 1210	END TIME: 1314
SAMPLE ID: 828120HA114012 / SAMPLE TIME: 1252	SITE NAME/INSTALLATION: NYSDEC #828120	PAGE 1 OF 1

WELL DIAMETER (IN.): ☐ 1 ☑ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☑ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☑ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	x		
CASING	x		
LOCKED	x		
COLLAR	x		

INITIAL DTW (BMP)	8.95 FT	FINAL DTW (BMP)	9.85 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	14.68 FT	SCREEN INTERVAL	unk FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	5.73 FT	DRAWDOWN VOLUME (final DTW- initial DTW X well diam. squared X 0.041)	0.1476 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (water column X well diameter² X 0.041)	0.935 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.365 GAL	DRAWDOWN/ TOTAL PURGED	0.1081	PRESSURE TO PUMP	NA PSI

0.1632

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C) ±3%	SP. CONDUCTANCE (mS/cm) ±3%	DISS. O_2 (mg/L) ±10% or 3 values <0.5 mg/L	pH (units) ±0.1	REDOX (mv) ±10 mv	TURBIDITY (ntu) ±10% and <10 ntu or 3 values <5 ntu	PUMP INTAKE DEPTH (ft)	COMMENTS
1215	BEGIN PURGING									
1220	9.91	175	16.8	0.98	4.59	7.16	100.1	69.0	12'	Lt Brown color No odor
1225	10.01	150	16.8	1.40	4.16	6.92	39.7	80.3	12'	" " Turndown Flow rate
1230	9.97	150	16.7	1.75	4.31	6.91	15.1	68.2	12'	" "
1235	9.95	150	16.7	1.95	3.11	6.95	5.3	22.5	12'	Colorless, odorless
1240	9.85	150	16.7	2.09	3.19	6.96	1.6	9.7	12'	" "
1245	9.85	150	16.7	2.14	2.96	6.97	0.0	9.8	12'	" "
1250	9.85	150	16.8	2.05	2.94	6.98	0.8	9.1	12'	" "

FINAL STABILIZED FIELD PARAMETERS (rounded to appropriate significant figures)

TEMP: nearest degree (ex. 10.1 = 10)
COND: 3 significant figures max (ex. 1.686 = 1.69)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: ☑ PERISTALTIC ☐ SUBMERSIBLE ☐ BLADDER ☐ WATTERA ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☑ ALCONOX ☑ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☑ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER ☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER Solonist ☐ PID ☑ WQ METER YSI ☑ TURB. METER Hach ☑ PUMP Peristaltic ☐ OTHER ☐ FILTERS NO x TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	ANALYTE LIST	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	QC COLLECTED
☑	MNA	Multiple		No	Multiple		No
☑	VOC	8260B		No	HCl		Yes - DUP+MS/MSD

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☑ NO ☐

NUMBER OF GALLONS GENERATED: 1.365

NO-PURGE METHOD UTILIZED: YES ☐ NO ☑

NOTES: 828120HA114012 / 828120HA114012MS / 828120HA114012MSD } 1252 + 828120DUP @ —

DEVIATIONS FROM THE WORK PLAN

Sampler Signature: [signature] Print Name: Isaac Moses

Checked By: [signature] Date: 8/21/23

REV. 3/29/2019

LOW FLOW GROUNDWATER SAMPLING RECORD

MACTEC

511 Congress Street
Suite 200
Portland, Maine 04101

PROJECT NAME: Carriage Clearners		LOCATION ID: MW-6	DATE: 10/25/22
PROJECT NUMBER: 3616206118		START TIME: 0925	END TIME: 0950 (will sample TM)
SAMPLE ID: 828120MW06009	SAMPLE TIME:	SITE NAME/INSTALLATION: NYSDEC # 828120	PAGE: 1 OF 1

WELL DIAMETER (IN.): [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [X] 1/8 [ ] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [X] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	9.10 FT	FINAL DTW (BMP)	10.15 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	— FT
WELL DEPTH (BMP)	10.15 FT	SCREEN INTERVAL	unk FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	1.05 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	1.05 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (water column X well diameter² X 0.041)	GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C) ±3%	SP. CONDUCTANCE (mS/cm) ±3%	DISS. O_2 (mg/L) ±10% or 3 values <0.5 mg/L	pH (units) ±0.1	REDOX (mv) ±10 m	TURBIDITY (ntu) ±10% and <10 ntu or 3 values <5 ntu	PUMP INTAKE DEPTH (ft)	COMMENTS
0925	BEGIN PURGING - Dry almost immediately									
									10.5'	@ Bottom of well for intake - Producing less than 50 mL/min

Well Dry on 10/25/2022
Grab Sample 10/26/2022

FINAL STABILIZED FIELD PARAMETERS (rounded to appropriate significant figures)

TEMP nearest degree (ex. 10.1 - 10)
COND 3 significant figure max (ex. 1.680 - 1.68)
pH nearest tenth (ex. 5.53 - 5.5)
DO nearest tenth (ex. 3.51 - 3.5)
TURB 3 SE max, nearest tenth (6.19 - 6.2; 10.1 - 10.1)
ORP 2 SE (44.1 - 44; 191 - 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
[ ] PERISTALTIC
[ ] SUBMERSIBLE
[ ] BLADDER
[ ] WATTERA
[ ] OTHER
[ ] OTHER

DECON FLUIDS USED
[ ] ALCONOX
[ ] DEIONIZED WATER
[ ] POTABLE WATER
[ ] NITRIC ACID
[ ] HEXANE
[ ] METHANOL
[ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
[ ] SILICON TUBING
[ ] HDPE TUBING
[ ] LDPE TUBING
[ ] OTHER
[ ] OTHER
[ ] S. STEEL PUMP MATERIAL
[ ] PVC PUMP MATERIAL
[ ] GEOPROBE SCREEN
[ ] OTHER
[ ] OTHER
[ ] OTHER

EQUIPMENT USED
[ ] WL METER
[ ] PID
[ ] WQ METER
[ ] TURB. METER
[ ] PUMP
[ ] OTHER
[ ] FILTERS NO. TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	ANALYTE LIST	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	QC COLLECTED
✓	8260B VOC	8260B		NO	HCl	80 mL	NO

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	✓	
NO-PURGE METHOD UTILIZED		✓

NUMBER OF GALLONS GENERATED:

NOTES: Dry almost immediately, lowered tubing to bottom of well, got less than 50 mL/min - Call PM
Will sample 10/26/22 in AM (Grab)

DEVIATIONS FROM THE WORK PLAN: - well Dry 10/25

Sampler Signature: Isaac Moore
Print Name: Isaac Moore
Checked By:
Date: 8/21/23

REV. 3.29.2019

* See back of Field sheet for 10/26 sample info

Date 10/26/22

Well : MW-6 -> Dry 10/25, waited ~24 hrr to grab sample

DTW : 9.13

Sample ID: 828120 MW06 009

Sample Time: 0815

Sampled using peristaltic Pump For VOCs via 8260B

LOW FLOW GROUNDWATER SAMPLING RECORD

MACTEC

511 Congress Street
Suite 200
Portland, Maine 04101

PROJECT NAME: Carriage Cleaners	LOCATION ID: MW-93
PROJECT NUMBER: 3616206118	DATE: 10/26/22
SAMPLE ID: 828120 MW93 MW09B018	SAMPLE TIME: 0930
START TIME: 0830	END TIME: 0935
SITE NAME/INSTALLATION: NYSDEC #828120	PAGE: 1 OF 1

WELL DIAMETER (IN.): ☐ 1 ☐ 2 ☑ 4 ☐ 6 ☐ 8 ☐ OTHER
TUBING ID (INCHES): ☑ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER
MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED		✓	
COLLAR	✓		

INITIAL DTW (BMP)	7.91 FT	FINAL DTW (BMP)	7.94 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	— FT
WELL DEPTH (BMP)	19.48 FT	SCREEN INTERVAL	unk FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	11.57 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	0.0195 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (water column X well diameter² X 0.041)	7.55 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.665 GAL	DRAWDOWN/ TOTAL PURGED	0.007	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C) ±3%	SP. CONDUCTANCE (mS/cm) ±3%	DISS. O_2 (mg/L) ±10% or 3 values <0.5 mg/L	pH (units) ±0.1	REDOX (mv) ±10 mv	TURBIDITY (ntu) ±10% and <10 ntu or 3 values <5 ntu	PUMP INTAKE DEPTH (ft)	COMMENTS
1830										
0840	BEGIN PURGING									
0845	7.92	150	15.0	0.75	0.66	7.60	-39.1	293	18	Cloudy, odorless
0850	7.92	150	15.1	0.74	0.31	7.02	-59.6	234	18	" "
0855	7.92	250	14.9	0.74	0.00	6.88	-63.4	226	18	" " Increase flow rate
0900	7.94	250	15.0	0.74	0.00	6.84	-66.0	175	18	" "
0905	7.94	250	15.1	0.74	0.00	6.83	-68.2	140	18	" "
0910	7.94	250	15.1	0.74	0.00	6.82	-69.8	119	18	" "
0915	7.94	250	15.0	0.74	0.00	6.80	-69.7	94.3	18	Colorless, odorless
0920	7.94	250	15.0	0.74	0.00	6.80	-69.9	95.0	18	" "
0925	7.94	250	15.0	0.74	0.00	6.79	-70.7	92.3	18	" "
0930	Sample									
~~0935~~										

FINAL STABILIZED FIELD PARAMETERS (rounded to appropriate significant figures)

	15.0	0.74	0.00	6.79	-70.7	92.3

TEMP: nearest degree (ex. 10.1 - 10)
COND: 3 significant figure max (ex. 1.680 - 1.69)
pH: nearest tenth (ex. 5.53 - 5.5)
DO: nearest tenth (ex. 3.51 - 3.5)
TURB: 3 SF max; nearest tenth (6.19 - 6.2; 101 - 101)
ORP: 2 SF (-44.1 - -44; 191 - 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: ✓ PERISTALTIC; ☐ SUBMERSIBLE; ☐ BLADDER; ☐ WATTERA; ☐ OTHER; ☐ OTHER

DECON FLUIDS USED: ✓ ALCONOX; ✓ DEIONIZED WATER; ☐ POTABLE WATER; ☐ NITRIC ACID; ☐ HEXANE; ☐ METHANOL; ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS: ✓ SILICON TUBING; ✓ HDPE TUBING; ☐ LDPE TUBING; ☐ OTHER; ☐ OTHER; ☐ S. STEEL PUMP MATERIAL; ☐ PVC PUMP MATERIAL; ☐ GEOPROBE SCREEN; ☐ OTHER; ☐ OTHER; ☐ OTHER

EQUIPMENT USED: ✓ WL METER Solinist; ☐ PID; ✓ WQ METER YSI; ✓ TURB. METER Hach; ✓ PUMP Peristaltic; ☐ OTHER; ☐ FILTERS NO ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	ANALYTE LIST	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	QC COLLECTED
VOC	8260		No	HCl	80 mL	No

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	✓	
NO-PURGE METHOD UTILIZED		✓

NUMBER OF GALLONS GENERATED: 2.665

NOTES: water more turbid than last time. I had trouble getting tubing deep 16' + stirred up well.

DEVIATIONS FROM THE WORK PLAN

Sampler Signature: Isaac Moge Print Name:

Checked By: Date: 8/21/23

REV: 3.29.2019

LOW FLOW GROUNDWATER SAMPLING RECORD

MACTEC

511 Congress Street
Suite 200
Portland, Maine 04101

PROJECT NAME: Carriage Cleaners		LOCATION ID: MW-111I	DATE: 10/26/22
PROJECT NUMBER: 3616206118		START TIME: 1130	END TIME: 1245
SAMPLE ID: 828120MW111I020	SAMPLE TIME: 1230	SITE NAME/INSTALLATION: NYSDEC # 828120	PAGE: 1 OF 1

WELL DIAMETER (IN.): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER
TUBING ID (INCHES): ☒ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER
MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			✓
COLLAR	✓		

INITIAL DTW (BMP)	11.04 FT	FINAL DTW (BMP)	11.48 FT	PROT. CASING STICKUP (AGS)	FLUSH FT	TOC/TOR DIFFERENCE	– FT
WELL DEPTH (BMP)	29.20 FT	SCREEN INTERVAL	unk FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	18.16 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	0.071 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (water column X well diameter² X 0.041)	2.96 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.664 GAL	DRAWDOWN/ TOTAL PURGED	0.426	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C) ±3%	SP. CONDUCTANCE (mS/cm) ±3%	DISS. O_2 (mg/L) ±10% or 3 values <0.5 mg/L	pH (units) ±0.1	REDOX (mv) ±10 mv	TURBIDITY (ntu) ±10% and <10 ntu or 3 values <5 ntu	PUMP INTAKE DEPTH (ft)	COMMENTS
1145	BEGIN PURGING									
1150	11.38	160	15.9	1.59	1.92	6.93	33.9	18.1	20	Colorless, odorless
1155	11.44	160	15.9	1.59	0.00	6.67	29.8	11.6	20	" "
1200	11.45	160	16.0	1.62	0.00	6.63	23.2	7.33	20	" "
1205	11.44	160	16.0	1.60	0.00	6.65	13.8	7.19	20	" "
1210	11.45	160	15.9	1.35	0.00	6.68	-0.7	3.25	20	" "
1215	11.46	160	15.9	1.26	0.00	6.68	-4.7	2.80	20	" "
1220	11.48	160	15.9	1.24	0.00	6.67	-7.0	1.67	20	" "
1225	11.48	160	15.9	1.25	0.00	6.67	-7.5	1.73	20	" "

FINAL STABILIZED FIELD PARAMETERS (rounded to appropriate significant figures)

	15.9	1.25	0.00	6.67	-7.5	1.73

TEMP nearest degree (ex. 10.1 – 10)
COND 3 significant figure max (ex. 1.86 – 1.86)
pH nearest tenth (ex. 5.51 – 5.5)
DO nearest tenth (ex. 3.51 – 3.5)
TURB 3 SU max; nearest tenth (6.19 – 6.2; 101 – 101)
ORP 2 SU (44.1 – 44; 191 – 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: ☒ PERISTALTIC ☐ SUBMERSIBLE ☐ BLADDER ☐ WATTERA ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☒ ALCONOX ☒ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS: ☒ SILICON TUBING ☒ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER; ☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☒ WL METER Solo-mist ☐ PID ☒ WQ METER YSI ☒ TURB. METER Hach ☒ PUMP Peristaltic ☐ OTHER ☐ FILTERS NO. ☒ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	ANALYTE LIST	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	QC COLLECTED
✓	VOC	8260B		NO	HCl	80 mL	NO
✓	MNA	Multiple		~~NO~~ YES	Multiple		NO

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☒	☐
NO-PURGE METHOD UTILIZED	☐	☒

NUMBER OF GALLONS GENERATED: 1.664

NOTES: well to west in grass labelled as MW-111. MW-111I is in asphalt.

DEVIATIONS FROM THE WORK PLAN

Sampler Signature: [signature] Print Name: Isaac Moser
Checked By: [signature] Date: 8/21/23

REV. 3/29/2019

LOW FLOW GROUNDWATER SAMPLING RECORD

MACTEC

511 Congress Street
Suite 200
Portland, Maine 04101

PROJECT NAME: Carriage Cleaners		LOCATION ID: MW-210	DATE: 10/26/22
PROJECT NUMBER: 361620611 8		START TIME: 1330	END TIME: 1445
SAMPLE ID: 828120MW21-0017	SAMPLE TIME: 1420	SITE NAME/INSTALLATION: NYSDEC #828120	PAGE: 1 OF 1

WELL DIAMETER (IN.): [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER
TUBING ID (INCHES): [X] 1/8 [ ] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER
MEASUREMENT POINT (MP): [X] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	7.95 FT	FINAL DTW (BMP)	8.17 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	— FT
WELL DEPTH (BMP)	17.65 FT	SCREEN INTERVAL	unk. FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	9.7 FT	DRAWDOWN VOLUME (final DTW - initial DTW X well diam. squared X 0.041)	0.835 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (water column X well diameter^2 X 0.041)	1.58 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.56 GAL	DRAWDOWN/ TOTAL PURGED	0.022	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C) ±3%	SP. CONDUCTANCE (mS/cm) ±3%	DISS. O_2 (mg/L) ±10% or 3 values <0.5 mg/L	pH (units) ±0.1	REDOX (mv) ±10 mv	TURBIDITY (ntu) ±10% and <10 ntu or 3 values <5 ntu	PUMP INTAKE DEPTH (ft)	COMMENTS
1345	BEGIN PURGING									
1350	8.17	200	16.5	0.96	0.00	6.78	-19.5	47.7	12	Lt Brown, odorless
1355	8.17	200	16.4	1.20	0.00	6.57	-19.5	48.6	12	" "
1400	8.17	200	16.3	1.28	0.00	6.58	-24.4	8.7	12	Colorless odorless
1405	8.17	200	16.2	1.33	0.00	6.59	-26.4	8.3	12	Colorless, odorless
1410	8.17	200	16.2	1.33	0.00	6.60	-29.5	8.5	12	" "
1415	8.17	200	16.1	1.34	0.00	6.61	-31.4	8.0	12	" "

FINAL STABILIZED FIELD PARAMETERS (rounded to appropriate significant figures)

	16.1	1.34	0.00	6.61	-31.4	8.0

TEMP. nearest degree (ex. 10.1 - 10)
COND. 3 significant figure max (ex. 1.680 - 1.68)
pH nearest tenth (ex. 5.53 - 5.5)
DO nearest tenth (ex. 3.51 - 3.5)
TURB 3 SU max, nearest tenth (6.19 - 6.2; 101 - 101)
ORP 2 SU (-11.1 - -11; 194 - 194)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP:
[X] PERISTALTIC
[ ] SUBMERSIBLE
[ ] BLADDER
[ ] WATTERA
[ ] OTHER
[ ] OTHER

DECON FLUIDS USED:
[ ] ALCONOX
[ ] DEIONIZED WATER
[ ] POTABLE WATER
[ ] HCL ACID
[ ] HEXANE
[ ] METHANOL
[ ] OTHER

TUBING/PUMP/BLADDER MATERIALS:
[X] SILICON TUBING
[X] HDPE TUBING
[ ] LDPE TUBING
[ ] OTHER
[ ] OTHER
[ ] S. STEEL PUMP MATERIAL
[ ] PVC PUMP MATERIAL
[ ] GEOPROBE SCREEN
[ ] OTHER
[ ] OTHER
[ ] OTHER

EQUIPMENT USED:
[✓] WL METER Solonist
[ ] PID
[✓] WQ METER YSI
[✓] TURB. METER Hach
[✓] PUMP Peristaltic
[ ] OTHER
[ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	ANALYTE LIST	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	QC COLLECTED
✓	VOC	8260		No	HCl		Yes MS/MSD + DUP
✓	MNA	Multiple		No	Multiple		

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED:

NOTES:

Sampler Signature: [signature] Print Name: Isaac Mogil
Checked By: [signature] Date: 8/21/23

DEVIATIONS FROM THE WORK PLAN:

REV 3.29.2019

FIELD INSTRUMENT CALIBRATION RECORD

PROJECT NAME: Cairrage Cleaners / Former Speedy's Cleaners
PROJECT NUMBER: 3616206118 / 3616206120
PROJECT LOCATION: 2101 / 2150 Monroe Ave, Brighton, NY
WEATHER CONDITIONS (AM): 55°F, clear
WEATHER CONDITIONS (PM):

TASK NO: DATE: 10/26/22
MACTEC CREW: IM DG
SAMPLER NAME: I. Moser
SAMPLER SIGNATURE:
CHECKED BY: VMW DATE: 8/21/23

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO: Pro Plus
UNIT ID NO: 36431

AM CALIBRATION Start Time 0716 /End Time 0740

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	4.00	+/- 0.1 pH Units
pH (7)	SU	7.0		+/- 0.1 pH Units
pH (10)	SU	10.0	10.01	+/- 0.1 pH Units
Redox	+/- mV	240	240	+/- 10 mV
Conductivity	mS/cm	1.413	1.41	+/- 0.5 % of standard
DO (saturated)	%	100	99.8	+/- 2% of standard
DO (saturated)	mg/L (see Chart 1)			+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1		< 0.5 mg/L
Temperature	°C		13.9	
Baro. Press.	mmHg		741.2	

POST CALIBRATION CHECK Start Time 0745 /End Time

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	7.0	+/- 0.3 pH Units
240	240	+/- 10 mV
1.413	1.41	+/- 5% of standard
		+/- 0.5 mg/L of standard

TURBIDITY METER

METER TYPE: Hach
MODEL NO: 2100 Q
UNIT ID NO: 45319

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
~~10~~ Standard	NTU	<0.1	10.0	~~10~~	10	+/- 0.3 NTU of stan
20 Standard	NTU	20	20.0	20	20	+/- 5% of standard
100 Standard	NTU	100	100.0	100	100	+/- 5% of standard
800 Standard	NTU	800	800.0	800	800	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO:
UNIT ID NO:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO:
UNIT ID NO:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO:
UNIT ID NO:

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source: Laboratory provided
Sample Preservatives Source:
Disposable Filter Type: in-line 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)		
pH (7)		
pH (10)		
ORP		
Conductivity		
<0.1 Turb. Stan.		
20 Turb. Stan.		
100 Turb. Stan.		
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

* - Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations
** - If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries
1 - DO Saturated standard value is calculated based on Oxygen Solubility as Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010

MACTEC
511 Congress Street, Portland Maine 04101

FIELD INSTRUMENT CALIBRATION RECORD

FIELD INSTRUMENT CALIBRATION RECORD

PROJECT NAME: Cairrage Cleaners / Former Speedy's Cleaners
PROJECT NUMBER: 3616206118 / 3616206120
PROJECT LOCATION: 2101 / 2150 Monroe Ave, Brighton, NY
WEATHER CONDITIONS (AM): 55° F, clear
WEATHER CONDITIONS (PM):

TASK NO: _____ DATE: 10/25/22
MACTEC CREW: IM DG
SAMPLER NAME: I. Moser
SAMPLER SIGNATURE: _____
CHECKED BY: VMW DATE: 8/21/23

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO: Pro Plus
UNIT ID NO: 36431

AM CALIBRATION Start Time 0730 /End Time 0800

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	4.01	+/- 0.1 pH Units
pH (7)	SU	7.0	7.02	+/- 0.1 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units
Redox	+/- mV	240	240	+/- 10 mV
Conductivity	mS/cm	1.413	1.42	+/- 0.5 % of standard
DO (saturated)	%	100	99.9	+/- 2% of standard
DO (saturated)	mg/L [1 (see Chart 1)]			+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1		< 0.5 mg/L
Temperature	°C		13°	
Baro. Press.	mmHg		748	

POST CALIBRATION CHECK Start Time 0800 /End Time 0810

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	7.03	+/- 0.3 pH Units
240	241	+/- 10 mV
1.413	1.413	+/- 5% of standard
		+/- 0.5 mg/L of standard

TURBIDITY METER

METER TYPE: Hach
MODEL NO.: 2100 Q
UNIT ID NO.: 45319

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
10.0 ~~<0.1~~ Standard	NTU	~~<0.1~~ 10.0	10.0	~~10.0 <0.1~~	10.0	+/- 0.3 NTU of stan.
20 Standard	NTU	20	20.0	20	20.0	+/- 5% of standard
100 Standard	NTU	100	100.0	100	100.0	+/- 5% of standard
800 Standard	NTU	800	800.0	800	800.0	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE: _____
MODEL NO.: _____
UNIT ID NO.: _____

Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
Span Gas	ppmv	100		100	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE: _____
MODEL NO.: _____
UNIT ID NO.: _____

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE: _____
MODEL NO.: _____
UNIT ID NO.: _____

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source: _____
Lot#/Date Produced: _____
Trip Blank Source: Laboratory provided
Sample Preservatives Source: _____
Disposable Filter Type: in-line 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L) _____
- Other _____
- Other _____
- Other _____

Cal. Standard Lot Number	Exp. Date
pH (4)	
pH (7)	
pH (10)	
ORP	
Conductivity	
<0.1 Turb. Stan.	
20 Turb. Stan.	
100 Turb. Stan.	
800 Turb. Stan.	
PID Span Gas	
O_2-LEL Span Gas	
Other	

NOTES:

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1-19-2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1-19-2010

MACTEC
511 Congress Street, Portland Maine 04101

FIELD INSTRUMENT CALIBRATION RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

MACTEC

511 Congress Street
Suite 200
Portland, Maine 04101

PROJECT NAME: Carriage Cleaners		LOCATION ID: MW-210	DATE: 4/13/23
PROJECT NUMBER: 3616206118		START TIME: 0820	END TIME: 0910
SAMPLE ID: 828120 MW210015	SAMPLE TIME: 0900	SITE NAME/INSTALLATION: NJDEC#828120	PAGE: 1 OF 1

WELL DIAMETER (IN.): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☒ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☐ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	6.08 FT	FINAL DTW (BMP)	6.72 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	— FT
WELL DEPTH (BMP)	17.66 FT	SCREEN INTERVAL	— FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	11.58 FT	DRAWDOWN VOLUME (final DTW- initial DTW X well diam. squared X 0.041)	0.105 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (water column X well diameter² X 0.041)	1.8991 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.56 GAL	DRAWDOWN/ TOTAL PURGED	0.067	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C) ±3%	SP. CONDUCTANCE (mS/cm) ±3%	DISS. O_2 (mg/L) ±10% or 3 values <0.5 mg/L	pH (units) ±0.1	REDOX (mv) ±10 mv	TURBIDITY (ntu) ±10% and <10 ntu or 3 values <5 ntu	PUMP INTAKE DEPTH (ft)	COMMENTS
0820	BEGIN PURGING									
0825	6.65	150	11.60	1.010	0.0	6.89	-18.2	25.9	15	
0830	6.67	150	11.70	1.008	0.0	6.85	-23	31.6	15	
0835	6.68	150	11.94	1.003	0.0	6.83	-28.9	14.4	15	
0840	6.69	150	12.05	1.002	0.0	6.82	-31.7	7.38	15	
0845	6.70	150	12.03	0.997	0.0	6.82	-33.1	6.97	15	
0850	6.70	150	12.07	0.996	0.0	6.82	-33.7	6.55	15	
0855	6.71	150	12.03	0.992	0.0	6.82	-34	5.32	15	
0900	Sample									

FINAL STABILIZED FIELD PARAMETERS (rounded to appropriate significant figures)

TEMP.: nearest degree (ex. 10.1 10)
COND.: 3 significant figure max (ex. 1.686 1.69)
pH: nearest tenth (ex. 5.53 5.5)
DO: nearest tenth (ex. 3.51 3.5)
TURB: 3 SF max, nearest tenth (6.19 6.2; 101 101)
ORP: 2 SF (44.1 44; 191 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
☒ PERISTALTIC
☐ SUBMERSIBLE
☐ BLADDER
☐ WATTERA
☐ OTHER
☐ OTHER

DECON FLUIDS USED
☒ ALCONOX
☒ DEIONIZED WATER
☐ POTABLE WATER
☐ NITRIC ACID
☐ HEXANE
☐ METHANOL
☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
☒ SILICON TUBING
☒ HDPE TUBING
☐ LDPE TUBING
☐ OTHER
☐ OTHER
☐ S. STEEL PUMP MATERIAL
☐ PVC PUMP MATERIAL
☐ GEOPROBE SCREEN
☐ OTHER
☐ OTHER
☐ OTHER

EQUIPMENT USED
☒ WL METER Solinst
☐ PID
☒ WQ METER Hanna
☒ TURB. METER Lamotte
☒ PUMP Peristaltic
☐ OTHER
☐ FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	ANALYTE LIST	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	QC COLLECTED
☒	VOCs 8260B						
☒	Total organic Carbon						
☒	Sulfide by SM4500S-F						
☒	Alkalinity by SM 2320B						
☒	Multiple						
☒	Iron total/dissolved						
☒	dissolved gasses						

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☒
NO-PURGE METHOD UTILIZED	☐	☒

NUMBER OF GALLONS GENERATED: 1.56

NOTES: 828120 MW210015 @ 0900

Sampler Signature: [signature] Print Name: Mark Felong

Checked By: [signature] Date: 4/13/23

DEVIATIONS FROM THE WORK PLAN: —

REV. 3/29/2019

LOW FLOW GROUNDWATER SAMPLING RECORD

MACTEC

511 Congress Street
Suite 200
Portland, Maine 04101

PROJECT NAME: Carriage Cleaners		LOCATION ID: EW-1	DATE: 4/12/23
PROJECT NUMBER: 3616206118		START TIME: 1145	END TIME: 1240
SAMPLE ID: 828120EW01010	SAMPLE TIME: 1230	SITE NAME/INSTALLATION: NJDEC#828120	PAGE: 1 OF 1

WELL DIAMETER (IN.): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☒ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☐ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	5.21 FT	FINAL DTW (BMP)	5.55 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	— FT
WELL DEPTH (BMP)	12.44 FT	SCREEN INTERVAL	— FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	7.23 FT	DRAWDOWN VOLUME (final DTW- initial DTW X well diam. squared X 0.041)	0.056 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (water column X well diameter² X 0.041)	1.186 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.76 GAL	DRAWDOWN/ TOTAL PURGED	0.032	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C) ±3%	SP. CONDUCTANCE (mS/cm) ±3%	DISS. O_2 (mg/L) ±10% or 3 values <0.5 mg/L	pH (units) ±0.1	REDOX (mv) ±10 mv	TURBIDITY (ntu) ±10% and <10 ntu or 3 values <5 ntu	PUMP INTAKE DEPTH (ft)	COMMENTS
1145	BEGIN PURGING									
1150	5.49	150	13.07	0.567	0.0	7.16	0.4	3.49	10	
1155	5.50	150	12.84	0.569	0.0	7.15	-15.5	0.57	10	
1200	5.52	150	13.10	0.580	0.0	7.15	-20.7	0.87	10	
1205	5.53	150	12.67	0.584	0.0	7.15	-20.8	0.54	10	
1210	5.53	150	13.14	0.585	0.0	7.14	-26.7	0.55	10	
1215	5.53	150	13.30	0.589	0.0	7.13	-23.9	0.13	10	
1220	5.54	150	13.10	0.592	0.0	7.13	-22.5	0.47	10	
1225	5.54	150	13.21	0.592	0.0	7.12	-21.8	0.24	10	
1230	Sample									

FINAL STABILIZED FIELD PARAMETERS (rounded to appropriate significant figures)

TEMP.: nearest degree (ex. 10.1 10)
COND.: 3 significant figure max (ex. 1.686 1.69)
pH: nearest tenth (ex. 5.53 5.5)
DO: nearest tenth (ex. 5.51 5.5)
TURB: 3 SF max, nearest tenth (6.19 6.2, 101 101)
ORP: 2 SF (44.1 44, 191 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☒ ALCONOX
- ☒ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER Solinst
- ☐ PID
- ☒ WQ METER Hanna
- ☒ TURB. METER Lamotte
- ☒ PUMP Peristaltic
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	ANALYTE LIST	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	QC COLLECTED
☒	VOCs 8260B						
☒	Total organic Carbon						
☒	Sulfide by SM4500S-F						
☒	Alkalinity by SM2320B						
☒	Methane						
☒	Iron total/ dissolved						
☒	Dissolved gasses						

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED	YES ☐	NO ☒
NO-PURGE METHOD UTILIZED	YES ☐	NO ☒

NUMBER OF GALLONS GENERATED: 1.76

NOTES: 828120 EW01010 @ 1230

Sampler Signature: [signature] Print Name: Mark Felons

Checked By: [signature] Date: 4/12/23

DEVIATIONS FROM THE WORK PLAN: —

REV. 3/29/2019

LOW FLOW GROUNDWATER SAMPLING RECORD

MACTEC

511 Congress Street
Suite 200
Portland, Maine 04101

PROJECT NAME	Carriage Cleaners
PROJECT NUMBER	3616206118
SAMPLE ID	828120MW06009
SAMPLE TIME	1400
LOCATION ID	MW-6
DATE	4/12/23
START TIME	1320
END TIME	~~1315~~ 1410
SITE NAME/INSTALLATION	NJDEC #828120
PAGE	1 OF 1

WELL DIAMETER (IN.): [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER
TUBING ID (INCHES): [X] 1/8 [ ] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER
MEASUREMENT POINT (MP): [ ] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED		X	
COLLAR	✓		

INITIAL DTW (BMP)	7.18 FT	FINAL DTW (BMP)	7.63 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	— FT
WELL DEPTH (BMP)	10.09 FT	SCREEN INTERVAL	— FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	2.91 FT	DRAWDOWN VOLUME (final DTW- initial DTW X well diam. squared X 0.041)	0.018 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (water column X well diameter² X 0.041)	0.119 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.56 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C) ±3%	SP. CONDUCTANCE (mS/cm) ±3%	DISS. O_2 (mg/L) ±10% or 3 values <0.5 mg/L	pH (units) ±0.1	REDOX (mv) ±10 mv	TURBIDITY (ntu) ±10% and <10 ntu or 3 values <5 ntu	PUMP INTAKE DEPTH (ft)	COMMENTS
1320	BEGIN PURGING									
1325	7.45	150	12.03	0.423	7.74	7.42	18.8	11.3	9	
1330	7.53	150	11.20	0.410	7.18	7.34	20.8	1.11	9	
1335	7.55	150	10.93	0.415	6.99	7.33	21.5	0.71	9	
1340	7.57	150	11.05	0.420	6.88	7.31	21.2	0.32	9	
1345	7.59	150	11.05	0.429	6.61	7.29	22	0.15	9	
1350	7.60	150	11.07	0.437	6.43	7.27	22.6	0.21	9	
1355	7.61	150	11.05	0.439	6.33	7.27	23.1	0.19	9	
1400	Sample									

FINAL STABILIZED FIELD PARAMETERS (rounded to appropriate significant figures)

TEMP.: nearest degree (ex. 10.1 10)
COND.: 3 significant figure max (ex. 1.686 1.69)
pH: nearest tenth (ex. 5.53 5.5)
DO: nearest tenth (ex. 3.51 3.5)
TURB: 3 SF max, nearest tenth (6.19 6.2, 101 101)
ORP: 2 SF (44.1 44, 191 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [X] ALCONOX
- [X] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] OTHER
- [ ] OTHER
- [ ] OTHER

EQUIPMENT USED
- [X] WL METER Solinst
- [ ] PID
- [X] WQ METER Hanna
- [X] TURB. METER LaMotte
- [X] PUMP Peristaltic
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	ANALYTE LIST	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	QC COLLECTED
[X]	VOCs 8260B						

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: 1.56

NOTES: 828120MW06009 @ 1400

Sampler Signature: [signature] Print Name: Mark Felong

Checked By: [signature] Date: 4/12/23

DEVIATIONS FROM THE WORK PLAN: —

REV. 3/29/2019

LOW FLOW GROUNDWATER SAMPLING RECORD

MACTEC

511 Congress Street
Suite 200
Portland, Maine 04101

PROJECT NAME: Carriage Cleaners		LOCATION ID: MW-6B	DATE: 4/12/23
PROJECT NUMBER: 361620618		START TIME: 1425	END TIME: 1510
SAMPLE ID: 828120MW06B027	SAMPLE TIME: 1505	SITE NAME/INSTALLATION: NJDEC#[illegible]	PAGE: 1 OF 1

WELL DIAMETER (IN.): ☐ 1 ☐ 2 ☒ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☒ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☐ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	7.06 FT	FINAL DTW (BMP)	7.42 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	— FT
WELL DEPTH (BMP)	29.24 FT	SCREEN INTERVAL	— FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	22.18 FT	DRAWDOWN VOLUME (final DTW- initial DTW X well diam. squared X 0.041)	0.236 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (water column X well diameter² X 0.041)	14.55 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.56 GAL	DRAWDOWN/ TOTAL PURGED	0.151	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C) ±3%	SP. CONDUCTANCE (mS/cm) ±3%	DISS. O_2 (mg/L) ±10% or 3 values <0.5 mg/L	pH (units) ±0.1	REDOX (mv) ±10 mv	TURBIDITY (ntu) ±10% and <10 ntu or 3 values <5 ntu	PUMP INTAKE DEPTH (ft)	COMMENTS
1425	BEGIN PURGING									
1430	7.41	150	13.27	0.736	0.0	7.01	-54.8	37.1	27	
1435	7.41	150	13.25	0.733	0.0	7.01	-57.8	26.5	27	
1440	7.41	150	13.19	0.732	0.0	7.01	-59.9	22.4	27	
1445	7.41	150	13.48	0.728	0.0	7.01	-62	24.0	27	
1450	7.41	150	13.40	0.728	0.0	7.01	-66.3	17.0	27	
1455	7.41	150	13.21	0.725	0.0	7.01	-663	14.5	27	
1500	7.41	150	13.30	0.723	0.0	7.01	-66.1	15.1	27	
1505	Sample									

FINAL STABILIZED FIELD PARAMETERS (rounded to appropriate significant figures)

TEMP.: nearest degree (ex. 10.1 10)
COND.: 3 significant figure max (ex. 1.686 1.69)
pH: nearest tenth (ex. 5.53 5.5)
DO: nearest tenth (ex. 3.51 3.5)
TURB: 3 SF max, nearest tenth (6.19 6.2, 101 101)
ORP: 2 SF (44.1 44, 191 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☒ ALCONOX
- ☒ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER
- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER Solinst
- ☐ PID
- ☒ WQ METER Horiba
- ☒ TURB. METER LaMotte
- ☒ PUMP Peristaltic
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	ANALYTE LIST	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	QC COLLECTED
☒	VOCs 8260B						

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☒
NO-PURGE METHOD UTILIZED	☐	☒

NUMBER OF GALLONS GENERATED: 1.56

NOTES: 828120MW06B027 @1505

Sampler Signature: [signature] Print Name: Mark Felong

Checked By: [signature] Date: 4/12/23

DEVIATIONS FROM THE WORK PLAN: —

REV. 3/29/2019

LOW FLOW GROUNDWATER SAMPLING RECORD

MACTEC

511 Congress Street
Suite 200
Portland, Maine 04101

PROJECT NAME: Carriage Cleaners		LOCATION ID: MW-8B	DATE: 4/12/23
PROJECT NUMBER: 3616206118		START TIME: 1030	END TIME: 1100
SAMPLE ID: 828120MW08B027	SAMPLE TIME: 1100	SITE NAME/INSTALLATION: NJDEC#828120	PAGE: 1 OF 1

WELL DIAMETER (IN.): ☐ 1 ☐ 2 ☑ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☑ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☐ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	7.91 FT	FINAL DTW (BMP)	8.15 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	— FT
WELL DEPTH (BMP)	29.24 FT	SCREEN INTERVAL	— FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	21.33 FT	DRAWDOWN VOLUME (final DTW- initial DTW X well diam. squared X 0.041)	0.157 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (water column X well diameter² X 0.041)	13.99 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.17 GAL	DRAWDOWN/ TOTAL PURGED	0.135	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C) ±3%	SP. CONDUCTANCE (mS/cm) ±3%	DISS. O_2 (mg/L) ±10% or 3 values <0.5 mg/L	pH (units) ±0.1	REDOX (mv) ±10 mv	TURBIDITY (ntu) ±10% and <10 ntu or 3 values <5 ntu	PUMP INTAKE DEPTH (ft)	COMMENTS
1030	BEGIN PURGING									
1035	8.15	150	13.09	0.805	0.13	6.98	-4	15.2	27	
1040	8.15	150	13.17	0.811	0.0	6.98	-10.3	18.6	27	
1045	8.15	150	13.00	0.814	0.0	6.98	-12.3	15.2	27	
1050	8.15	150	13.30	0.810	0.0	6.98	-13.2	15.9	27	
1055	8.15	150	13.46	0.812	0.0	6.98	-14.3	16.8	27	
1100	Sample									

FINAL STABILIZED FIELD PARAMETERS (rounded to appropriate significant figures)

TEMP.: nearest degree (ex. 10.1 10)
COND.: 3 significant figure max (ex. 1.686 1.69)
pH: nearest tenth (ex. 5.53 5.5)
DO: nearest tenth (ex. 3.51 3.5)
TURB: 3 SF max, nearest tenth (6.19 6.2, 101 101)
ORP: 2 SF (443.1 44, 191 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☑ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☑ ALCONOX
- ☑ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☑ SILICON TUBING
- ☑ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER
- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☑ WL METER Solinst
- ☐ PID
- ☑ WQ METER Hanna
- ☑ TURB. METER Lamotte
- ☑ PUMP Peristaltic
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	ANALYTE LIST	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	QC COLLECTED
☑	VOCs	8260B					

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☑
NO-PURGE METHOD UTILIZED	☐	☑

NUMBER OF GALLONS GENERATED: 1.17

NOTES: 828120MW08B027@1100

Sampler Signature: [signature] Print Name: Mark Fulong

Checked By: [signature] Date: 4/12/23

DEVIATIONS FROM THE WORK PLAN: —

REV. 3/29/2019

LOW FLOW GROUNDWATER SAMPLING RECORD

MACTEC

511 Congress Street
Suite 200
Portland, Maine 04101

PROJECT NAME: Carriage Cleaners		LOCATION ID: MW-111I	DATE: 4/11/23
PROJECT NUMBER: 36162 06 118		START TIME: 1550	END TIME: 1630
SAMPLE ID: 828120MW111I013	SAMPLE TIME: 1630	SITE NAME/INSTALLATION: NYDEC#828120	PAGE: 1 OF 1

WELL DIAMETER (IN.): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☒ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☐ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	☒		
CASING	☒		
LOCKED COLLAR	☒	☒	

INITIAL DTW (BMP)	8.18 FT	FINAL DTW (BMP)	9.89 FT	PROT. CASING STICKUP (AGS)	FLUSH FT	TOC/TOR DIFFERENCE	— FT
WELL DEPTH (BMP)	15.32 FT	SCREEN INTERVAL	— FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	7.14 FT	DRAWDOWN VOLUME (final DTW- initial DTW X well diam. squared X 0.041)	0.280 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (water column X well diameter² X 0.041)	1.171 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.56 GAL	DRAWDOWN/ TOTAL PURGED	0.180	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C) ±3%	SP. CONDUCTANCE (mS/cm) ±3%	DISS. O_2 (mg/L) ±10% or 3 values <0.5 mg/L	pH (units) ±0.1	REDOX (mv) ±10 mv	TURBIDITY (ntu) ±10% and <10 ntu or 3 values <5 ntu	PUMP INTAKE DEPTH (ft)	COMMENTS
1550	BEGIN PURGING									
1595	9.78	150	14.11	1.002	1.09	7.03	-9.8	0.99	13	
1600	9.80	150	~~13.95~~	1.00	0.96	7.01	-9.2	0.02	13	
1605	9.80	150	13.76	1.001	0.93	7.01	-8.9	1.31	13	
1610	9.80	150	13.98	0.99	1.01	7.01	-7	2.01	13	
1615	9.80	150	13.41	0.99	0.90	7.01	-6.3	0.44	13	
1620	9.81	150	13.34	0.98	0.96	7.00	-6.2	0.73	13	
1625	9.82	150	13.29	0.98	0.94	6.99	-6.5			
1630	Sample									

FINAL STABILIZED FIELD PARAMETERS (rounded to appropriate significant figures)

TEMP.: nearest degree (ex. 10.1 - 10)
COND.: 3 significant figure max (ex. 1.086 - 1.09)
pH: nearest tenth (ex. 5.55 - 5.5)
DO: nearest tenth (ex. 3.51 - 3.5)
TURB: 3 SF max, nearest tenth (6.19 - 6.2, 101 - 101)
ORP: 2 SF (43.1 - 44, 191 - 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☒ ALCONOX
- ☒ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER Solinst
- ☐ PID
- ☒ WQ METER Hanna
- ☒ TURB. METER Lamotte
- ☒ PUMP Peristaltic
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	ANALYTE LIST	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	QC COLLECTED
☒	VOCs	8260B					
☒	Total organic carbon						
☒	Sulfide	by SM4500S-F					
☒	Alkalinity	by SM2320B					
☒	Multi-lp						
☒	IRON total/dissolved						
☒	dissolved gasses						

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☒
NO-PURGE METHOD UTILIZED	☐	☒

NUMBER OF GALLONS GENERATED: 1.56

NOTES: 828120MW111I@1630

Sampler Signature: Mark Falcone Print Name: Mark Falcone

Checked By: Date: 4/11/23

DEVIATIONS FROM THE WORK PLAN

REV. 3/29/2019

LOW FLOW GROUNDWATER SAMPLING RECORD

MACTEC

511 Congress Street
Suite 200
Portland, Maine 04101

PROJECT NAME: Carriage cleaners		LOCATION ID: HA-114	DATE: 4/13/23
PROJECT NUMBER: 36162061 8		START TIME: 1015	END TIME: 1105
SAMPLE ID: 828120HA114013	SAMPLE TIME:	SITE NAME/INSTALLATION: NJDEC H828120	PAGE: 1 OF 1

WELL DIAMETER (IN.): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☒ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☐ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

INITIAL DTW (BMP)	7.80 FT	FINAL DTW (BMP)	8.68 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	— FT
WELL DEPTH (BMP)	14.74 FT	SCREEN INTERVAL	— FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	6.94 FT	DRAWDOWN VOLUME (final DTW- initial DTW X well diam. squared X 0.041)	.15 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (water column X well diameter² X 0.041)	1.14 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.56 GAL	DRAWDOWN/ TOTAL PURGED	0.093	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C) ±3%	SP. CONDUCTANCE (mS/cm) ±3%	DISS. O_2 (mg/L) ±10% or 3 values <0.5 mg/L	pH (units) ±0.1	REDOX (mv) ±10 mv	TURBIDITY (ntu) ±10% and <10 ntu or 3 values <5 ntu	PUMP INTAKE DEPTH (ft)	COMMENTS
1015	BEGIN PURGING									
1020	9.38	250	12.06	1.888	1.57	6.90	13.6	55.5	13	lowered purge rate
1025	9.09	150	12.64	2.276	2.17	6.94	0.4	19.3	13	
1030	8.71	150	13.05	2.513	2.36	6.96	-4	6.02	13	
1035	8.69	150	13.23	2.418	2.22	6.96	-3.2	6.30	13	
1040	8.68	150	13.04	2.388	2.24	6.96	-0.4	5.37	13	
1045	8.68	150	13.01	2.361	2.2	6.96	0.1	5.11	13	
1050	8.68	150	12.99	2.372	2.26	6.96	0.9	5.26	13	
1055	Sample									

FINAL STABILIZED FIELD PARAMETERS (rounded to appropriate significant figures)

TEMP.: nearest degree (ex. 10.1 10)
COND.: 3 significant figure max (ex. 1.686 1.69)
pH: nearest tenth (ex. 5.53 5.5)
DO: nearest tenth (ex. 3.51 3.5)
TURB: 3 SF max., nearest tenth (6.19 6.2, 101 101)
ORP: 2 SF (44.1 44, 191 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: ☒ PERISTALTIC ☐ SUBMERSIBLE ☐ BLADDER ☐ WATTERA ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☒ ALCONOX ☒ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS: ☒ SILICON TUBING ☒ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER ☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☒ WL METER Solinst ☐ PID ☒ WQ METER Hanna ☒ TURB. METER Lamotte ☒ PUMP Peristaltic ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	ANALYTE LIST	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	QC COLLECTED
☒	VOCs 8260B						
☒	Total organic carbon						
☒	Sulfide by SM 4500S-F						
☒	Alkalinity by SM2320B						
☒	*Methane*						
☒	Iron total/dissolved						
☒	dissolved gasses						

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☐ NO ☒

NO-PURGE METHOD UTILIZED: YES ☐ NO ☒

NUMBER OF GALLONS GENERATED: 1.56

NOTES: 828120HA114013@1055

Sampler Signature: [signature] Print Name: Mark Felong

Checked By: [signature] Date: 4/13/23

DEVIATIONS FROM THE WORK PLAN

REV. 3/29/2019

LOW FLOW GROUNDWATER SAMPLING RECORD

MACTEC

511 Congress Street
Suite 200
Portland, Maine 04101

PROJECT NAME: Carriage/Cleaners		LOCATION ID: MW-9B	DATE: 4/11/23
PROJECT NUMBER: 361620618		START TIME: 1320	END TIME: 1405
SAMPLE ID: 828120MW9B017	SAMPLE TIME: 1405	SITE NAME/INSTALLATION: NYDEC #828120	PAGE: 1 OF 1

WELL DIAMETER (IN.): ☐ 1 ☐ 2 ☒ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☒ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☐ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED		✓	
COLLAR	✓		

INITIAL DTW (BMP)	5.31 FT	FINAL DTW (BMP)	5.56 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	— FT
WELL DEPTH (BMP)	19.42 FT	SCREEN INTERVAL	— FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	14.11 FT	DRAWDOWN VOLUME (final DTW- initial DTW X well diam. squared X 0.041)	0.6 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (water column X well diameter² X 0.041)	9.26 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.75 GAL	DRAWDOWN/ TOTAL PURGED	0.0934	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C) ±3%	SP. CONDUCTANCE (mS/cm) ±5%	DISS. O_2 (mg/L) ±10% or 3 values <0.5 mg/L	pH (units) ±0.1	REDOX (mv) ±10 mv	TURBIDITY (ntu) ±10% and <10 ntu or 3 values <5 ntu	PUMP INTAKE DEPTH (ft)	COMMENTS
1320	BEGIN PURGING									
1325	5.31	150	14.88	.716	0.0	6.84	-80.3	57.6	17.0	
1330	5.51	150	14.46	.708	0.0	6.80	-85.7	23.3	17.0	
1335	5.51	150	15.50	.708	0.0	6.79	-91.7	18.3	17.0	
1340	5.52	150	15.29	.706	0.0	6.79	-91.4	17.2	17.0	
1345	5.52	150	15.02	.701	0.0	6.80	-91.8	9.59	17.0	
1350	5.53	150	15.05	.702	0.0	6.80	-93.0	8.35	17.0	
1355	5.53	150	14.56	.699	0.0	6.81	-91.9	6.79	17.0	
1400	5.54	150	14.54	.698	0.0	6.81	-92.5	6.92	17.0	
1405	Sample									

FINAL STABILIZED FIELD PARAMETERS (rounded to appropriate significant figures)

TEMP.: nearest degree (ex. 10.1 10)
COND.: 3 significant figure max (ex. 1.686 1.69)
pH: nearest tenth (ex. 5.53 5.5)
DO: nearest tenth (ex. 3.51 3.5)
TURB: 3 SF max, nearest tenth (6.19 6.2, 101 101)
ORP: 2 SF (-44.1 -41, 191 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: ☒ PERISTALTIC ☐ SUBMERSIBLE ☐ BLADDER ☐ WATTERA ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☒ ALCONOX ☒ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS: ☒ SILICON TUBING ☐ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☒ WL METER Solinst ☐ PID ☒ WQ METER Hanna ☒ TURB. METER LaMotte ☒ PUMP Peristaltic ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	ANALYTE LIST	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	QC COLLECTED
☒ VOCs 8260B						

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☐ NO ☒

NO-PURGE METHOD UTILIZED: YES ☐ NO ☒

NUMBER OF GALLONS GENERATED: 1.75

NOTES: 828120 MW9B017 @ 1405
828120 MW9B017 MS @ 1405
828120 MW9B017 MSD @ 1405
DUP @ 1405

Sampler Signature: [signature] Print Name: Mark Felong

Checked By: [signature] Date: 4/11/23

DEVIATIONS FROM THE WORK PLAN: —

REV. 3/29/2019

LOW FLOW GROUNDWATER SAMPLING RECORD

MACTEC

511 Congress Street
Suite 200
Portland, Maine 04101

PROJECT NAME: Carriage Cleaners		LOCATION ID: MW-9	DATE: 4/11/23
PROJECT NUMBER: 3616206118		START TIME: 1140	END TIME: 1225
SAMPLE ID: 828120MW09008	SAMPLE TIME: 1215	SITE NAME/INSTALLATION: NYSDEC #828120	PAGE: 1 OF 1

WELL DIAMETER (IN.): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☒ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	6.14 FT	FINAL DTW (BMP)	8.46 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	— FT
WELL DEPTH (BMP)	9.61 FT	SCREEN INTERVAL	— FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	3.47 FT	DRAWDOWN VOLUME (final DTW- initial DTW X well diam. squared X 0.041)	.38 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (water column X well diameter² X 0.041)	0.569 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.37 GAL	DRAWDOWN/ TOTAL PURGED	0.279	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C) ±3%	SP. CONDUCTANCE (mS/cm) ±3%	DISS. O_2 (mg/L) ±10% or 3 values <0.5 mg/L	pH (units) ±0.1	REDOX (mv) ±10 mv	TURBIDITY (ntu) ±10% and <10 ntu or 3 values <5 ntu	PUMP INTAKE DEPTH (ft)	COMMENTS
1140	BEGIN PURGING									
1145	6.78	150	10.71	1.92	0.05	6.90	133	2.04	8.0	
1150	6.88	150	10.56	1.97	0.0	6.88	-82	1.03	8.0	
1155	7.42	150	10.81	2.02	0.0	6.85	-101	0.88	8.0	
1200	7.65	150	11.04	2.04	0.0	6.85	-105	0.96	8.0	
1205	7.91	150	11.10	2.04	0.0	6.87	-102	0.35	8.0	Pump lowered .5 FT
1210	8.15	150	11.33	2.04	0.0	6.86	-104	0.75	8.5	
1215	Sample									

FINAL STABILIZED FIELD PARAMETERS (rounded to appropriate significant figures)

TEMP.: nearest degree (ex. 10.1 10)
COND.: 3 significant figure max (ex. 1.686 1.69)
pH: nearest tenth (ex. 5.53 5.5)
DO: nearest tenth (ex. 3.51 3.5)
TURB: 3 SF max, nearest tenth (6.19 6.2, 101 101)
ORP: 2 SF (44.1 44, 191 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☒ ALCONOX
- ☒ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER New Tubing

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☒ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER
- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☒ WL METER Solonist
- ☐ PID
- ☒ WQ METER Hanna
- ☒ TURB. METER Lamotte
- ☒ PUMP Peristaltic
- ☐ OTHER
- ☐ FILTERS NO. X TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	ANALYTE LIST	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	QC COLLECTED
X	VOCs 8260B						
X	Total Organic Carbon						
X	Sulfide by SM4500S-F						
X	Alkalinity by SM2320B						
X	**Multiple**						
X	Iron total/dissolved						
X	Dissolved gasses						

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	☒
NO-PURGE METHOD UTILIZED	☐	☒

NUMBER OF GALLONS GENERATED: 1.37

NOTES: Sample 828120MW09008 @ 1215

Sampler Signature: [signature] Print Name: Mark Felong

Checked By: [signature] Date: 4/11/23

DEVIATIONS FROM THE WORK PLAN: —

REV. 3/29/2019