FAY REALTY INC.
434-440 RIVERDALE AVENUE
YONKERS, NEW YORK 10705
NYSDEC P-SITE: 360197

REMEDIAL INVESTIGATION WORK PLAN

SUBMITTED TO:

New York State Department of Environmental Conservation
Division of Environmental Remediation
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PWGC Project Number: FAY2101

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REMEDIAL INVESTIGATION WORK PLAN
434-440 RIVERDALE AVENUE, YONKERS, NEW YORK 10705

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ACRONYMS

ACRONYM	DEFINITION
ACO	Administrative Settlement
ASP	Analytical Services Protocol
ASTM	American Society for Testing and Materials
AWQS	Ambient Water Quality Standard
CAMP	Community Air Monitoring Program
C&D	Construction & Demolition debris
CBRE	CBRE, Inc.
CFR	Code of Federal Regulations
CVOC	Chlorinated Volatile Organic Compound
DCE	cis-1,2-Dichloroethene
DER	Department of Environmental Remediation
DUSR	Data Usability Summary Reports
ELAP	Environmental Laboratory Approval Program
EM	Electromagnetic
ESA	Environmental Site Assessment
ESI	Environmental Site Investigation
GPR	Ground Penetrating Radar
GQS	Groundwater Quality Standard
GV	Guidance Value
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCE	Tetrachloroethylene
PDR	Personal DataRAM
PID	Photo-ionization Detector
PWGC	P.W. Grosser Consulting, Inc.
PVC	Polyvinyl Chloride
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance / Quality Control
QEP	Qualified Environmental Professional
REC	Recognized Environmental Condition
SCO	Soil Cleanup Objective
SCR	Site Characterization Report
SCWP	Site Characterization Workplan
SDG	Sample Delivery Group
SOP	Standard Operating Procedure
SSDS	Sub Slab Depressurization System
TCE	Trichloroethylene
TSA	Transaction Screen Analysis
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
VMP	Vapor Monitoring Point
VOC	Volatile Organic Compound

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CERTIFICATION

I, Jennifer Lewis, PG, certify that I am currently a New York State registered professional geologist as defined in 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 and that this Remedial Investigation Work Plan (RIWP) was prepared in accordance with applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10).

I certify that the information and statements in this certification are true. I understand that a false statement made herein is punishable as Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

Signature 7/9/24 Date

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer or geologist in accordance with Section 7209(2), Article 145, New York State Education Law.

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1.0 INTRODUCTION

P.W. Grosser Consulting, Inc. (PWGC) has prepared the following RIWP to outline the procedures and scope of work intended to delineate the nature and extent of soil, groundwater, and soil vapor contamination onsite and offsite from historical site usage at the property as a former drycleaning site, formerly known as Riverdale Dry-Cleaners ("Site") located at 434-440 Riverdale Ave., Yonkers, New York.

The Site owner, Fay Realty Inc., has been compelled by the New York State Department of Environmental Conservation (NYSDEC), via an Administrative Consent Order and Administrative Settlement (ACO) executed on July 29, 2020 and filed as Index #CO3-20191223-299, to perform a site characterization investigation. The Site has been listed with P-Listing #360197.

A Site Characterization Work Plan (SCWP) was submitted to NYSDEC by Eastern Environmental Solutions, Inc. (Eastern) and subsequently approved in August of 2021. An addendum to the workplan was prepared by PWGC and approved by the NYSDEC in January of 2022 to limit the site characterization to the contaminants of concern, to delineate potential areas of concern within the property boundary, and evaluate whether offsite, up-gradient properties may be contributing to contaminants observed onsite. PWGC completed the Site Characterization field work in March of 2022 and presented the Site Characterization Report (SCR) to the NYSDEC in May of 2022. Approval or comment on PWGC's SCR was postponed until the neighboring property to the north (432 Riverdale Avenue) discussed their site conditions with NYSDEC.

The owner of 432 Riverdale Avenue previously conducted a Phase II Environmental Site Assessment (ESA) in May 2018 in which they identified chlorinated solvent impact in groundwater and soil vapor beneath their site. Subsequently, they installed an active sub-slab depressurization system (SSDS). In December of 2022, DT Consulting Services, Inc. and Bellucci Engineering, PLLC. prepared a Rebound Testing Report (RTR) for 432 Riverdale Avenue and presented it to the NYSDEC in January of 2023. The RTR identified tetrachloroethene (PCE) at concentrations as high as 8,100 µg/m^3 and trichloroethene (TCE) at concentrations as high as 850 µg/m^3 in sub-slab soil vapor and recommended that the SSDS continue in operation to mitigate the onsite vapor intrusion condition.

On May 5, 2023, the NYSDEC issued a letter to PWGC that the Department disagreed with the findings of PWGC's SCR based upon the results of the neighboring RTR results and requested the preparation of a RIWP to delineate the nature and extent of the contamination affiliated with the Site. This RIWP was prepared to meet that request and scope the proposed supplemental investigation effort.

1.1. Project Background

The Site is listed with P-Listing #360197. This RIWP is a requirement of an Order on Consent and Administrative Settlement (Index No. CO3-20191223-299) by the NYSDEC to address hazardous substances detected at the Site and downgradient of it. The primary contaminants of concern are a class of chemicals referred to as chlorinated volatile organic compounds (CVOCs). This RIWP documents the planned investigative activities to be completed at the Site.

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2.0 SITE DESCRIPTION

2.1. Site Description

The Site is located at 434 Riverdale Avenue, Yonkers, New York. The Site is located within the City of Yonkers and Westchester County and is identified as Tax Map parcel number 1.-132-14.16. The Site is an irregularly shaped approximately 0.36-acre parcel located on the northeast corner of the intersection of Riverdale Avenue and St. Andrews Place. The Site is located in a mixed-use commercial and residential area. A Site Location figure is included as **Figure 1**. A Site Plan is included as **Figure 2**.

The Site is currently improved with a commercial building housing several businesses. The northernmost commercial space, 434 Riverdale Avenue, was occupied by a drycleaner from approximately 2000 through 2014. The space has remained unoccupied since that time; however, it has been rented to a business and used solely for storing used household appliances. The former dry-cleaning equipment was historically located toward the front of the space, nearest to Riverdale Avenue. There are no records or accounts of where the former dry-cleaning waste was disposed of, with the exception being the machinery and other wastes derived from the decommissioning of the drycleaning machinery.

Other addresses associated with the Site and the current occupants are listed below:

- 434 Riverdale Avenue- Formerly a drycleaner, but currently a non-retail appliance storage space.
- 436 Riverdale Avenue- Lorena Mex Mini Market (supermarket)
- 438 Riverdale Avenue- Salon Fancy Spa, a nail salon
- 440 Riverdale Avenue- El Valle Restaurant
- 442 Riverdale Avenue- Food Center Deli
- 97-99 St Andrews Place- D&K Laundry (a laundromat)

The basement spaces beneath 434, 436, and 438 Riverdale Avenue are connected internally by doors and are accessible from the supermarket unit. The basements in 440 Riverdale Avenue, 442 Riverdale Avenue, and 97-99 St Andrews Place are only accessible from the ground floor and are not interconnected.

2.2. Site History

According to an initial SCWP prepared by Eastern, the Site was developed with the existing one-story building sometime prior to 1942. Historic uses of the Site include the following: drycleaning operations, a laundromat, pharmacies, a 99-cent store, grocery stores, restaurants, offices, nail salons, a stationary store, a housewares shop, a peddler, and a cleaning service. The northern portion of the Site (434 Riverdale Avenue) operated as a drycleaner for at least 14 years, from 2000 to 2014.

2.3. Regional Geology/Hydrogeology

The geologic setting of the region is well documented. The area is underlain by tightly folded, metamorphic rocks. Erosion of these formations has resulted in the formation of outcrops in the general area. The bedrock beneath the Site is part of the Manhattan Formation The bedrock beneath the Site is overlain by thin deposits of Pleistocene age glacial outwash deposits (sand and gravel). According to the United States Department of Agriculture Web Soil Survey, soils beneath the Site consist of urban lands.

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2.4. Site Geology/Hydrogeology

The Site elevation ranges between 88 and 92 feet above mean sea level. Based on the past investigation at the Site, the stratigraphy at the property, from cellar grade down, consists of fill material and sandy silt to an approximate depth of two to five feet. The depth to groundwater beneath the Site ranges from approximately 8.5 feet to 13 feet below sidewalk grade across the Site. The depth to groundwater beneath the top of basement slab grade ranged from 0.5 feet to 5.2 feet. The differential in the depth to groundwater is believed to be primarily because of the varied Site elevation. Per the NYSDEC, groundwater beneath the Site is expected to flow towards the north and west.

2.5. Current Site Use

The Site is currently occupied by a commercial building housing several businesses, including an unoccupied household appliance storage space (434 Riverdale Avenue), a grocery store (436 Riverdale Avenue), a nail salon (438 Riverdale Avenue), a restaurant (440 Riverdale Avenue), a delicatessen (442 Riverdale Avenue), and a laundromat (97-99 St. Andrews Place).

2.6. Future Site Use

The existing general Site use is not intended to change.

2.7. Previous Environmental Reports

An initial Limited Phase II Environmental Site Investigation (ESI) was performed by CBRE, Inc. (CBRE) at the north adjoining property (432 Riverdale Avenue) in May of 2018. Consequently, an environmental review memorandum of the 434 Riverdale Avenue portion of the Site was prepared by Tenen Environmental in March of 2019. Subsequently, PWGC performed a Site Characterization Investigation at the Site in August of 2022. These reports are included as **Appendix A**.

2.7.1. Limited Phase II Investigation by CBRE at 432 Riverdale Ave. (May 2018)

In May of 2018, CBRE conducted a Limited Phase II ESI on the north adjoining property (432 Riverdale Avenue). An initial Transaction Screen Analysis (TSA) identified historical dry-cleaning operations at the Site as a Recognized Environmental Condition (REC). A subsequent limited Phase II ESI was conducted at 432 Riverdale Avenue to assess the presence of chlorinated solvents in soil vapor, indoor air, and ambient air. One sub-slab soil vapor sample, two indoor air samples, and one outdoor ambient air sample (from the rear yard of the building) were collected and analyzed for volatile organic compounds (VOCs).

The results of the sample analysis showed PCE, a common drycleaning solvent, and cis-1,2-dichloroethene (DCE), a breakdown product of PCE, were detected in the sub-slab soil vapor sample collected directly north of the Site at elevated concentrations. Based on the New York State Department of Health (NYSDOH) soil vapor decision matrices contained in the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH, October 2006, updated May 2017), the concentrations of PCE and DCE detected in sub-slab soil vapor and indoor air are within the range where mitigation is recommended. Concentrations of PCE and TCE, another breakdown product of PCE, were detected in the indoor air sample co-located with the soil vapor sample collected directly north of the Site at concentrations exceeding their respective NYSDOH Air Guidance Values. The limited Phase II ESI identified Site operations as the potential source of chlorinated solvents in soil vapor and indoor air at 432 Riverdale Avenue.

Based upon the findings of the CBRE investigation, an active SSDS was installed at 432 Riverdale Avenue to address the soil vapor intrusion of CVOCs into indoor air. A pilot study was conducted in November of 2018 and the SSDS was installed in March of 2019. PWGC did not have access to a full report documenting the system installation; however, PWGC was provided with a data table that included system influent results from March 2019, July 2019, October 2019, and January 2022. PCE in the March 2019 influent sample was 90,000 µg/m^3; the three subsequent results were 360 µg/m^3 or less. Similar dramatic decreases were observed in the TCE and DCE concentrations during the same time period.

2.7.2. Environmental Review Memorandum by Tenen at 434 Riverdale Ave. (March 2019)

An environmental review memorandum was prepared by Tenen in March 2019 for 434 Riverdale Avenue which summarized the historical information pertaining to the Site, specifically that it contained a drycleaning operation from at least 2000 to 2014 and discussing other potential sources of the environmental impacts observed at 432 Riverdale Avenue. The city directory identified two other drycleaning operations in the vicinity, presumably upgradient, at 460 Riverdale Avenue and 462 Riverdale Avenue.

2.7.3. Site Characterization Report by PWGC at 434-440 Riverdale Ave. (August 2022)

PWGC performed a Site Characterization investigation at 434-440 Riverdale Ave in March 2022. The primary objective of the work performed as part of this Site Characterization was to collect additional Site information and the environmental data necessary to assess the potential for contamination affiliated with the Site. The scope of work for the property included characterization of onsite soils, onsite and upgradient groundwater, and characterization of onsite soil vapor. The investigation included advancing seven soil borings, installing six groundwater monitoring wells (upgradient and onsite), and collecting five sub-slab soil vapor samples with five co-located indoor air samples throughout the subject property and one outdoor air sample.

The findings of the soil investigation included no significant evidence of VOC impact to soils, with no analytes detected at concentrations that exceeded Unrestricted Use SCOs or Commercial Use SCOs. Detectable concentrations of chlorinated solvents identified in two samples were both collected from the smear zone of the groundwater table and their detections could potentially be related to contaminants observed in the groundwater.

Findings from the groundwater investigation resulted in PCE, TCE, or DCE detections in five of the six samples with only one exceedance of Ambient Water Quality Standards (AWQSs) for these three compounds. Groundwater exceedances at the Site were confined to the area located within the footprint of the former Riverdale Dry-Cleaners.

PCE, TCE, and/or DCE were detected in each sub-slab soil vapor sample and accompanying indoor air sample, but not detected in the outdoor air sample. The highest sub-slab soil vapor concentration of PCE was reported in the sample collected beneath the western side of the laundromat on the south side of the property which appears to be upgradient of the former drycleaners. This sample is also the furthest from the active SSDS installed at the adjacent downgradient neighbor located at 432 Riverdale Ave. Similarly, the highest indoor air concentration of PCE was detected again in the western side of the laundromat.

The Site Characterization Report identified a lack of significant CVOC impact in the soil vapor samples that was generally consistent with the lack of CVOC impact to soil and groundwater on the subject property. VOC concentrations detected in soil vapor and indoor air were not observed at concentrations that included a recommendation of additional monitoring or remediation via the NYSDOH soil vapor matrices.

Site Characterization sampling results and exceedances are displayed on **Figures 3, 4, and 5**.

2.7.4. Rebound Testing Summary Letter Report by DT Consulting Services Inc. and Bellucci Engineering PLLC (DTCS/BE) at 432 Riverdale Ave. (January 20223)

Following the installation of the SSDS in March 2019 at 432 Riverdale Ave., DTCS/BE initiated a Rebound Test to assess the need for continual operation. Vacuum testing from 2019-2021 demonstrated inconsistent sub-slab vacuum based on the presence of shallow groundwater below the building slab. Concurrent soil vapor testing in March 2019, July 2019, October 2019, and January 2022 from the sub-slab vapor monitoring points identified a significant decrease in CVOCs over time. Based on the decrease in concentration of sub-slab CVOCs and the findings of the Site Characterization Report at 434-440 Riverdale Avenue, DTCS/BE conducted a rebound test to determine if continued operation of the SSDS was necessary.

On November 16, 2022, DTCS/BE conducted an inspection of the SSDS. Two of four VMPs (VP-1 and VP-3) had no vacuum during the testing event. The SSDS was subsequently shut down. Rebound testing was performed on December 20-21, 2022, including the collection of sub-slab soil vapor samples from the two VMPs functioning in November 2022 (VP-2 and VP-4). Two co-located indoor air samples and one outdoor air sample were also collected.

Sample results from VP-2 yielded elevated concentrations of PCE (8,100 µg/m^3), DCE (6,800 µg/m^3), and TCE (850 µg/m^3). The associated indoor air sample also yielded elevated concentrations of these CVOCs exceeding their respective NYSDOH Air Guidance Values. Significantly lower levels of CVOCs were detected in VP-4. Based on NYSDOH Decision Matrices, mitigation is still warranted in the southern portion of the building around VP-2, while no further action is required in the direct vicinity of VP-4. Continual operation of the SSDS is warranted to mitigate the vapor intrusion conditions within the building.

On May 5, 2023, after the receipt and review of the Rebound Testing Report at 432 Riverdale Avenue prepared by DTCS/BE, the NYSDEC issued a letter to PWGC that the Department did not concur with the findings of the SCR. Subsequently, the Department requested the preparation of an RIWP to delineate the nature and extent of the contamination affiliated with the Site.

3.0 STANDARDS, CRITERIA, AND GUIDANCE (SCGS)

Based on previous investigations at the Site and neighboring property, the primary chemicals of potential concern (COPC) to be encountered at the Site are VOCs related to the historical usage of the Site as a dry-cleaning facility.

Applicable regulations at NYSDEC 6 NYCRR Part 375 provide soil cleanup objectives (SCOs) for Unrestricted Use, or restricted use based on the intended usage of the property. Restricted use SCOs include Restricted Residential Use SCOs and Commercial Use SCOs. The goal of the Remedial Investigation is to delineate the potential contamination related to the former dry-cleaning facility on both a mixed use residential and commercial property, and on a commercial property; therefore, soil sample results will be compared to Unrestricted Use SCOs, Restricted-Residential Use SCOs, and Commercial Use SCOs. In addition, soil samples are also evaluated against the NYSDEC April 2023 Guidelines for Sampling and Analysis of PFAS Under NYSDEC's Part 375 Remedial Programs.

Groundwater sample results will be compared to the NYSDEC Class GA Ambient Water Quality Standards (AWQS) as specified in the Technical Operation and Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards and Guidance Values. In addition, groundwater samples are also evaluated against the NYSDEC April 2023 Guidelines for Sampling and Analysis of PFAS Under NYSDEC's Part 375 Remedial Programs.

Soil vapor and indoor air results will be compared to the applicable Soil Vapor/Indoor Air Decision Matrices specified in NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

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4.0 REMEDIAL INVESTIGATION SCOPE OF WORK

The primary objective of this Remedial Investigation is to delineate the areal extent of potential contamination in soil, groundwater, and / or soil vapor media at or emanating from the Site and at the downgradient adjacent property. The Scope of Work for this Remedial Investigation includes the following tasks:

- Geophysical investigation to identify utilities
- Delineation of onsite and immediately downgradient soil impacts
- Characterization of onsite and downgradient groundwater impacts
- Characterization of onsite and downgradient soil vapor impacts
- Qualitative human health exposure evaluation
- QA/QC and Data Validation

Delineating the areal extent of potential contaminants requires access to the property downgradient of the previous onsite drycleaners. The proposed scope of work requires prior coordination and access approval from a representative of the neighboring downgradient property located at 432 Riverdale Avenue. The property at 432 Riverdale Avenue is currently developed as a mixed-use commercial and multi-family residential property. Soil vapor contamination identified on the property led the owner to install an SSDS to provide protection from soil vapor intrusion. Delineating the nature and extent of the contamination affiliated with the Site requires the SSDS at 432 Riverdale Avenue to be off for a minimum of two weeks to allow for the equilibration of soil vapor conditions, access to the basement at 432 Riverdale Avenue to collect soil vapor samples from the previously installed VMPs, and the installation of temporary groundwater sampling wells and soil borings. Upon approval and coordination with the owner of 432 Riverdale Avenue, the proposed Remedial Investigation can proceed.

4.1. Geophysical Investigation

A geophysical survey will be performed to identify Site utilities and clear the proposed drilling locations.

4.2. Sampling Methodologies

4.2.1. Soil Sampling Methodologies

To characterize soil quality, soil borings will be installed at both the Site and the adjacent property at 432 Riverdale Avenue. At the Site, three soil borings will be installed. Boring locations will be focused in areas of potential concern along the northern edge of the basement of 434 Riverdale Avenue as illustrated in **Figure 6**. At 432 Riverdale Avenue, two borings will be installed on that property's side of the area of concern. Three additional borings will be installed on the eastern, northern and western perimeter of the building footprint at grade. Indoor soil borings will be installed utilizing a coring drill, along with a hand auger and/or a Geoprobe manual slide hammer. Outdoor soil borings will be installed using a Geoprobe drill rig.

Soil borings will be advanced to the groundwater elevation or bedrock refusal, whichever is shallower. Soils will be collected continuously from ground surface to the groundwater table or bedrock refusal. The depth of bedrock is varied and may be encountered as little as 1 to 2 feet below the basement slab or 9 to 10 feet below the sidewalk grade, depending on the location. The groundwater table was previously identified as ranging from approximately 8.5 feet to 13 feet below sidewalk grade and 0.5 feet to 5.2 feet beneath the top of the Site's

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basement slab. The specific two-foot sampling interval for each boring is to be determined based upon the interval with the greatest evidence of contamination (in the form of staining, odor, and /or the presence of a PID response). Additional samples may be collected based on the professional judgement of the onsite hydrogeologist. Soil samples will not be collected below the water table or from the smear zone.

Each boring will be classified by a hydrogeologist using the Unified Soil Classification System (USCS) and soil boring logs will be completed for each location. Soil samples will be placed directly into laboratory supplied bottleware and placed on ice in a cooler for transport to a New York State Department of Health (NYSDOH) Environmental Laboratory Accredited Program (ELAP) certified laboratory.

A minimum of 20% of the samples will be analyzed for the full suite of analytes listed below, focusing first on the sampling locations located in the basement of the 434 Riverdale Avenue building. Samples collected from the 434 Riverdale Avenue portion of the investigation will be analyzed for the following analytes:

- TCL VOCs by USEPA Method 8260C, collected with terracore devices or equivalent
- TCL SVOCs by USEPA Method 8270D
- TAL Metals by USEPA Method 6010
- Mercury by USEPA Method 7473
- Trivalent & Hexavalent Chromium by USEPA Method 7196
- Total Cyanide by USEPA Method 9010c/9012B
- TCL Pesticides/PCBs by USEPA Method 8081B/8082A
- Silvex by USEPA Method 8151
- PFAS by USEPA Method 1633 Modified
- 1,4-Dioxane by USEPA Method 8270-SIM

Samples collected from the 432 Riverdale Avenue portion of the investigation will be analyzed for the following analytes (unless needed to meet the minimum of 20% full suite samples):

- TCL VOCs by USEPA Method 8260C, collected with terracore devices or equivalent

The PFAS sampling will be conducted in accordance with Guidelines for Sampling and Analysis of PFAS under NYSDEC's Part 375 Remedial Programs (April 2023) as included in **Appendix G**.

4.2.2. Groundwater Sampling Methodology

To evaluate the nature and extent of groundwater contamination affiliated with the Site, a total of seven temporary groundwater monitoring wells will be installed. Four of these wells will be co-located with proposed soil boring locations. One proposed well location is within the Site's basement, three are in the neighboring property's basement at 432 Riverdale Ave, and one each is located on the west, north and east exterior perimeter of 432 Riverdale Ave. The proposed well locations are identified in **Figure 7.**

The seven proposed wells will be installed using a combination of a coring drill, a hand auger and / or a Geoprobe manual slide hammer for indoor wells or a Geoprobe drill rig for outdoor wells. Wells will be installed to a depth of approximately 5 feet below the groundwater interface or until bedrock is encountered, whichever is shallower, to insert a 10 foot section of 2-inch screen (Schedule-40 PVC screen) at the groundwater interface. (A

shorter section of screen will only be used if that is the maximum possible due to bedrock.) The depth of bedrock is varied and may be encountered as little as 1 to 2 feet below the basement slab or 9 to 10 feet below the sidewalk grade, depending on the location. The depth to bedrock will also be further evaluated during the RI. The annulus around these screen sections will be filled with a sand filter pack (FilPro #1). The well above the screen will be 2-inch solid PVC. The depth and elevation of the screened intervals will be recorded. Groundwater at the Site is expected between approximately 0.5 feet and 5.22-feet below basement grade or from approximately 8.5 feet to 13 feet below sidewalk grade.

No less than seven days after installation, newly installed monitoring wells will be developed by over-pumping to restore the hydraulic properties of the aquifer. Well development will continue until the turbidity of the groundwater is less than or equal to 50 NTUs, or when pH, temperature, and conductivity measurements stabilize. Stabilization is considered achieved when three consecutive readings of these field parameters are within five percent of each other over a period of 15 minutes.

Once well development has been completed, at least seven additional days will be allowed to elapse prior to the collection of groundwater samples. Groundwater samples will be collected using a peristaltic pump fitted with dedicated high-density polyethylene (HDPE) and Polytetrafluoroethylene (Masterflex) tubing in accordance with United States Environmental Protection Agency (USEPA) Low Stress (Low Flow) Purging and Sampling Procedure for The Collection of Groundwater Samples from Monitoring Wells (September 2017). A Horiba U-52 multi-parameter water quality meter outfitted with a flow through cell will be utilized to monitor field parameters (turbidity, pH, temperature, oxidation reduction potential (ORP), dissolved oxygen (DO) and conductivity) at 5-minute intervals.

Samples will be collected in pre-cleaned, pre-preserved, laboratory supplied glassware and stored in a cooler on ice for transport to the laboratory. Samples will be submitted to York Analytical Laboratory.

A minimum of 20% of samples will be collected for the full suite of analytes. One anticipated full suite sample will be collected from a well in the basement of the 434 Riverdale Avenue building, while the second anticipated location will be prioritized to be downgradient of that location, unless field observations indicate otherwise. Samples collected from 434 Riverdale Avenue and the single additional presumed downgradient sample location of the investigation will be analyzed for the following analytes:

- TCL VOCs by USEPA Method 8260D
- TCL SVOCs by USEPA Method 8270D
- TAL Metals by USEPA Method 6010D/6020D (total and dissolved)
- Mercury by USEPA Method 7470 (total and dissolved)
- Total Cyanide by USEPA Method 9010C/9012B
- Trivalent & Hexavalent Chromium by USEPA Method 7196 (total and dissolved)
- TCL Pesticides/PCBs by USEPA Method 8081/8082
- Silvex by USEPA Method 8151
- PFAS by USEPA Method 1633 Modified
- 1,4-Dioxane by USEPA Method 8270-SIM

The remainder of the samples collected from the investigation will be analyzed for the following analytes:

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- TCL VOCs by USEPA Method 8260D

Groundwater samples for emerging contaminant evaluation will be collected in accordance with Guidelines for Sampling and Analysis of PFAS under NYSDEC's Part 375 Remedial Programs (April 2023). Quality Assurance / Quality Control (QA/QC) sampling will be conducted as detailed in **Section 5.0**

4.2.3. Soil Vapor Sampling Methodology

To delineate potential volatile organic compounds in soil vapor throughout the Site and the neighboring properties, a total of nine sampling points are proposed. Soil vapor sampling point installation and sample collection will be performed in accordance with the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006). Prior to collecting the proposed soil vapor samples, the SSDS at 432 Riverdale Avenue will need to be shut off for a minimum of two weeks to allow for the soil vapor conditions to equilibrate and limit any influence of the SSDS on sample collection.

To evaluate potential soil vapor impact, one sub-slab vapor sample will be collected along the northern-most edge of the subject property at 434 Riverdale Avenue from an existing VMP (VP-6). At the immediately adjacent property (432 Riverdale Avenue), four soil vapor samples will be collected from the existing VMPs associated with the building's SSDS. Three soil vapor samples will also be collected to the west, north, and east of the building of 432 Riverdale Ave via soil vapor sampling points set at the approximate depth of two feet above the water table. The sampling points will be installed via a Geoprobe drill rig and constructed of a stainless-steel sampling point attached to dedicated polyethylene tubing and the hole will be backfilled with clean sand and sealed at the surface with hydrated bentonite. A ninth soil vapor sample will be installed and collected as a sub-slab sample along the northern edge of the basement of 432 Riverdale Avenue where there is no VMP. This sub-slab vapor sampling point will be installed via hammer drill to create a hole in the floor slab to an approximate depth of two inches beneath the bottom of the slab in accordance with procedures specified in the NYSDOH Guidance. The sampling point will be constructed of dedicated polyethylene tubing and the remainder of the slab hole backfilled with clean sand and sealed at the surface with hydrated bentonite.

A tracer gas (100% helium, ±2%) will be utilized to test if a competent seal exists around each sub-slab soil vapor sampling location in accordance with NYSDOH soil vapor intrusion guidance. Once the integrity of the seal is confirmed at each location, three volumes of air will be extracted from each point prior to sample collection with a flow rate of less than 0.2 liters/minute. Sample duration will be approximately 24 hours or when the canister vacuum reduces to approximately -5 inches of water column, whichever is first. The only exception to this will be the sample to the west of 432 Riverdale Avenue, which will need to be collected for 8 hours, as the proposed sampling location is unsecured. A sample log sheet will be maintained.

An indoor air sample will be collected from each room where at least one sub-slab soil vapor sample will be collected. One indoor air sample will be collected at 434 Riverdale Avenue and another two at 432 Riverdale Avenue (where there are four sub-slab locations spread across two rooms). There will be one corresponding outdoor air sample collected in the rear yard of 432 Riverdale Avenue. Each of the indoor and outdoor ambient air samples will be placed in the breathing zone, three to five feet above the local grade. The indoor and outdoor

air samples will be collected in 6-liter summa canisters that are individually certified by the laboratory. A copy of the NYSDOH Indoor Air Quality Questionnaire and Building Inventory is included as **Appendix C** and will be completed for the indoor spaces.

Samples will be collected in six-liter Summa canisters that have been batch certified clean by the laboratory and analyzed for VOCs using USEPA Method TO-15.

Soil vapor sampling points are illustrated in **Figure 8.**

4.3. Surveying

PWGC will contract a licensed surveyor to attempt to survey the boring locations, well locations, and groundwater elevations. If accurate survey data cannot be collected based on the discontinuity of the sampling locations occurring in multiple basements and outdoor locations, the approximate locations and elevations will be recorded from the nearest available benchmark or feature. PWGC will keep the NYSDEC apprised regarding the success of the survey during the RI.

4.4. Onsite and Offsite Qualitative Human Health Exposure Evaluation

A Qualitative Human Health Exposure Assessment will be completed for the Site, characterizing the exposure setting, identifying exposure pathways, and evaluating contaminant fate and transport. The Qualitative Human Health Exposure Assessment will follow DER-10, appendix 3B and Section 3.3(c)4.

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5.0 QUALITY ASSURANCE PROJECT PLAN (QAPP)

PWGC has prepared a Quality Assurance Project Plan (QAPP) in accordance with DER-10, Section 2.4. The QAPP presents the objectives, functional activities, methods, and QA/QC requirements associated with sample collection and laboratory analysis for characterization activities. Specifically, this QAPP addresses the following:

- Project Scope and Goals
- Organization and Responsibilities of Project Personnel
- Project Objectives, including Quality Assurance Objectives for Data
- Overview of Field Sampling Program and Procedures
- Sample Packaging and Shipping
- Sample Documentation
- Sample Analytical Program
- Quality Assurance/Quality Control Procedures

5.1. Project Organization

The Remedial Investigation Work Plan will be implemented on behalf of Fay Realty Inc. The following identifies the responsibilities of the various organizations supporting the Remedial Investigation.

- The NYSDEC Project Manager (Caroline Jalanti) will be responsible for reviewing and approving this work plan, coordinating approval of requested modifications, and providing guidance on regulatory requirements.
- The PWGC Program Manager (Andy Lockwood) will provide technical expertise for review of the project plans, reports and ongoing field activities.
- The PWGC Quality Assurance Manager (Jennifer Lewis) will confirm the quality of work associated with the project is in accordance with all project plans.
- PWGC Project Manager (Michael Gaul) will be responsible for the day-to-day project management, task leadership, and project engineering support and for the planning and implementation of remedial activities. The Project Manager is responsible for ensuring that the requirements of the RIWP are implemented. The project manager will also act as the Site Health and Safety Manager (HSM).
- PWGC Field Team Leader (Matthew Sanchez or designee) will be responsible for sample collection, oversight of subcontractor personnel, and coordination of daily field activities. The Field Team Leader will act as the Site Health and Safety Officer (SHSO) ensuring implementation of the Site Health and Safety Plan (HASP).
- A New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory (York Analytical Laboratories of Nyack, New York., NELAP ID New York State Dept. of Health Nos. 10854 and 12058) will be contracted to perform required analyses and reporting, including Analytical Services Protocol (ASP) Category B Deliverables, which will allow for data validation.
- An independent third-party data validator (Laboratory Data Consultants of Carlsbad, California or similar) will be contracted to perform data validation and prepare a Data Usability Summary Report (DUSR) in accordance with Section 3.6.
- Subcontractors will perform surveying, drilling, and/or sampling at the direction of the Field Team Leader in accordance with the RIWP.

5.2. Laboratory Analysis

Samples will be collected for VOCs, SVOCs, pesticides, PCBs, metals, PFAS, and 1,4-Dioxane. Requirements for sample analysis are described below. All samples will be submitted to a

NYSDOH ELAP certified laboratory (York Analytical) for analysis. Analytical methods, preservation, container requirements, and holding times are summarized below.

5.2.1. *Analytical Methods (Soil)*

Soil samples collected for volatile organic analysis shall be collected directly from the proposed sampling location utilizing a NYSDEC-approved method, such as Terra Core® sampling devices. The samples will be transferred to laboratory-supplied glassware and packed in a cooler with ice and shipped under proper chain-of-custody procedures to York Analytical for analysis. Analysis will conform to NYSDEC ASP Category B data deliverables in accordance with NYSDEC DER-10, Appendix 2B, 1.0 (b), including calibration standards, surrogate recoveries, and chromatograms. Soil samples will be analyzed for one or more of the compounds in the table below.

ANALYTICAL METHODS (SOIL)

Analyte/ Analyte Group	Matrix	Method/ SOP	Container(s) (number, size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Estimated Number of Samples to be Collected
TCL VOCs	Soil	USEPA 8260C	3 x 40 ml VOA, glass vial	1 x Methanol 2 x DI H_2O Cool ≤ 4°C	48 hours	14 Days	8
TCL SVOCs	Soil	USEPA 8270D	1 x 4 oz, glass	Cool ≤ 4°C	14 days	40 days	3
TAL Metals	Soil	USEPA 6010D	1 x 4 oz, glass	Cool ≤ 4°C	180 days	180 days	3
Mercury	Soil	USEPA 7473	1 x 4 oz, glass	Cool ≤ 4°C	28 days	28 days	3
Cyanide	Soil	USEPA 9010C/9012B	1 x 4 oz, glass	Cool ≤ 4°C	14 days	14 days	3
Hexavalent Chromium	Soil	USEPA 7196A	1 x 4 oz, glass	Cool ≤ 4°C	30 days	30 days	3
Trivalent Chromium	Soil	USEPA 7196A	1 x 4 oz, glass	Cool ≤ 4°C	30 days	30 days	3
PCBs	Soil	USEPA 8082A	1 x 4 oz, glass	Cool ≤ 4°C	14 days	40 Days	3
Pesticides	Soil	USEPA 8081B	1 x 4 oz, glass	Cool ≤ 4°C	14 days	40 days	3
Herbicides	Soil	USEPA 8151A	1 x 4 oz, glass	Cool ≤ 4°C	14 days	40 days	3
PFAS	Soil	USEPA 1633	1 x 8 oz unpreserved plastic (HDPE) unlined cap	Cool < 4°C	14 days	28 days	3
1,4-Dioxane	Soil	USEPA 8270D SIM Mode	1 x 8 oz, amber glass, Teflon-lined lid	Cool ≤ 4°C	14 days	40 days	3
*SIM Mode only necessary if EPA 8260 analysis cannot meet a MDL of 0.1 mg/kg							

5.2.2. *Analytical Methods (Groundwater)*

Groundwater samples will be analyzed for one or more of the compounds in the table below. Glassware will be supplied pre-cleaned and pre-preserved by the analytical laboratory. Sample preservation will consist of storage in a cooler with ice to a temperature of 4°C.

ANALYTICAL METHODS (Groundwater)

Analyte/ Analyte Group	Matrix	Method/ SOP	Container(s) (number, size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Estimated Number of Samples to be Collected
TCL VOCs	Water	EPA 8260D	3 x 40 ml VOA, glass vial	HCl Cool ≤ 6 °C	48 hours	14 Days	7
TCL SVOCs	Water	EPA 8270D	2 x 1000 ml, amber glass	Cool ≤ 6 °C	7 days	40 days	2
TAL Metals	Water	EPA 6010D/6020D	1 x 500 ml plastic	HNO_3	6 months	6 months	2
Mercury	Water	EPA 7470	1 x 500 ml plastic	HNO_3	6 months	6 months	2
Cyanide	Water	EPA 9010C/9012B	1 x 250 ml, plastic	NaOH	14 days	14 days	2
Hexavalent Chromium	Water	EPA 7196A	1 x 500 ml, plastic	Cool ≤ 6 °C	24 hrs	24 hrs	2
Trivalent Chromium	Water	EPA 7196A	1 x 500 ml, plastic	Cool ≤ 6 °C	24 hrs	24 hrs	2
PCBs	Water	EPA 8082A	1 x 1000 ml, amber glass	Cool ≤ 6 °C	7 days	40 Days	2
Pesticides	Water	EPA 8081B	1 x 500 ml, amber glass	Cool ≤ 6 °C	7 days	7 days	2
Herbicides	Water	EPA 8151A	1 x 1000 ml, amber glass	Cool ≤ 6 °C	7 days	7 days	2
PFAS	Water	EPA 1633	3 x 250 ml HDPE, unlined cap	Trizma Cool < 6 °C	14 days	28 days	2
1,4-Dioxane	Water	USEPA 8270D SIM Mode	3 x 40 ml VOA, glass vial	HCl Cool ≤ 6 °C	48 hours	14 Days	2
*SIM Mode to be used to meet required detection limit of 0.35 ug/L							

5.2.3. Analytical Methods (Soil Vapor and Air)

Soil vapor, indoor air, and outdoor ambient air samples will be collected. Each sample will be analyzed for VOCs by USEPA Method TO-15. Samples will be collected in laboratory supplied batch-certified SUMMA canisters.

Analyte/ Analyte Group	Matrix	Method/ SOP	Container(s) (number, size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Estimated Number of Samples to be Collected
VOCs	Soil Vapor and Ambient Air	USEPA TO-15	6L SUMMA Canister	None	None	14 days	12

5.3. Sample Identification

Each sample will be identified with a set of information relating to individual sample characteristics. Required information consists of Sample Designation, Depth, Date, Time, and Matrix. Examples of sample IDs are shown below.

- SB001 (2-4') (soil sample, boring 001 from 2 to 4 feet bgs)
- MW004 (groundwater sample, temporary sampling well 004)
- SV001 (soil vapor point 001)
- IA001 (indoor air sample 001)
- OA001 (outdoor air sample 001)

Sample frequency, locations, depths, and nomenclature may change subject to field decisions and professional judgment.

5.4. Field/Laboratory Data Control Requirements

QC procedures will be followed in the field and at the laboratory to ensure that reliable data are obtained. When performing field sampling, care shall be taken to prevent the cross-contamination of sampling equipment, sample bottles, and other equipment that could compromise sample integrity. QC samples will include the following:

- Blind Duplicates – one per 20 environmental samples for each matrix sampled.
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) - one per 20 environmental samples for each matrix sampled.
- Equipment Blank – one per day for each matrix sampled where non-dedicated sampling equipment is utilized (such as a hand auger).
- Field Blank – one per day that PFAS are sampled.
- Trip Blank – one per day that VOCs in groundwater or soil are sampled.

QA/QC Sample Type	Est. Total QA/QC Samples	Est. Days of Sampling
Blind Duplicate	2 (one soil and one groundwater)	N/A
MS/MSD	2 (one soil and one groundwater)	N/A
Equipment Blank	TBD	TBD
Field Blank	TBD	TBD
Trip Blank	TBD	TBD

5.5. Chain-of-Custody, Sample Packaging and Shipment

Each day that samples are collected, a chain-of-custody/request for analysis form will be completed and submitted to the laboratory with samples to be analyzed. A copy of the chain-of-custody will be retained by the Project Manager. The chain-of-custody form will include the project name, sampler's signature, sample IDs, date and time of sample collection, and analyses requested.

Samples will be packaged and shipped in a manner that maintains sample preservation requirements during transport (i.e., ice to keep samples cool until receipt at the laboratory), ensures that sample holding times can be achieved by the laboratory, and prevents samples from being tampered with.

If a commercial carrier ships samples, a bill of lading (waybill) will be used as documentation of sample custody. Receipts for bills of lading and other documentation of shipment shall be maintained as part of the permanent custody documentation. Commercial carriers are not required to sign the chain-of-custody form as long as it is enclosed in the shipping container and evidence tape (custody seal) remains in place on the shipping container.

5.6. Data Usability and Validation

The main purpose of the data is for use in defining the extent of contamination at the Site, to aid in evaluation of potential human health and ecological exposure assessments, and to support remedial action decisions. Based upon this, data usability and validation will be performed as described below. Complete data packages will be archived in the project files, and if deemed necessary, additional validation can be performed using procedures in the following sections.

5.6.1. Data Usability and Validation Requirements

Data usability and validation are performed on analytical data sets, primarily to confirm that sampling and chain-of-custody documentation are complete, sample IDs can be tied to specific sampling locations, samples were analyzed within the required holding times, and analyses are reported in conformance with NYSDEC ASP, Category B data deliverable requirements as applicable to the method utilized. Data will be submitted to the NYSDEC via EQuIS.

5.6.2. Data Usability and Validation Methods

A designee of the PWGC Project Manager will complete a data usability evaluation for the data collected during the remedial activities and prepare a data usability summary report (DUSR) in accordance with NYSDEC DER-10, Appendix 2B.

Independent third-party data validation will be performed on 5% of the sample data or on one sample from each sample delivery group (SDG), whichever is greater. Data validation will be performed by a qualified subcontractor independent of the project (Laboratory Data Consultants of Carlsbad, California or similar).

5.7. Field Equipment Calibration

Equipment will be inspected and approved by the Field Team Leader before being used. Monitoring equipment will be calibrated in accordance with PWGC's SOP Equipment Calibration and Maintenance, or to factory specifications, as appropriate. Monitoring equipment will be calibrated following manufacturers' recommended schedules. Daily field response checks and calibrations will be performed, as necessary (i.e. photoionization detector [PID] calibrations). Equipment calibrations will be documented in a designated field logbook in accordance with PWGC's SOP Field Documentation.

5.8. Special Sampling Considerations for PFAS

The sampling protocol will follow the NYSDEC April 2023 Guidelines for Sampling and Analysis of PFAS.

To ensure that the analytical results obtained during the Remedial Investigation are representative of the actual site conditions several measures should be taken:

- Collection of appropriate field QA/QC samples (blanks, duplicates, equipment rinsate samples, etc.) as detailed in the QAPP;
- Collection of samples using the sample guidelines contained throughout Section 5.0; and
- Analysis by the analytical laboratory using established laboratory QA/QC procedures and methods as detailed in the QAPP.

5.9. Equipment Decontamination

To minimize the potential for cross-contamination, non-dedicated drilling and sampling equipment shall be properly decontaminated prior to and between sampling/drilling locations.

5.9.1. General Procedures

Drilling equipment will be decontaminated in a designated area. Sampling equipment and probes will be decontaminated in an area covered with plastic sheeting near the sampling location. Waste material generated during decontamination activities will be containerized, stored and disposed of in accordance with the procedures detailed in **Section 5.10**. Decontamination of sampling equipment shall be kept to a minimum, and wherever possible, dedicated sampling equipment shall be used. Personnel directly involved in equipment decontamination shall wear appropriate personal protective equipment (PPE).

5.9.2. Drilling Equipment

Drilling equipment shall be decontaminated prior to performance of the first boring/excavation and between all subsequent borings/excavations. This shall include hand tools, casing, augers, drill rods, temporary well material and other related tools and equipment. Water used during drilling and/or steam cleaning operations shall be from a potable source.

5.9.3. Sampling Equipment

Sampling equipment (e.g.., trowels, knives, split-spoons, bowls, hand augers, etc.) will be decontaminated prior to each use as follows:

- Laboratory-grade glassware detergent and tap water scrub to remove visual contamination
- Generous tap water rinse
- Distilled water rinse

5.9.4. Meters and Probes

All meters and probes that are used in the field (other than those used solely for air monitoring purposes, e.g., PID) will be decontaminated between uses as follows:

- Laboratory-grade detergent and tap water solution wash
- Tap water rinse
- Distilled water rinse (triple rinse)

5.10. Management of Investigation Derived Waste

Waste materials generated from field operations may consist of soil cuttings, purge water, and miscellaneous solid materials such as personal protective equipment (PPE) and supplies. Investigative derived waste (IDW) generated during field operations will be disposed of in accordance with applicable regulations.

Soil cuttings generated from soil boring and well installation activities will be stored in 55-gallon drums. Drums will be labeled to indicate the source of the soil and will be stored in a designated area onsite. Soil cores and soil cuttings will be field screened using a PID, while performing drilling operations. Drummed soils will be disposed of at an offsite disposal facility or reused onsite at the point of generation, if appropriate. Following receipt of the analytical results, recommendations for disposition of the drummed soil will be provided to the NYSDEC.

Development and purge water generated during the field activities will be stored in a portable holding tank and/or 55-gallon drums. Drums will be labeled to indicate the source of the fluid and will be stored in a designated area onsite. Drummed groundwater will be sampled to determine if discharge to the surface of the Site is appropriate or offsite disposal is required. Following receipt of the groundwater sampling results, recommendations for disposition of the water will be provided to NYSDEC.

5.11. Field Documentation

Documentation will take place on either appropriate forms or in a dedicated site logbook (non-weatherproof). Permanent black or blue ink (no use of Sharpie® permanent markers) will be used to record information in the logbook. Errors in field documentation will be lined through, initialed, dated, and corrected. Forms will be kept by the PWGC Field Team Leader during the field activities. Field activities will be documented in the field logbook. The logbook will contain pages that are consecutively numbered and will be permanently bound with a cover. Upon completion of daily activities, unused portions of pages will be lined-through and initialed. A short daily report shall be provided to DEC within 3 business days of field work.

The primary purpose of the field logbook is to document the daily field activities and to provide descriptions of each activity. All entries in the field logbook will be recorded and dated by the person making the entry.

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6.0 REMEDIAL INVESTIGATION REPORT PREPARATION

The Remedial Investigation will incorporate the methods and findings of the investigation activities performed as outlined in this work plan and supplementary data gap work plans for both onsite and offsite activities, if required. The report will identify specific contamination concentrations throughout each media (e.g., soil, groundwater, soil vapor), delineate the extent of contamination in soil and groundwater onsite, evaluate potential exposure pathways, and provide conclusions and recommendations for additional investigation.

Electronic copies of the Remedial Investigation Report will be submitted to the NYSDEC.. Analytical results of the investigation will be reported with Category B data deliverables and submitted in the electronic data delivery (EDD) format through the Department's environmental information management system (EIMS).

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7.0 GREEN AND SUSTAINABLE REMEDIATION AND ENVIRONMENTAL FOOTPRINT ANALYSIS

NYSDEC's DER-31 Green Remediation requires that green remediation concepts and techniques be considered during all stages of the remedial program including site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. This section of the RIWP provides a summary of all green remediation evaluations to be completed for the Site during the RI, and to be reported in the RIR.

7.1. Project Planning

The following procedures have been integrated into the RIWP and will be carried out during the RI (where possible) to allow for increased efficiency and sustainability during the RI:

- The sampling plan has been designed to be streamlined to ensure the collection of the necessary data to ideally avoid the need to remobilize, while also keeping the scope limited enough to avoid unnecessary expenditure of energy and waste generation.
- PWGC will do their best to select subcontractors (analytical laboratories, drillers, and surveyors) from the local area to limit fuel expended by the subcontractors traveling to and from the site.
- No hard copies of the RIWP will be planned to be distributed to avoid excess use of wastepaper.
- Pre fieldwork meetings will be planned to take place virtually to avoid unnecessary emissions.

7.2. Field Activities

The following items will be evaluated and potentially integrated during the RI field work to limit the work's environmental footprint:

- Reduction of onsite emissions during RI Sampling Events - Usage of battery powered groundwater sampling pumps or pumps which can use on-site electricity rather than a gas-powered generator.
- Transportation efficiency – When possible, using mass transit and / or carpooling to the site for field work. This will lower the carbon footprint of such events.
- Work efficiency - minimizing field mobilizations to reduce fuel consumption and associated air emissions and limit disturbance to the land and local ecosystems.
- Equipment efficiency – use of a more efficient, low flow pump so as to require less pumping during low flow groundwater sampling.

Green methods which are implemented during the RI field work will be documented in the RIR.

7.3. Materials and Waste Management

Wastes which may be generated during the RI include purge water from on-site monitoring wells, acetate liners from borings, nitrile gloves, tubing, soil cuttings, etc.

The following items will be evaluated and potentially integrated during the RI field work to limit the work's environmental footprint:

- The use of products containing recycled and biobased contents.
- Reducing the volume of generated IDW where possible to limit the need for waste containers such as 55-gallon storage drums. (Example: using more efficient, lower flow pumps to generate less purge water.)
- Minimizing the use of disposable single use items such as plastic bags.
- Disposal of waste (where possible) via municipal waste (such as gloves).
- Place soil cuttings back in boreholes if no evidence of obvious contamination is observed.

7.4. Lab Support

The following lab support items will be considered and potentially implemented during the RI to limit the environmental footprint of the RI:

- The use of a fixed-base laboratory for analytical services to reduce the environmental footprint of the RI by limiting the transportation of samples to multiple locations, thus limiting fuel consumption.
- The selection of a high performing laboratory for analytical services with a commitment to energy efficiency, recycling, and other green principles.

7.5. Metrics and Reporting

As recommended by the NYSDEC, evaluation of the remedial investigation's environmental footprint will be evaluated using the Spreadsheets for Environmental Footprint Analysis (SEFA). SEFA are a set of workbooks designed for conducting environmental footprint analyses compatible with the EPA's Methodology (US EPA, 2012), which in turn reflects EPA's five core elements for green remediation. This evaluation will be included in the RIR.

8.0 HEALTH AND SAFETY PLAN (HASP)

Field operations will be performed in accordance with the health and safety requirements provided in the site-specific Health and Safety Plan (HASP). The HASP is included as **Appendix D**. The HASP outlines the requirements for training, medical surveillance, daily tailgate meetings, emergency response, and accident and injury reporting.

The PWGC Field Team Leader will be responsible for implementing the HASP, completing the daily tailgate safety meetings, and performing necessary Industrial Hygiene (IH) monitoring as specified in the HASP.

When considering the health and safety of site personnel, the use of prohibited items (i.e. Tyvek suits) associated with PFAS sampling can be used if an equivalent alternate is not available.

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9.0 COMMUNITY AIR MONITORING PLAN (CAMP)

A site-specific Community Air Monitoring Plan (CAMP) has been prepared to provide measures for protection for onsite workers and the downwind community from potential airborne contaminants as a direct result of the Remedial Investigation. The CAMP is included as **Appendix F**.

The Community Air Monitoring Plan will be implemented and executed for all ground intrusive activities in accordance with 29 CFR 1910.120(h), the New York State Department of Health's (NYSDOH) Generic Community Air Monitoring Plan, and NYSDEC DER-10, Appendix 1A and 1B.

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10.0 PROJECT SCHEDULE

The preliminary schedule for the major project milestones is presented in **Table 1**. Field work is anticipated to begin within 30 days following approval of this RIWP by NYSDEC. A draft RI Report should be submitted to the NYSDEC within 45 days following receipt of analytical results.

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11.0 REFERENCES

NYSDEC, Division of Environmental Restoration, 6 NYCRR Part 375, Environmental Remediation Programs, December 14, 2006.

NYSDEC, Division of Environmental Remediation, DER-10, Technical Guidance for Site Investigation and Remediation, May 2010.

NYSDEC, Division of Environmental Remediation, CP-51, Soil Cleanup Guidance, October 2010.

NYSDEC, Division of Water, Technical and Operational Guidance Series 1:1:1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998, Addendum April 2000.

NYSDOH, Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006.

NYSDEC, Division of Environmental Remediation, April 2023, Guidelines for Sampling and Analysis of PFAS Under NYSDEC's Part 375 Remedial Programs.

NYSDOH, May 2017, Update to Soil Vapor / Indoor Air Matrices.

USEPA, September 2017, Low Street (low flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells.

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FIGURES

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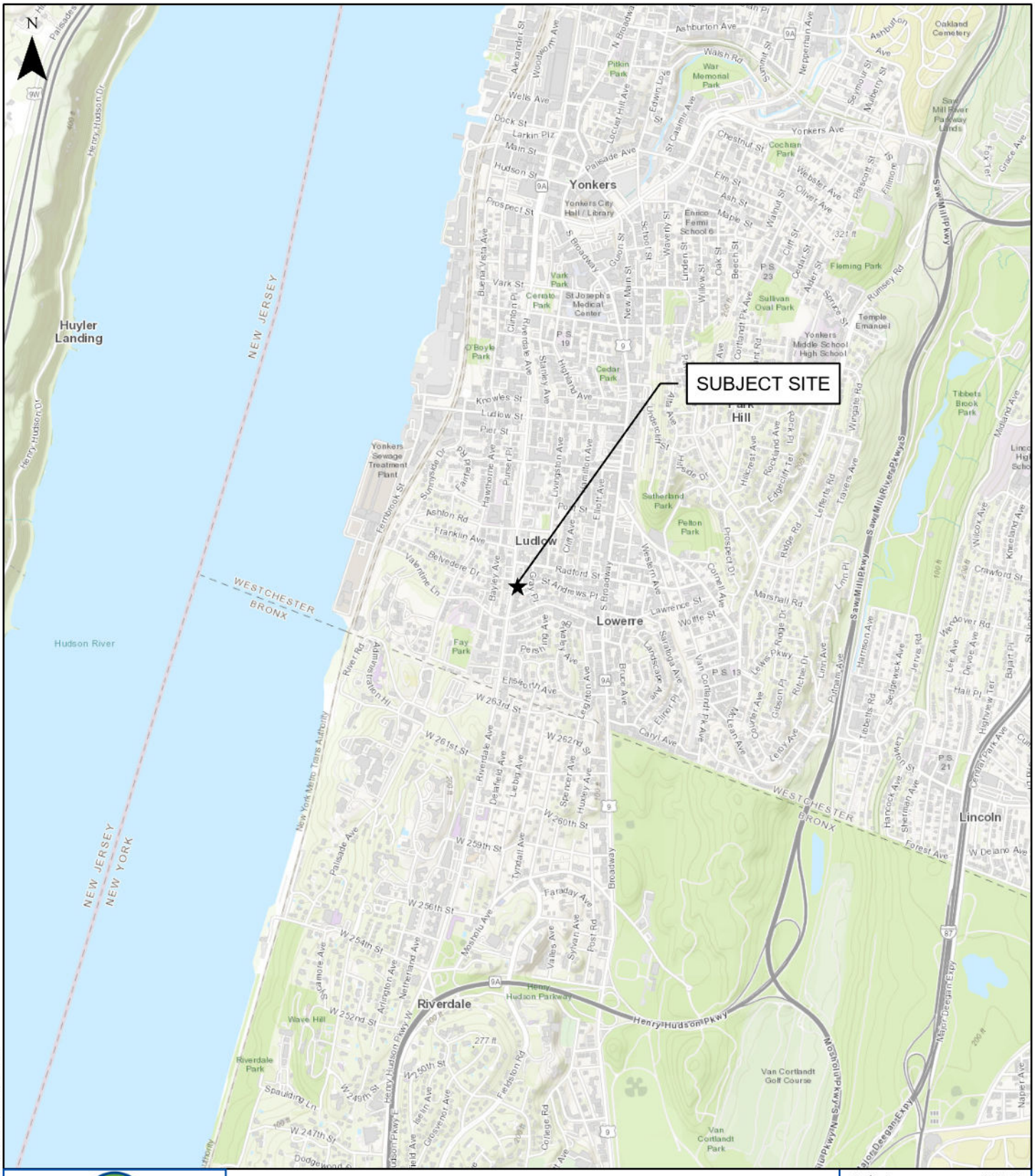

SITE LOCATION

434 Riverdale Ave
Yonkers, NY

0 ¼ ½ ¾ 1 Miles

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Project:	FAY2101
Date:	8/2/2023
Designed by:	MG
Drawn by:	JM
Approved by:	MG
Figure No:	1

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Site Plan

434 Riverdale Ave
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FIGURE NO:

2

Document Path: W:\Projects\E-L\FAY\FAY_GIS\2401\ProjectFiles\FAY2401.aprx

Sample ID:	SB-001
Soil Depth:	0-2'
Sampling Date:	3/9/2022
Lab Sample ID:	22C0596-06
Volatile Organic Compounds by EPA 8260 - (mg/L)	
Acetone	0.0079 J
cis-1,2-Dichloroethylene	0.19
Tetrachloroethylene	0.096
Trichloroethylene	0.069

Sample ID:	SB-002
Soil Depth:	0-2'
Sampling Date:	3/9/2022
Lab Sample ID:	22C0596-05
Volatile Organic Compounds by EPA 8260 - (mg/L)	
Acetone	0.024 J
cis-1,2-Dichloroethylene	0.031
Methylene chloride	0.0081 J
trans-1,2-Dichloroethylene	0.055
Trichloroethylene	0.0037 J

Sample ID:	SB-005
Soil Depth:	0-2'
Sampling Date:	3/10/2022
Lab Sample ID:	22C0658-01
No Detections or Exceedances	

Sample ID:	SB-007
Soil Depth:	0-2'
Sampling Date:	3/10/2022
Lab Sample ID:	22C0658-03
Volatile Organic Compounds by EPA 8260 - (mg/L)	
Tetrachloroethylene	0.014 J

Sample ID:	SB-003
Soil Depth:	0-2'
Sampling Date:	3/9/2022
Lab Sample ID:	22C0596-03
Volatile Organic Compounds by EPA 8260 - (mg/L)	
Methylene chloride	0.0053 J

Sample ID:	SB-006
Soil Depth:	0-2'
Sampling Date:	3/10/2022
Lab Sample ID:	22C0658-02
Volatile Organic Compounds by EPA 8260 - (mg/L)	
Methylene chloride	0.0069 J

Sample ID:	SB-004
Soil Depth:	0-2'
Sampling Date:	3/9/2022
Lab Sample ID:	22C0596-02
Volatile Organic Compounds by EPA 8260 - (mg/L)	
Methylene chloride	0.011

Site Boundary
Tax Lot Boundary
Monitoring Well Sample Location
Soil Boring Sample Location
Monitoring Well/Soil Boring Sample Location
Sub-Slab Vapor/Indoor Air Sample Location
Outdoor Ambient Air Sample Location
Former Riverdale Dry Cleaners

Notes
Highlighted text denotes concentrations exceeding the applicable NYSDEC Unrestricted Use SCO
Highlighted text denotes concentrations exceeding the applicable NYSDEC Commercial Use SCO
Highlighted text denotes results identified at a detectable concentration.
J- Denotes an estimated concentration

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Scale:	AS SHOWN	Approved by:	EL

Site Characterization Soil Results and Exceedances

434 Riverdale Ave
Yonkers, NY

FIGURE NO:

3

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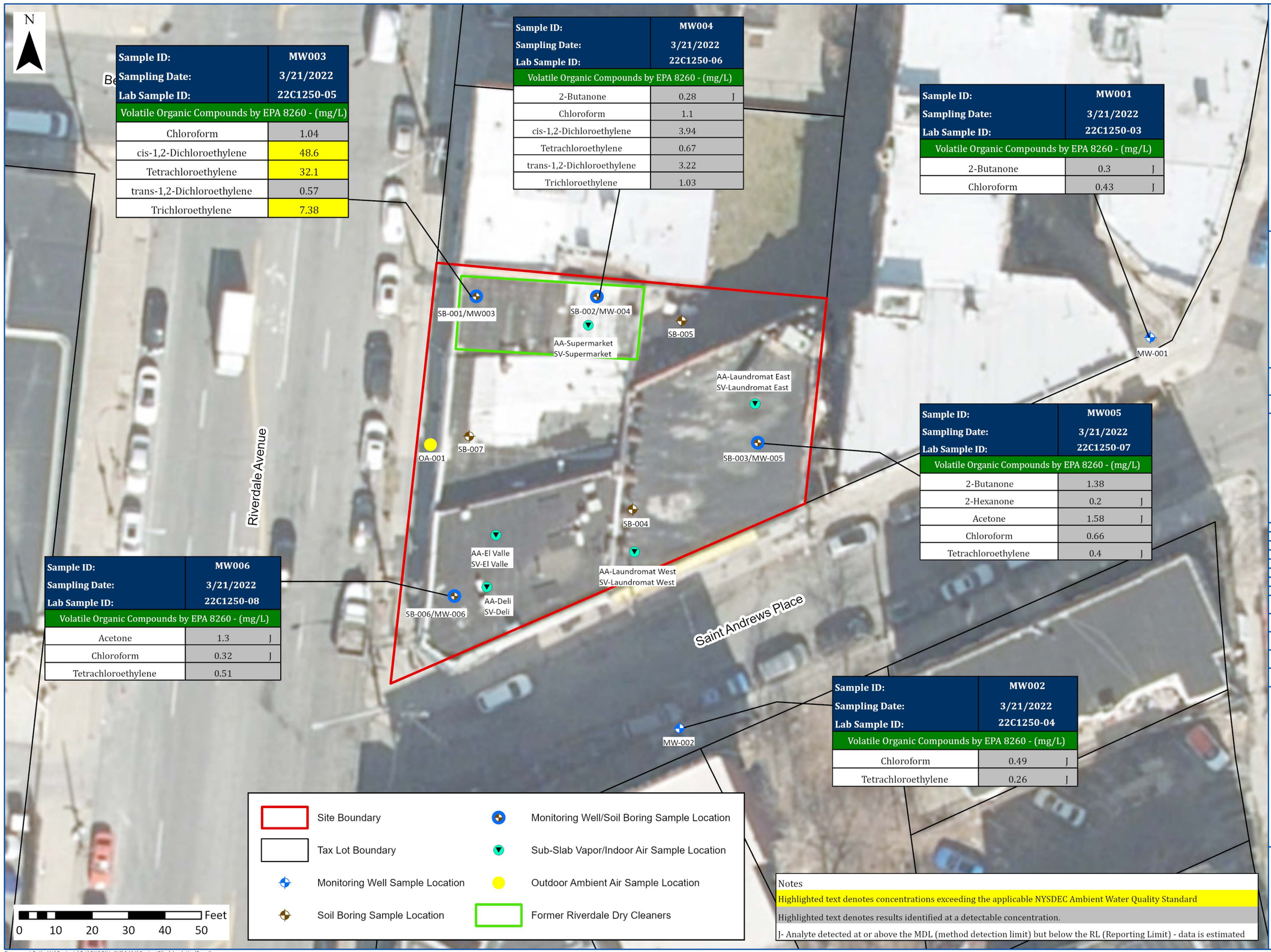

Sample ID:	MW003
Sampling Date:	3/21/2022
Lab Sample ID:	22C1250-05
Volatile Organic Compounds by EPA 8260 - (mg/L)	
Chloroform	1.04
cis-1,2-Dichloroethylene	48.6
Tetrachloroethylene	32.1
trans-1,2-Dichloroethylene	0.57
Trichloroethylene	7.38

Sample ID:	MW004	
Sampling Date:	3/21/2022	
Lab Sample ID:	22C1250-06	
Volatile Organic Compounds by EPA 8260 - (mg/L)		
2-Butanone	0.28	J
Chloroform	1.1	
cis-1,2-Dichloroethylene	3.94	
Tetrachloroethylene	0.67	
trans-1,2-Dichloroethylene	3.22	
Trichloroethylene	1.03	

Sample ID:	MW001	
Sampling Date:	3/21/2022	
Lab Sample ID:	22C1250-03	
Volatile Organic Compounds by EPA 8260 - (mg/L)		
2-Butanone	0.3	J
Chloroform	0.43	J

Sample ID:	MW005	
Sampling Date:	3/21/2022	
Lab Sample ID:	22C1250-07	
Volatile Organic Compounds by EPA 8260 - (mg/L)		
2-Butanone	1.38	
2-Hexanone	0.2	J
Acetone	1.58	J
Chloroform	0.66	
Tetrachloroethylene	0.4	J

Sample ID:	MW006	
Sampling Date:	3/21/2022	
Lab Sample ID:	22C1250-08	
Volatile Organic Compounds by EPA 8260 - (mg/L)		
Acetone	1.3	J
Chloroform	0.32	J
Tetrachloroethylene	0.51	

Sample ID:	MW002	
Sampling Date:	3/21/2022	
Lab Sample ID:	22C1250-04	
Volatile Organic Compounds by EPA 8260 - (mg/L)		
Chloroform	0.49	J
Tetrachloroethylene	0.26	J

Notes

Highlighted text denotes concentrations exceeding the applicable NYSDEC Ambient Water Quality Standard

Highlighted text denotes results identified at a detectable concentration.

J- Analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

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Scale:	AS SHOWN	Approved by:	EL

Site Characterization Groundwater Results and Exceedances

434 Riverdale Ave
Yonkers, NY

FIGURE NO:

4

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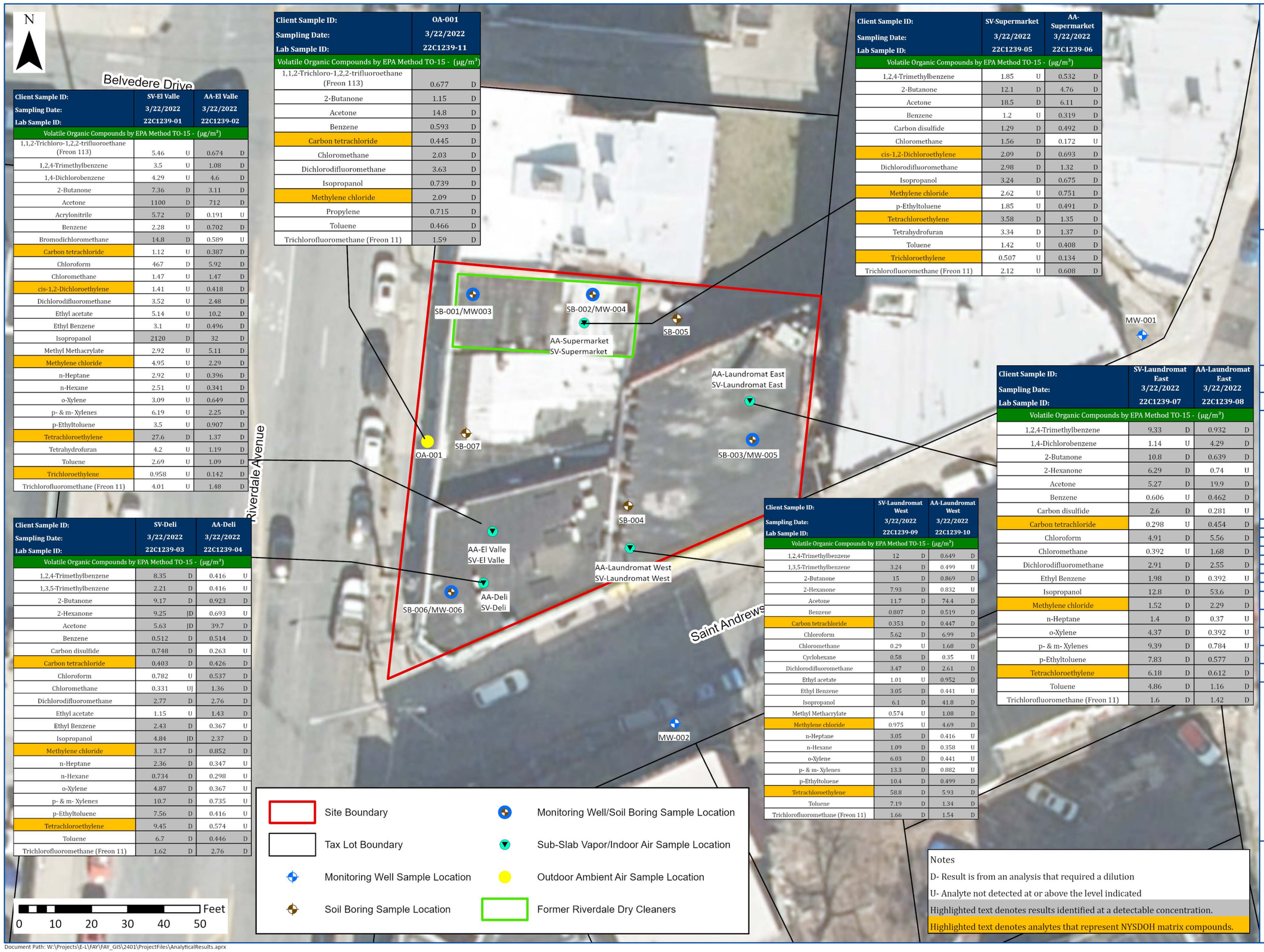

Client Sample ID:	SV-El Valle		AA-El Valle	
Sampling Date:	3/22/2022		3/22/2022	
Lab Sample ID:	22C1239-01		22C1239-02	
Volatile Organic Compounds by EPA Method TO-15 - (µg/m³)				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5.46	U	0.674	D
1,2,4-Trimethylbenzene	3.5	U	1.08	D
1,4-Dichlorobenzene	4.29	U	4.6	D
2-Butanone	7.36	D	3.11	D
Acetone	1100	D	712	D
Acrylonitrile	5.72	D	0.191	U
Benzene	2.28	U	0.702	D
Bromodichloromethane	14.8	D	0.589	U
Carbon tetrachloride	1.12	U	0.387	D
Chloroform	467	D	5.92	D
Chloromethane	1.47	U	1.47	D
cis-1,2-Dichloroethylene	1.41	U	0.418	D
Dichlorodifluoromethane	3.52	U	2.48	D
Ethyl acetate	5.14	U	10.2	D
Ethyl Benzene	3.1	U	0.496	D
Isopropanol	2120	D	32	D
Methyl Methacrylate	2.92	U	5.11	D
Methylene chloride	4.95	U	2.29	D
n-Heptane	2.92	U	0.396	D
n-Hexane	2.51	U	0.341	D
o-Xylene	3.09	U	0.649	D
p- & m- Xylenes	6.19	U	2.25	D
p-Ethyltoluene	3.5	U	0.907	D
Tetrachloroethylene	27.6	D	1.37	D
Tetrahydrofuran	4.2	U	1.19	D
Toluene	2.69	U	1.09	D
Trichloroethylene	0.958	U	0.142	D
Trichlorofluoromethane (Freon 11)	4.01	U	1.48	D

Client Sample ID:	OA-001	
Sampling Date:	3/22/2022	
Lab Sample ID:	22C1239-11	
Volatile Organic Compounds by EPA Method TO-15 - (µg/m³)		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.677	D
2-Butanone	1.15	D
Acetone	14.8	D
Benzene	0.593	D
Carbon tetrachloride	0.445	D
Chloromethane	2.03	D
Dichlorodifluoromethane	3.63	D
Isopropanol	0.739	D
Methylene chloride	2.09	D
Propylene	0.715	D
Toluene	0.466	D
Trichlorofluoromethane (Freon 11)	1.59	D

Client Sample ID:	SV-Supermarket		AA-Supermarket	
Sampling Date:	3/22/2022		3/22/2022	
Lab Sample ID:	22C1239-05		22C1239-06	
Volatile Organic Compounds by EPA Method TO-15 - (µg/m³)				
1,2,4-Trimethylbenzene	1.85	U	0.532	D
2-Butanone	12.1	D	4.76	D
Acetone	18.5	D	6.11	D
Benzene	1.2	U	0.319	D
Carbon disulfide	1.29	D	0.492	D
Chloromethane	1.56	D	0.172	U
cis-1,2-Dichloroethylene	2.09	D	0.693	D
Dichlorodifluoromethane	2.98	D	1.32	D
Isopropanol	3.24	D	0.675	D
Methylene chloride	2.62	U	0.751	D
p-Ethyltoluene	1.85	U	0.491	D
Tetrachloroethylene	3.58	D	1.35	D
Tetrahydrofuran	3.34	D	1.37	D
Toluene	1.42	U	0.408	D
Trichloroethylene	0.507	U	0.134	D
Trichlorofluoromethane (Freon 11)	2.12	U	0.608	D

Client Sample ID:	SV-Laundromat East		AA-Laundromat East	
Sampling Date:	3/22/2022		3/22/2022	
Lab Sample ID:	22C1239-07		22C1239-08	
Volatile Organic Compounds by EPA Method TO-15 - (µg/m³)				
1,2,4-Trimethylbenzene	9.33	D	0.932	D
1,4-Dichlorobenzene	1.14	U	4.29	D
2-Butanone	10.8	D	0.639	D
2-Hexanone	6.29	D	0.74	U
Acetone	5.27	D	19.9	D
Benzene	0.606	U	0.462	D
Carbon disulfide	2.6	D	0.281	U
Carbon tetrachloride	0.298	U	0.454	D
Chloroform	4.91	D	5.56	D
Chloromethane	0.392	U	1.68	D
Dichlorodifluoromethane	2.91	D	2.55	D
Ethyl Benzene	1.98	D	0.392	U
Isopropanol	12.8	D	53.6	D
Methylene chloride	1.52	D	2.29	D
n-Heptane	1.4	D	0.37	U
o-Xylene	4.37	D	0.392	U
p- & m- Xylenes	9.39	D	0.784	U
p-Ethyltoluene	7.83	D	0.577	D
Tetrachloroethylene	6.18	D	0.612	D
Toluene	4.86	D	1.16	D
Trichlorofluoromethane (Freon 11)	1.6	D	1.42	D

Client Sample ID:	SV-Deli		AA-Deli	
Sampling Date:	3/22/2022		3/22/2022	
Lab Sample ID:	22C1239-03		22C1239-04	
Volatile Organic Compounds by EPA Method TO-15 - (µg/m³)				
1,2,4-Trimethylbenzene	8.35	D	0.416	U
1,3,5-Trimethylbenzene	2.21	D	0.416	U
2-Butanone	9.17	D	0.923	D
2-Hexanone	9.25	JD	0.693	U
Acetone	5.63	JD	39.7	D
Benzene	0.512	D	0.514	D
Carbon disulfide	0.748	D	0.263	U
Carbon tetrachloride	0.403	D	0.426	D
Chloroform	0.782	U	0.537	D
Chloromethane	0.331	UJ	1.36	D
Dichlorodifluoromethane	2.77	D	2.76	D
Ethyl acetate	1.15	U	1.43	D
Ethyl Benzene	2.43	D	0.367	U
Isopropanol	4.84	JD	2.37	D
Methylene chloride	3.17	D	0.852	D
n-Heptane	2.36	D	0.347	U
n-Hexane	0.734	D	0.298	U
o-Xylene	4.87	D	0.367	U
p- & m- Xylenes	10.7	D	0.735	U
p-Ethyltoluene	7.56	D	0.416	U
Tetrachloroethylene	9.45	D	0.574	U
Toluene	6.7	D	0.446	D
Trichlorofluoromethane (Freon 11)	1.62	D	2.76	D

Client Sample ID:	SV-Laundromat West		AA-Laundromat West	
Sampling Date:	3/22/2022		3/22/2022	
Lab Sample ID:	22C1239-09		22C1239-10	
Volatile Organic Compounds by EPA Method TO-15 - (µg/m³)				
1,2,4-Trimethylbenzene	12	D	0.649	D
1,3,5-Trimethylbenzene	3.24	D	0.499	U
2-Butanone	15	D	0.869	D
2-Hexanone	7.93	D	0.832	U
Acetone	11.7	D	74.4	D
Benzene	0.807	D	0.519	D
Carbon tetrachloride	0.353	D	0.447	D
Chloroform	5.62	D	6.99	D
Chloromethane	0.29	U	1.68	D
Cyclohexane	0.58	D	0.35	U
Dichlorodifluoromethane	3.47	D	2.61	D
Ethyl acetate	1.01	U	0.952	D
Ethyl Benzene	3.05	D	0.441	U
Isopropanol	6.1	D	41.8	D
Methyl Methacrylate	0.574	U	1.08	D
Methylene chloride	0.975	U	4.69	D
n-Heptane	3.05	D	0.416	U
n-Hexane	1.09	D	0.358	U
o-Xylene	6.03	D	0.441	U
p- & m- Xylenes	13.3	D	0.882	U
p-Ethyltoluene	10.4	D	0.499	D
Tetrachloroethylene	58.8	D	5.93	D
Toluene	7.19	D	1.34	D
Trichlorofluoromethane (Freon 11)	1.66	D	1.54	D

Notes

D- Result is from an analysis that required a dilution

U- Analyte not detected at or above the level indicated

Highlighted text denotes results identified at a detectable concentration.

Highlighted text denotes analytes that represent NYSDOH matrix compounds.

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Scale:	AS SHOWN	Approved by:	EL

Site Characterization Soil Vapor and Ambient Air Results and Exceedances

434 Riverdale Ave
Yonkers, NY

FIGURE NO:

5

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Proposed Soil Boring Locations

434 Riverdale Ave
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FIGURE NO:

6

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Proposed Monitoring Well Locations

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FIGURE NO:

7

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Proposed Ambient Air & Soil Vapor Sample Locations

434 Riverdale Ave
Yonkers, NY

FIGURE NO:

8

TABLE

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Table 1
Project Schedule - Remedial Investigation

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Dates	7/1 to 7/7	7/8 to 8/6				8/6 to 8/12	8/13 to 9/2			9/3 to 9/23			9/24 to 11/4						11/5 to 11/11	11/12 to 12/30						
Task																										
Initial NYSDEC RIWP Approval																										
30 Day Comment Period																										
Final NYSDEC RIWP Approval																										
Field Activities																										
Laboratory Analysis																										
Data Validation																										
Preparation of Report																										
Submission of Draft RI Report to NYSDEC																										
NYSDEC Internal Review of RI Report & Significant Threat Determination																										

APPENDIX A

Previous Environmental Reports

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LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT

Riverdale Avenue 432
432 Riverdale Avenue
Yonkers, New York 10705
CBRE Project No.: E80405746

Prepared For:
CBRE, Inc. | Debt & Structured Finance

www.cbre.com/Assessment

CBRE

55 West Red Oak Lane
White Plains, New York 10604
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May 4, 2018

Mr. Alex Cohen
Underwriting Analyst
CBRE, Inc. | Debt & Structured Finance
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New York, New York 10166
(212) 656-0538
alex.cohen@cbre.com

RE: Limited Phase II Environmental Site Assessment
Riverdale Avenue 432
432 Riverdale Avenue
Yonkers, New York 10705
CBRE Project No.: E80405746

Dear Mr. Cohen:

CBRE, Inc., a Delaware corporation ("CBRE") has completed a Limited Phase II Environmental Site Assessment of the above referenced property. The work was conducted in accordance with CBRE's letter of engagement and generally accepted industry standards. This report was prepared solely for the use of CBRE, Inc. | Debt & Structured Finance (hereinafter "Client" or "User") and any party specifically referenced in Section 1.4 User Reliance. No other party shall use or rely on this report or the findings herein, without the prior written consent of CBRE.

Thank you for the opportunity to provide our services. If you have any questions or need any additional information please contact the undersigned at paul.stellato@cbre.com.

Sincerely,

CBRE, Inc. – ASSESSMENT AND CONSULTING SERVICES

Prepared By:

Paul Stellato
Senior Environmental Site Assessor

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1.0 INTRODUCTION

CBRE is pleased to submit our Limited Phase II Environmental Site Assessment (Assessment) of the property identified as Riverdale Avenue 432, located at 432 Riverdale Avenue, Yonkers, New York herein referred to as the "Subject".

1.1. Background and Purpose

The purpose of this Assessment was to investigate Potential Environmental Conditions (PECs) identified in a Transaction Screen Assessment (TSA) prepared by CBRE, dated April 18, 2018. Specifically, the following RECs were identified, which warrant investigation at this time:

The southerly adjoining property located at 434 Riverdale Avenue was identified on the several regulatory databases indicative of historical on-site dry cleaning operations. These listings include the RCRA Non-Generator database, which listed this southerly adjoining site as a Non-Generator of hazardous wastes as of 2006 (the site was listed as a RCRA Conditionally Exempt Small Quantity Generator (CESQG) in 2001); the NY Drycleaners database (registration effective in 2003, but noted as currently shutdown); and EDR Historical Cleaners database for listings including Dynasty Cleaners from 1997 to 2002 and Riverdale Cleaners from 2003 to 2014. As such, it appears that this site historically operated as a full-service dry cleaning establishment from at least 1997 through 2006, but is presently operating as a drop-off dry cleaning facility, which was confirmed during CBRE's site reconnaissance. According to the RCRA Non-Generator regulatory listing, several notices of violation were reported in connection with this dry cleaning operation, but were informal administrative violations. Although this site is not identified on any regulatory databases indicative of an adverse environmental condition such as a spill or release, given the close proximity to the Subject and length of time the drycleaner existed at this location, it represents a potential environmental concern to the Subject and a vapor encroachment condition cannot be ruled out.

1.2. Limitations and Exceptions

- The scope of work completed was designed solely to meet the needs of the Client. CBRE shall not be liable for any unattended usage of this report by another party.

- No subsurface investigation can wholly eliminate uncertainty regarding the presence of contamination on a property. This Assessment was designed to reduce, but not eliminate the potential for RECs at the Subject, within reasonable limits of time and cost. The ESA is not intended to be exhaustive or all inclusive and does not represent a guarantee of the identification of all possible environmental risk.

- Client is advised that if the ESA is obtained with the intent of qualifying the purchaser as an innocent landowner, contiguous property owner, or bona fide prospective purchaser under CERCLA, there will be continuing obligations of due care and responsiveness and additional legal requirements that likely apply to such status. CBRE accepts and undertakes no responsibility as to such requirements and advises that counsel be separately consulted with respect to such requirements.

1.3. Special Terms and Conditions

There are no special terms and conditions associated with this assignment.

1.4. User Reliance

This investigation was conducted on behalf of and for the exclusive use of the Client. This report, and the findings contained herein, shall not, in whole or part, be disseminated or conveyed to or used by any other party without the prior written consent of CBRE.

2.0 PROPERTY DESCRIPTION

Project Name:	Riverdale Avenue 432
Project Address:	432 Riverdale Avenue
City, State Zip Code:	Yonkers, New York 10705

3.0 SCOPE OF WORK

This Assessment was prepared in accordance with CBRE's Proposal for Limited Phase II Environmental Site Assessment, dated April 23, 2018. Specifically, this Assessment included the following activities:

- Notify New York's one-call system for underground utilities mark out;
- Advancement of two (2) sub-slab vapor borings; and,
- Collection of one (1) sub-slab vapor; two (2) indoor air, and one (1) ambient air samples for laboratory analysis.

4.0 SUBSURFACE INVESTIGATION

4.1. Utility Clearance

Prior to conducting any subsurface drilling, CBRE contacted New York's underground utility mark-out system.

4.2. Sub-slab Soil Vapor Borings and Indoor Air sampling

Sub-Slab Vapor Sampling

CBRE directed the advancement of two (2) sub-slab vapor borings; however, upon sample collection it was found that one laboratory supplied summa canister did not contain any negative pressure and therefore could not be used. As such, one (1) soil vapor sample was collected during this Assessment. Specifically, the sub-slab vapor boring, denoted as SS-1, was advanced in the southwestern portion of the Subject basement in the vicinity of the former neighboring dry cleaner. The soil vapor probe location is depicted on Sample Location Plan in Appendix A.

The sub-slab vapor probe was advanced by Enviroprobe Services, Inc. (Enviroprobe) using hand-held sampling equipment, to a depth of 6-inches beneath the concrete slab. A vapor probe was consisting of a vapor implant and rigid tubing was installed at the

sample location. Prior to sampling the tubing system was purged of ambient air with a low-flow pump. The sample was collected into laboratory supplied 1 liter summa canister equipped with a regulator and manometer to ensure the flow rate of 200 ml/min.

To serve as a quality assurance/quality control (QA/QC) device, a tracer gas was used to serve to verify the integrity of the soil vapor probe seal. Helium was used as the tracer gas. A portable monitoring device was used to analyze the integrity of the seal. After adjustments to prevent infiltration and prior to sampling, each location was proven to not show a significant presence of Helium.

Upon completion of sampling the vapor point was removed, the borehole was backfilled and the ground surface was repaired. The summa canister was shipped under proper chain of custody to Accutest/SGS Laboratories (Accutest) for analysis of VOCs in accordance with EPA method TO-15. However, CBRE instructed the laboratory to only report for the chlorinated solvents included in the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006 / revised May 2017) including carbon tetrachloride, 1,1-dichloroethene, cis-1,2-dichloroethene (DCE), trichloroethene (TCE), methylene chloride, tetrachloroethene (PCE), 1,1,1-trichloroethane, and vinyl chloride

Indoor Air Sampling

Prior to collecting the sub-slab soil vapor sampling, CBRE collected two (2) indoor air samples in the vicinity of the sub-slab soil vapor samples. The indoor air samples are denoted as IA-1 and IA-2, which correspond to the sub-slab vapor sample. In addition, CBRE collected on background ambient air sample, denoted AA from the rear courtyard of the Subject building. The summa canisters for indoor air sampling were placed away from areas of increased air movement like vents, fans, windows, or outside doors and at a height that would simulate the breathing space of the occupants of the specific room (at least three feet above the floor). The summa canister for background air sampling was placed outside the Subject's building. The specific sample locations are shown on the Sample Location Plan provided as Figure 1 in Appendix A.

The indoor and background air sample canisters will be equipped with manometers set to an 8 hours sample duration. Upon completion of sampling, the summa canisters were also sent to Accutest) for analysis of VOCs in accordance with EPA Method TO-15. However, CBRE instructed the laboratory to only report for the chlorinated solvents included in the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006 / revised May 2017) including carbon tetrachloride, 1,1-dichloroethene, cis-1,2 DCE, TCE, methylene chloride, PCE, 1,1,1-trichloroethane, and vinyl chloride.

4.3. Discussion of Analytical Results

As per, the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York updated May 2017, New York State does not currently have standards, criteria, or guidance values for concentrations of compounds in soil vapor. However, the NYSDOH uses decision matrices for TCE, DCE, 1,1-dichloroethene, carbon tetrachloride, PCE, 1,1,1-trichloroethane, methylene chloride, and vinyl chloride, which compare sub-

slab vapor concentrations to indoor air concentrations. For example, when indoor air concentrations exceed 1 $\mu g/m^3$ for TCE (Matrix A) and/or sub-slab levels for TCE are identified to exceed 6 $\mu g/m^3$, the NYSDOH Matrix Guideline requires mitigation. In addition, when indoor air concentrations of PCE are detected (Matrix B) and sub-slab levels for PCE exceed 1,000 $\mu g/m^3$, the NYSDOH Matrix Guideline requires mitigation. A summary of the indoor air and soil vapor analytical results compared to NYSDOH Matrix is attached as Table 1 in Appendix B. The laboratory report is attached in Appendix C.

Indoor air and Sub-Slab Soil Vapor

Sub-slab soil vapor analytical results identified two (2) chlorinated VOCs (CVOC) in the samples collected from the sub-slab vapor samples. Specifically, cis-1,2-DCE and PCE was detected in the sub-slab vapor sample collected from SS-1. Indoor air analytical results identified five (5) CVOCs in the samples collected. Specifically, carbon tetrachloride, cis,-1,2-DCE, TCE, methylene chloride, and PCE were identified in indoor air samples collected. The compounds identified in the NYSDOH decision matrix are carbon tetrachloride, cis-1,2-DCE, and TCE (Matrix A), and methylene chloride and PCE (Matrix B).

PCE was detected in the sub-slab vapor sample at a concentration of 204,000 $\mu g/m^3$ in SS-1. DCE was detected at a concentration of 4,040 $\mu g/m^3$ in SS-1. PCE was identified in the indoor air samples IA-1 and IA-2 at concentrations of 56 $\mu g/m^3$ in IA-1 and 4.3 $\mu g/m^3$ in IA-2; exceeding its NYSDOH mitigation criteria threshold in IA-1 and SS-1. DCE was detected at a concentration of 4.4 $\mu g/m^3$ in the sample collected from IA-1, exceeding its NYSDOH mitigation criteria. Finally, TCE and methylene chloride were detected in indoor air sample IA-1 at concentrations exceeding its NYSDOH mitigation criteria regardless of sub-slab concentrations.

Of note, the NYSDOH also maintains exposure fact sheets for PCE and TCE. They provide information on health effects in humans exposed to these two CVOCs in indoor air. The NYSDOH fact sheets exposure threshold value for PCE is 30 $\mu g/m^3$ and the exposure value for TCE is 2 $\mu g/m^3$. Analytical results identified PCE and TCE in the indoor air sample collected from IA-1 at concentrations exceeding their respective exposure thresholds.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The results of this Assessment are summarized below:

- One (1) sub-slab soil vapor sample, two (2) indoor air samples, and one (1) ambient air sample was collected for laboratory analysis.

- Sub-slab and indoor air vapor analytical results identified PCE and DCE at concentrations exceeding their respective NYSDOH Matrix guidelines requiring mitigation. In addition, TCE and methylene chloride was also identified in the indoor air samples collected requiring mitigation regardless of sub-slab concentrations.

- Based on the results of this Assessment, it appears that the former dry cleaner at 434 Riverdale Avenue has impacted the Subject property. PCE and DCE were detected in sub-slab vapor and indoor air samples greatly exceeding their respective NYSDOH Matrix criteria that would

require mitigation. In addition, TCE and methylene chloride was also identified in the indoor air samples collected requiring mitigation regardless of sub-slab concentrations. Finally, PCE and TCE were detected at concentrations exceeding their respective exposure thresholds in the indoor air sample collected from IA-1. As such, CBRE recommends that the vapors at the Subject be mitigated as required by the NYSDOH Matrix Guidelines. A vapor mitigation specialist should be retained to determine the effectiveness and design of a sub-slab depressurization criteria (SSDS) at the Subject property.

CBRE's conclusions and recommendations are based on the results this Assessment. This Assessment was intended solely to investigate RECs identified in the Phase I Report. It was not intended to satisfy the level of inquiry that may be necessary to support remedial solutions or determine migration pathways related to a release from the RECs.

APPENDIX A

Figures

Figure 1 - Sample Location Plan

Riverdale Avenue 432 432 Riverdale Avenue Yonkers, New York	CBRE	Project No:E80505746 Boundaries are approximate. Not to scale.

APPENDIX B

Tables

Table 1
Summary of Indoor Air and Soil Vapor Analytical Results
432 Riverdale Avenue
Yonkers, New York

Client Sample ID:		NYSDOH Indoor Air Matrix (May 2017) *	IA-1	IA-2	AA	NYSDOH Soil Vapor Matrix (May 2017) *	SS-1
Lab Sample ID:			JC65163-1	JC65163-2	JC65163-3		JC65163-4
Date Sampled:			4/27/2018	4/27/2018	4/27/2018		4/27/2018
Matrix:			Indoor Air Comp.	Indoor Air Comp.	Ambient Air Comp.		Soil Vapor Comp.
MS Volatiles (TO-15) - ug/m3							
Matrix A							
Carbon tetrachloride	ug/m3	0.2 < 1	**0.43 J**	**0.44 J**	**0.47 J**	< 6	ND (58)
cis-1,2-dichloroethene	ug/m3	0.2 < 1	**4.4**	ND (0.13)	ND (0.13)	< 6	**4,040**
Trichloroethylene	ug/m3	0.2 < 1	**4.9**	ND (0.064)	ND (0.064)	< 6	ND (52)
Matrix B							
Methylene chloride	ug/m3	< 10	**23**	**1.3**	**0.8**	< 100	ND (52)
Tetrachloroethylene	ug/m3	< 10	**56**	**4.3**	ND (0.11)	< 100	**204,000**
Results flagged as "Exceed" if any of the selected criteria exceeded (most stringent).					**Legend:**	Monitor	**Mitigate**
HITS ONLY. Only parameters detected in at least one sample are shown.							

CBRE

APPENDIX C

Analytical Report

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

CBRE

432 Riverdale Avenue, Yonkers, NY

E80405746

SGS Job Number: JC65163

Sampling Date: 04/27/18

Report to:

CBRE
55 West Red Oak Lane Suite 1
White Plains, NY 10604
Paul.Stellato@CBRE.com

ATTN: Paul Stellato

Total number of pages in report: 14

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Nancy Cole
Laboratory Director

Client Service contact: Victoria Pushkova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.

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SGS North America Inc.

Sample Summary

CBRE

Job No: JC65163

432 Riverdale Avenue, Yonkers, NY
Project No: E80405746

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC65163-1	04/27/18	08:05	PS	04/28/18	AIR	Indoor Air Comp.	IA-1
JC65163-2	04/27/18	08:00	PS	04/28/18	AIR	Indoor Air Comp.	IA-2
JC65163-3	04/27/18	08:05	PS	04/28/18	AIR	Ambient Air Comp.	AA
JC65163-4	04/27/18	09:05	PS	04/28/18	AIR	Soil Vapor Comp.	SS-1

Summary of Hits

Job Number: JC65163
Account: CBRE
Project: 432 Riverdale Avenue, Yonkers, NY
Collected: 04/27/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC65163-1	**IA-1**					
Carbon tetrachloride		0.068 J	0.20	0.020	ppbv	TO-15
cis-1,2-Dichloroethylene		1.1	0.20	0.034	ppbv	TO-15
Methylene chloride		6.7	0.20	0.033	ppbv	TO-15
Tetrachloroethylene		8.3	0.040	0.016	ppbv	TO-15
Trichloroethylene		0.92	0.040	0.012	ppbv	TO-15
Carbon tetrachloride		0.43 J	1.3	0.13	ug/m3	TO-15
cis-1,2-Dichloroethylene		4.4	0.79	0.13	ug/m3	TO-15
Methylene chloride		23	0.69	0.11	ug/m3	TO-15
Tetrachloroethylene		56	0.27	0.11	ug/m3	TO-15
Trichloroethylene		4.9	0.21	0.064	ug/m3	TO-15
JC65163-2	**IA-2**					
Carbon tetrachloride		0.070 J	0.20	0.020	ppbv	TO-15
Methylene chloride		0.36	0.20	0.033	ppbv	TO-15
Tetrachloroethylene		0.64	0.040	0.016	ppbv	TO-15
Carbon tetrachloride		0.44 J	1.3	0.13	ug/m3	TO-15
Methylene chloride		1.3	0.69	0.11	ug/m3	TO-15
Tetrachloroethylene		4.3	0.27	0.11	ug/m3	TO-15
JC65163-3	**AA**					
Carbon tetrachloride		0.074 J	0.20	0.020	ppbv	TO-15
Methylene chloride		0.23	0.20	0.033	ppbv	TO-15
Carbon tetrachloride		0.47 J	1.3	0.13	ug/m3	TO-15
Methylene chloride		0.80	0.69	0.11	ug/m3	TO-15
JC65163-4	**SS-1**					
cis-1,2-Dichloroethylene		1020	92	15	ppbv	TO-15
Tetrachloroethylene		30100	37	15	ppbv	TO-15
Trichloroethylene		914	18	5.4	ppbv	TO-15
cis-1,2-Dichloroethylene		4040	360	59	ug/m3	TO-15
Tetrachloroethylene		204000	250	100	ug/m3	TO-15
Trichloroethylene		4910	97	29	ug/m3	TO-15

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: IA-1
Lab Sample ID: JC65163-1
Matrix: AIR - Indoor Air Comp. Summa ID: M028
Method: TO-15
Project: 432 Riverdale Avenue, Yonkers, NY

Date Sampled: 04/27/18
Date Received: 04/28/18
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W05970.D	1	04/30/18 21:33	PC	n/a	n/a	V6W198
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

Air Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
56-23-5	153.8	Carbon tetrachloride	0.068	0.20	0.020	ppbv	J	0.43	1.3	0.13	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.033	ppbv		ND	0.79	0.13	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	1.1	0.20	0.034	ppbv		4.4	0.79	0.13	ug/m3
75-09-2	84.94	Methylene chloride	6.7	0.20	0.033	ppbv		23	0.69	0.11	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.017	ppbv		ND	1.1	0.093	ug/m3
127-18-4	165.8	Tetrachloroethylene	8.3	0.040	0.016	ppbv		56	0.27	0.11	ug/m3
79-01-6	131.4	Trichloroethylene	0.92	0.040	0.012	ppbv		4.9	0.21	0.064	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.038	ppbv		ND	0.51	0.097	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IA-2
Lab Sample ID: JC65163-2
Matrix: AIR - Indoor Air Comp. Summa ID: A442
Method: TO-15
Project: 432 Riverdale Avenue, Yonkers, NY

Date Sampled: 04/27/18
Date Received: 04/28/18
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W05971.D	1	04/30/18 22:29	PC	n/a	n/a	V6W198
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

Air Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
56-23-5	153.8	Carbon tetrachloride	0.070	0.20	0.020	ppbv	J	0.44	1.3	0.13	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.033	ppbv		ND	0.79	0.13	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.034	ppbv		ND	0.79	0.13	ug/m3
75-09-2	84.94	Methylene chloride	0.36	0.20	0.033	ppbv		1.3	0.69	0.11	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.017	ppbv		ND	1.1	0.093	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.64	0.040	0.016	ppbv		4.3	0.27	0.11	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.012	ppbv		ND	0.21	0.064	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.038	ppbv		ND	0.51	0.097	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AA
Lab Sample ID: JC65163-3
Matrix: AIR - Ambient Air Comp. Summa ID: A751
Method: TO-15
Project: 432 Riverdale Avenue, Yonkers, NY

Date Sampled: 04/27/18
Date Received: 04/28/18
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W05972.D	1	04/30/18 23:25	PC	n/a	n/a	V6W198
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

Air Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
56-23-5	153.8	Carbon tetrachloride	0.074	0.20	0.020	ppbv	J	0.47	1.3	0.13	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.033	ppbv		ND	0.79	0.13	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.034	ppbv		ND	0.79	0.13	ug/m3
75-09-2	84.94	Methylene chloride	0.23	0.20	0.033	ppbv		0.80	0.69	0.11	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.017	ppbv		ND	1.1	0.093	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.040	0.016	ppbv		ND	0.27	0.11	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.012	ppbv		ND	0.21	0.064	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.038	ppbv		ND	0.51	0.097	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	102%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SS-1
Lab Sample ID: JC65163-4
Matrix: AIR - Soil Vapor Comp. Summa ID: A505,A562
Method: TO-15
Project: 432 Riverdale Avenue, Yonkers, NY

Date Sampled: 04/27/18
Date Received: 04/28/18
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W05973.D	230	05/01/18 00:18	PC	n/a	n/a	V6W198
Run #2	6W05986.D	230	05/01/18 14:35	PC	n/a	n/a	V6W199

	Initial Volume
Run #1	200 ml
Run #2	100 ml

Air Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
56-23-5	153.8	Carbon tetrachloride	ND	92	9.2	ppbv		ND	580	58	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	92	15	ppbv		ND	360	59	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	1020	92	15	ppbv		4040	360	59	ug/m3
75-09-2	84.94	Methylene chloride	ND	92	15	ppbv		ND	320	52	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	92	7.9	ppbv		ND	500	43	ug/m3
127-18-4	165.8	Tetrachloroethylene	30100 [a]	37	15	ppbv		204000 [a]	250	100	ug/m3
79-01-6	131.4	Trichloroethylene	914	18	5.4	ppbv		4910	97	29	ug/m3
75-01-4	62.5	Vinyl chloride	ND	92	17	ppbv		ND	240	43	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%	95%	65-128%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Summa Canister and Flow Controller Log

AIR

SGS ACCUTEST

AIR CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking # 435767451417 | Bottle Order Control # | PAGE 1 OF 1
Lab Quote # | Lab Job # JC65163

Client / Reporting Information

Company Name: CBRE
Address: 55 W Red oak Ln
City: White Plains State: NY Zip: 10604
Project Contact: Paul.Stellato@CBRE.com E-mail:
Phone #: (914) 694-9600 Fax #:
Sampler(s) Name(s): Paul Stellato

Project Information

Project Name: 432 Riverdale Avenue
Street: "
City: Yonkers State: NY 10705
Project #: E804057.46
Client Purchase Order #:

Temperature (Fahrenheit)
Start: Maximum:
Stop: Minimum:

Atmospheric Pressure (inches of Hg)
Start: Maximum:
Stop: Minimum:

Other weather comment:

Requested Analysis: Voc, TO-15 *

Lab Sample #	Field ID / Point of Collection	Air Type: Indoor(I) Soil Vap(SV) Ambient(A)	Sampling Equipment Info: Canister Serial #	Canister Size 6L or 1L	Flow Controller Serial #	Start Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Stop Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Voc, TO-15 *
1	IA-1	I	M028	6L	MC149	4/26	14:30	30"	75°	PS	4/27	8:05	0"	75°	PS	X
2	IA-2	I	A442	6L	FC255	4/26	14:40	29"	68°	PS	4/27	8:00	0"	68°	PS	X
3	AA	A	A351	6L	MC109	4/26	14:35	30"	68°	PS	4/27	8:05	0"	68°	PS	X
	[illegible]		[illegible]			[illegible]					[illegible]					
4	SS-1 [illegible]	SV	A505	1L	FC446	4/27	9:00	29"	68°	PS	4/27	9:05	3"	68°	PS	X

INITIAL ASESSMENT CM/COR
LABEL VERIFICATION

Turnaround Time (Business days)
Standard - 15 Days
10 Day
5 Day
3 Day
2 Day (circled)
1 Day
Other
Approved By:
Date:

Data Deliverable Information
All NJDEP TO-15 is mandatory Full T1
Comm A
Comm B
Reduced T2
Full T1
Other:
DKQP reporting

Comments / Remarks
* PCE, TCE, Cis-1,2 DCE, Carbon Tetrachloride, 1,1-dichloroethene, methylene chloride, 1,1,1-trichloroethane and Vinyl chloride
*Canister #A559 was provided with no pressure, could not collect
Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Laboratory: 1	Date Time:	Received By: 1	Relinquished By: 2	Date Time:	Received By: 2
Relinquished by: 3	Date Time: 4/27/18	Received By: 3 FedEx	Relinquished By: 4	Date Time: 4/28/18 1010	Received By:
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #		

SGS

AIR SAMPLING EQUIPMENT RETURN FORM

CLIENT: CBRE

PROJECT: 432 Riverside AV

CONTROL#

JOB # JC65163

ADDITIONAL SUMMA CANISTERS	ADDITIONAL CONTROLLERS
5 A559	MC 20D

RELINQUISHED BY: 1	DATE & TIME: 4/25/18 1010	RECEIVED BY: 2	DATE & TIME:
RELINQUISHED BY: 3	DATE & TIME:	RECEIVED BY: 4	DATE & TIME:
CUSTODY SEAL #'S:		# OF BOXES OR PIECES IN DELIVERY	

NOTES:

SM086-03
Pub date: 3/12/18

JC65163: Chain of Custody
Page 2 of 3

SGS Sample Receipt Summary

Job Number: JC65163 **Client:** _____ **Project:** _____

Date / Time Received: 4/28/2018 10:10:00 AM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C:

Cooler Temps (Corrected) °C:

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☐		☐
2. Cooler temp verification:	N/A		
3. Cooler media:	N/A		
4. No. Coolers:	N/A		

Quality Control _Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 216017 pH 12+: 208717 Other: (Specify) _____ _____

Comments

SM089-03
Rev. Date 12/7/17

JC65163: Chain of Custody
Page 3 of 3

Summa Canister and Flow Controller Log

Job Number: JC65163
Account: IVINYWP CBRE
Project: 432 Riverdale Avenue, Yonkers, NY
Received: 04/28/18

SUMMA CANISTERS

Shipping							Receiving					
Summa ID	L	Vac " Hg	Date Out	By	SCC Batch	SCC FileID	Sample Number	Date In	By	Vac " Hg	Pres psig	Final psig	Dil Fact
M028	6	29.4	04/24/18	JT	CP9755	5W30635.D	JC65163-1	04/29/18	JR	.5			1
A442	6	29.4	04/24/18	JT	CP9755	5W30635.D	JC65163-2	04/29/18	JR	0			1
A751	6	29.4	04/24/18	JT	CP9755	5W30635.D	JC65163-3	04/29/18	JR		.2		1
A505	1	29.4	04/24/18	JT	CP9730	6W05670.D	JC65163-4	04/29/18	JR	2			1

FLOW CONTROLLERS / OTHER

Shipping					Receiving				
Flow Crtl ID	Date Out	By	cc/ min	Time hrs.	Date In	By	cc/ min	Flow RPD	Equipment Type
FC255	04/24/18	JT	9.6	8	04/30/18	JT	10	4.1	Flow Controller
FC646	04/24/18	JT	150	.083	04/30/18	JT	152	1.3	Flow Controller
MC109	04/24/18	JT	9.6	8	04/30/18	JT	9.9	3.1	Flow Controller
MC149	04/24/18	JT	9.6	8	04/30/18	JT	9.9	3.1	Flow Controller
MC200	04/24/18	JT	150	.083	04/30/18	JT	147	2	Flow Controller

SGS Bottle Order(s):
VP-042418-148

Prep Date	Room Temp(F)	Bar Pres "Hg
04/24/18	70	29.92

TENEN ENVIRONMENTAL

121 West 27th Street, Suite 702
New York, NY 10001
(646) 606-2332

--DRAFT – FOR DISCUSSION PURPOSES ONLY--

MEMORANDUM

DATE: March 21, 2019

TO: Kristen Wilson / Blanchard & Wilson, LLP

FROM: Mary Manto / Tenen Environmental, LLC

SUBJECT: Summary of Environmental Review
434 Riverdale Avenue (Block 0132, portion of parcel 17.18)
Yonkers, New York

DRAFT

Introduction

Tenen Environmental LLC (Tenen) reviewed historical and regulatory information pertaining to environmental conditions at the above property (the Site). A May 2018 limited investigation identified Site operations as a potential source of chlorinated solvents in soil vapor at 432 Riverdale Avenue, the north adjoining property. This memorandum summarizes the historical information pertaining to the Site and the contiguous properties owned by the Site owner (436-442 Riverdale Avenue and 97-99 St. Andrew's Place) and discusses other potential sources of the environmental impacts at 432 Riverdale Avenue.

The following information was reviewed:

Limited Phase II Environmental Site Assessment, 432 Riverdale Avenue, Yonkers, New York 10705. CBRE Assessment & Consulting Services, May 4, 2018.

The EDR City Directory Image Report, 434 Riverdale Avenue, Yonkers, NY 10705. Environmental Data Resources, February 15, 2019

The EDR Radius Map with GeoCheck, 434 Riverdale Avenue, Yonkers, NY 10705. Environmental Data Resources, February 13, 2019

Certified Sanborn Map Report, 434 Riverdale Avenue, Yonkers, NY 10705. Environmental Data Resources, February 13, 2019

Historical Information

CBRE May 2018 Phase II Report. In April 2018, CBRE conducted environmental investigations at 432 Riverdale Avenue, located directly north of the Site. The initial Transaction Screen Analysis (TSA) identified historical dry cleaning operations at the Site as a Recognized Environmental Condition (REC). A subsequent limited Phase II Investigation was conducted at 432 Riverdale Avenue to assess the presence of chlorinated solvents in soil vapor, indoor air and ambient air. One sub-slab soil vapor sample, two indoor air samples and one ambient sample (from the rear yard of the building) were collected. Two soil vapor points were installed but

the second sample was not collected due to a faulty summa canister. Samples were analyzed for TO-15 volatile organic contaminants (VOCs), with reporting limited to chlorinated solvents. The results were compared to the New York State Air Guidance Values (AGVs) and the decision matrices contained in the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (New York State Department of Health, October 2006, updated May 2017). Tetrachloroethylene (PCE), a common dry cleaning solvent, was detected in sub slab soil vapor in sample SS-1, located directly north of the Site, at 204,000 micrograms per cubic meter (ug/m3). Cis-1,2 dichloroethane (DCE) was also detected at this location. Based on the NYSDOH decision matrices, the concentrations detected in sub slab soil vapor and indoor air are within the range where mitigation is recommended. Concentrations of PCE (56 mg/m3) and trichloroethylene (TCE, 4.9 ug/m3) in the indoor air sample co-located with sample SS-1 were also above their respective Air Guidance Values (AGVs) of 30 ug/m3 and 2 ug/mg3.

Historical Maps and City Directories

Tenen reviewed Sanborn fire Insurance maps and city directories obtained from Environmental Data Resources, Inc. (EDR) on February 13 and 15, 2019. Information obtained from these sources is summarized below.

Site. The earliest Sanborn maps (1898-1917) show the Site as vacant. By 1942, the Site had been developed, and maps dated 1951 through 2004 (the date of the most recent map) depict a one-story commercial building with no specific uses identified. City directory listings document use of the Site for dry cleaning in 2000 (Dynasty Cleaners) and in 2005 and 2014 (Riverdale Cleaners).

Adjoining Properties. The adjoining properties are shown as vacant through 1917. Properties to the north, south, and east were developed by 1942, and the 1951-2004 maps depict mixed residential and commercial uses on the north adjoining lot, commercial use on the south and southeast adjoining properties, and residential use on the east adjoining property. By 1971, the west adjoining property was developed with a one-story commercial building, labeled as a Community Center and Police Department Command Center on maps dated 1989-2004. Listings for the south adjacent property, 436-442 Riverdale Avenue, indicate occupancy by restaurants, markets, a nail salon, a pharmacy, and liquor store. The available city directory listings for the adjoining/surrounding properties indicate long-term residential and commercial use, the latter including barbershops, groceries, restaurants, nail salons, community centers, police department, and a laundry (not listed as a dry cleaner). A 1977 listing for Gale Chemical Products was identified in association with the southeast adjoining property (97 St Andrews Place). It is unknown if this listing refers to chemical manufacturing or administrative operations. Other commercial listings for that location include a laundry, and Gel-Off Inc., the latter likely associated with a nail salon.

Surrounding Properties. In 1898, the surrounding properties were predominantly vacant with scattered residential development to the north and a hotel to the west. Further residential development is shown on the 1917 and 1942 maps, and the 1951 map shows commercial buildings fronting Riverdale Avenue. Dry cleaners were depicted on the northwest adjoining block at 433-437 Riverdale Avenue and 417 Riverdale Avenue, respectively (1957-1978) and to the south of the Site, at 460 and 462 Riverdale Avenue (1972-2014). Other non-residential uses shown include a contractor's yard and garage to the north (1917); auto sales (1951) and a filling station (1951-2004) at 420 Riverdale Avenue, north of the Site on the Site block; auto repair shops to the north (1951-2004) and northwest (1951-1978), and restaurants to the northwest (1971-1978) and south (1951-2004). While uses of individual lots may have changed, the nature of the surrounding area is depicted as relatively constant through 2004.

Summary

The May 2018 CBRE investigation report identifies chlorinated compounds, including PCE, a common dry cleaning solvent, in soil vapor and indoor air above regulatory levels at 432 Riverdale Avenue, the property directly north of the Site. The city directory listings document dry cleaning operations at the Site from 2000 through 2014. Historical sources also document residential, commercial and community use of adjoining properties. Surrounding area uses including dry cleaning, auto repair and filling stations, are shown in Figure 1. Based upon the Site's location and investigation data from nearby properties, regional groundwater flow is assumed to be west, toward the Hudson River. However, given the topography of the Site and nearby area, it appears that perched groundwater (which occurs above the bedrock and follows the bedrock contours), may flow to the north. Based on these assumptions, the majority of these surrounding uses appear to be located crossgradient or downgradient of the Site. However, the city directory listings identified dry cleaning operations at 462 Riverdale Avenue (1972-2014) and a laundry at 460 Riverdale Avenue (1992 and 2000), both located south, and presumably upgradient, of the Site.

Regulatory Records

Tenen obtained an updated database search using ASTM-standard radii. Many of the database listings pertain to locations that are downgradient/crossgradient, are a considerable distance from the Site, reference leaking tank and spills cases that have been closed, or are listings with no recorded releases and/or violations. All upgradient leaking tank and spill cases are closed.

Site. The Site address was listed on the RCRA NonGen, ICIS, US AIRS, MANIFEST, FINDS, ECHO, DRYCLEANERS and EDR Hist Cleaner databases. Pertinent information is summarized below.

- The RCRA NonGen listing (Riverdale Cleaners) indicates the property was a conditionally exempt small quantity generator in 1997 and 2001 of chromium, lead, tetrachloroethylene, trichloroethylene, and spent halogenated solvents. The Site is listed as and not a generator (verified) in 2006. No violations were found in connection to the RCRA NonGen listing. A MANIFEST listing (Dynasty Cleaners) references disposal of halogenated solvents in 1998.
- The DRYCLEANERS database identifies the Facility ID as 3-5518-00773 and lists the effective registration date as 9/24/2003.
- A listing for Dynasty Cleaners (434 Riverdale Ave) was identified on the EDR Hist Cleaner database. The record indicates the Site operated as a dry cleaner from 1997 through 2014. The business is listed as Dynasty Cleaners between 1997 and 2002, and Riverdale Cleaners from 2003 through 2014.

The database search indicated numerous listings of properties within the standard search radii on multiple regulatory databases. Many of these listings are located a significant distance from and/or downgradient of the Site. All upgradient leaking tank and all but one upgradient spill case have been closed. Multiple listings within 0.25 mile of the Site were identified on the DRYCLEANER and EDR Hist Cleaner databases and are discussed in below.

- Listings associated with 462 Riverdale Ave were identified on the DRYCLEANERS, MANIFEST, ICIS, US AIRS and RCRA NonGen databases as New French Dry Cleaners, and on the EDR Hist Cleaner database as One Hour French Cleaner. The record indicates this facility (Facility ID 3-5518-00780) was a conditionally exempt small quantity generator in 2006 and in 1988 disposed of spent halogenated solvents. No violations were found related to this listing. The EDR Hist Cleaner database indicates this location operated as a dry cleaning plant from at least 1973 through 2014. Alternative names associated with this business include Gmach Aron and R&L One Hour Cleaners Inc. This property is located approximately 0.07 mile upgradient of the Site.
- A listing for Cheng Laundry (460 Riverdale Ave), identified on the EDR Hist Cleaner database and located approximately 0.06 mile upgradient of the Site, indicates this location operated as a garment

pressing and cleaners' agents facility from 1988 through 2007. The business name was listed as Cheng(s) Laundry (1988-1999) and Easy Laundry (2000-2007).

- Red Cap Drive In Cleaners Inc (417 Riverdale Ave), listed on the EDR Hist Cleaner database, operated as a dry cleaning facility from 1969 through 1971. No further information was available. This listing is located approximately 0.05 mile downgradient of the Site.

Findings and Conclusions

A review of historical information indicates that the Site was vacant through at least 1917 and developed sometime prior to 1942. Historical maps dated 1951 through 2004 show the property developed with the existing one-story building. City directory listings document use of the Site for dry cleaning in 2000 and between 2005 and 2014. Use of the Site for dry cleaning was also documented in current regulatory and proprietary databases.

A May 2018 TSA (summarized in the 2018 Limited Phase II Investigation Report) prepared for the north adjacent lot, 432 Riverdale Avenue, identified use of the Site for dry cleaning as a REC. No additional on- or offsite RECs were identified by Tenen as part of the historical and regulatory records review.

A May 2018 Limited Phase II Investigation at 432 Riverdale Avenue identified chlorinated solvents associated with dry cleaning operations in soil vapor at the one sampled location and in indoor air at concentrations above New York State regulatory levels. A comparison of these levels with the NYSDOH Decision Matrices indicates that mitigation is recommended.

Historical dry cleaning operations at 462 Riverdale Avenue, south of the Site, are documented in the regulatory databases. Assuming a perched bedrock condition following local topography, this may be an upgradient location and a potential contributor to the contamination observed at 432 Riverdale Avenue. The remaining identified potential sources appear to be located downgradient or crossgradient of the Site and the north adjacent property.

Recommendations

Based on the available information, Tenen recommends a limited Phase II investigation to ascertain the distribution of chlorinated solvent impacts on the Site and other properties owned by the Site owner and to identify additional areas that may potentially be included should remediation be conducted under the New York State Brownfield Cleanup Program (BCP). Specifically, Tenen recommends the following sampling:

- Advance two soil vapor implants below the basement slab at the Site;
- Advance one soil vapor point within each of the commercial spaces located at 436-442 Riverdale Avenue and 97-99 St. Andrew's Place;
- Collect one co-located indoor air sample at each of the soil vapor sampling locations; this sample will be held pending analysis of the soil vapor samples; and,
- Install one soil boring to a maximum depth of four feet below the basement slab at the Site and collect one soil sample from the interval of highest suspected contamination or at 0-2 feet below slab. The information obtained will assist in confirming the depth to bedrock and better evaluate the level of effort and equipment necessary for soil and groundwater sampling.

Soil vapor and indoor air samples will be analyzed for volatile organic contaminants VOCs via USEPA method TO-15. The soil sample will be analyzed for VOCs and, if historic fill is observed, semi-volatile organic contaminants (SVOCs), Target Analyte List (TAL) metals, pesticides and polychlorinated biphenyls (PCBs).

FAY REALTY INC.
434-440 RIVERDALE AVENUE
YONKERS, NEW YORK 10705
NYSDEC P-SITE: 360197

SITE CHARACTERIZATION REPORT

SUBMITTED TO:

New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor,
Albany, NY 12233-7014

PREPARED FOR:

Fay Realty Inc.
85 Nassau Drive
Great Neck, New York 11021

PREPARED BY:

P.W. Grosser Consulting, Inc.
630 Johnson Avenue, Suite 7
Bohemia, New York 11716
Phone: 631-589-6353
Fax: 631-589-8705

Jennifer Lewis, PG, Vice President JenniferL@pwgrosser.com
Michael Gaul, Project Manager mgaul@pwgrosser.com

PWGC Project Number: FAY2101

AUGUST 2022

SITE CHARACTERIZATION REPORT
434-440 RIVERDALE AVE., YONKERS
NYSDEC P-SITE #360197

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P.W. GROSSER CONSULTING, INC.
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LONG ISLAND • MANHATTAN • SARATOGA SPRINGS • SYRACUSE • SHELTON

SITE CHARACTERIZATION REPORT
434-440 RIVERDALE AVE., YONKERS
NYSDEC P-SITE #360197

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ACRONYM	DEFINITION
ACO	Administrative Settlement
ASP	Analytical Services Protocol
ASTM	American Society for Testing and Materials
AWQS	Ambient Water Quality Standard
CAMP	Community Air Monitoring Program
C&D	Construction & Demolition debris
CBRE	CBRE, Inc.
CFR	Code of Federal Regulations
CVOC	Chlorinated Volatile Organic Compound
DCE	cis-1,2-Dichloroethene
DER	Department of Environmental Remediation
DUSR	Data Usability Summary Reports
ELAP	Environmental Laboratory Approval Program
EM	Electromagnetic
ESA	Environmental Site Assessment
ESI	Environmental Site Investigation
GPR	Ground Penetrating Radar
GQS	Groundwater Quality Standard
GV	Guidance Value
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCE	Tetrachloroethylene
PDR	Personal DataRAM
PID	Photo-ionization Detector
PWGC	P.W. Grosser Consulting, Inc.
PVC	Polyvinyl Chloride
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance / Quality Control
QEP	Qualified Environmental Professional
REC	Recognized Environmental Condition
SCO	Soil Cleanup Objective
SCR	Site Characterization Report
SCWP	Site Characterization Workplan
SDG	Sample Delivery Group

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ACRONYM	DEFINITION
SOP	Standard Operating Procedure
SSDS	Sub Slab Depressurization System
TCE	Trichloroethylene
TSA	Transaction Screen Analysis
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

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SITE CHARACTERIZATION REPORT
434-440 RIVERDALE AVE., YONKERS
NYSDEC P-SITE #360197

FIGURES

Figure 1	Vicinity Map
Figure 2	Site Plan with Sampling Locations

TABLES

Table 1	Soil Sample Analytical Data – Volatile Organic Compounds
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PWGC
CLIENT DRIVEN SOLUTIONS

CERTIFICATION

I, Jennifer Lewis, PG, certify that I am currently a NYS registered professional geologist as defined in 6 NYCRR Part 375 and that this Site Characterization 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).

I certify that all information and statements in this certification are true. I understand that a false statement made herein is punishable as Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

8/19/2022

Signature Date

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer or geologist in accordance with Section 7209(2), Article 145, New York State Education Law.

P.W. GROSSER CONSULTING, INC.
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1.0 INTRODUCTION

P.W. Grosser Consulting, Inc. (PWGC) has prepared the following Site Characterization Report (SCR) to outline procedures, scope of work, and analytical results intended to identify and delineate potentially impacted areas of concern at a former dry-cleaning site, formerly known as Riverdale Dry Cleaners ("Site") located at 434-440 Riverdale Ave., Yonkers, New York.

The Site Owner, Fay Realty Inc., has been compelled by the New York State Department of Environmental Conservation's (NYSDEC) Division of Environmental Remediation (DER), via an Administrative Consent Order and Administrative Settlement (ACO) executed on July 29, 2020, and filed as Index #CO3-20191223-299, to perform a site characterization investigation. The Site has been listed with a P-Listing #360197. A Site Characterization Workplan was submitted to NYSDEC by Eastern Environmental Solutions (Eastern) in August 2021 and subsequently approved on August 10, 2021. An addendum to the workplan was prepared by PWGC in January 2022 to limit the site characterization to the contaminants of concern, to delineate potential areas of concern within the property boundary, and evaluate whether off-site, up-gradient properties may be contributing to contaminants observed on-site. This SCR has been prepared to document and summarize that effort.

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2.0 SITE DESCRIPTION AND HISTORY

2.1 Site Description

The Site is located at 434 Riverdale Avenue, Yonkers, New York. The Site is located within the City of Yonkers and Westchester County. The Site is identified as Tax Map parcel number 1.-132-14.16. The Site is an irregularly shaped parcel located on the northeast corner of the intersection of Riverdale Avenue and St. Andrews Place. The Site is located in a mixed-use commercial and residential area. A Vicinity Map is included as **Figure 1**. A Site Plan is included as **Figure 2**.

The Site is currently improved with a commercial building housing several businesses. The northernmost commercial space, 434 Riverdale Avenue, was occupied by a dry cleaner from approximately 2000 through 2014. The space has remained unoccupied since that time; however, it has been rented to a business and used solely for storing used household appliances. The former dry-cleaning equipment was historically located toward the front of the space, nearest to Riverdale Avenue. There are no records or accounts of where the former dry-cleaning waste was disposed of.

Other addresses associated with the Site and the current occupants are listed below and shown on **Figure 2**.

434 Riverdale Avenue- Formerly a dry-cleaner, but currently a non-retail appliance storage space.
436 Riverdale Avenue- Lorena Mex Mini Market (supermarket)
438 Riverdale Avenue- Salon Fancy Spa, a nail salon
440 Riverdale Avenue- El Valle Restaurant
442 Riverdale Avenue- Food Center Deli
97-99 St Andrews Place- D&K Laundry (a laundromat)

The basement spaces beneath 434, 436, and 438 Riverdale Avenue are connected internally by doors and is accessible from the supermarket unit. The basements in 440 Riverdale Avenue, 442 Riverdale Avenue, and 97-99 St Andrews Place are only accessible from the ground floor and are not interconnected.

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The Site is bounded by a commercial and residential building to the north, St Andrews Place to the south, Riverdale Avenue to the west, and commercial and residential buildings to the east. The majority of the surrounding properties are zoned as mixed residential and commercial use.

2.2 Site History

According to an initial Site Characterization Work Plan prepared by Eastern, the Site was developed with the existing one-story building sometime prior to 1942. Historic uses of the Site include the following: dry cleaning operations, a laundromat, pharmacies, a 99-cent store, grocery stores, restaurants, offices, nail salons, a stationary store, a housewares shop, a peddler, and a cleaning service. The northern portion of the Site (434 Riverdale Avenue) operated as a dry cleaner for at least 14 years, from 2000-2014.

NYSDEC has designated the Site as a potential site (P-Site), indicating that the available information suggests the presence of hazardous waste at the Site and that a site characterization is needed. An Administrative Settlement (ACO) between Fay Realty and NYSDEC was executed in July 2020 and filed as Index # CO3-20191223-299. Requirements contained within the ACO included the preparation of a SCWP and payment of past and future costs incurred by NYSDEC in connection with the Site.

2.3 Regional Geology/Hydrogeology

The geologic setting of the region is well documented. The area is underlain by tightly folded, metamorphic rocks. Erosion of these formations has resulted in the formation of outcrops in the general area. The bedrock beneath the site is the Manhattan schist. The bedrock beneath the site is overlain by thin deposits of Pleistocene age glacial outwash deposits (sand and gravel). According to the United States Department of Agriculture Web Soil Survey, soils beneath the site consist of urban lands.

2.4 Site Geology/Hydrogeology

Based on this investigation at the Site, stratigraphy at the property, from the surface down, consists of fill material and sandy silt from grade to depths ranging from at least two to five feet below grade. The depth to groundwater beneath the Site ranges from approximately 8.5 feet to 13.22 feet below sidewalk grade across the Site. The depth to groundwater beneath the top of basement slab grade ranged from 0.5 feet to 5.22 feet. The differential in the depth to groundwater is believed to be primarily as a result of the varied site elevation.

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Groundwater beneath the Site appears to flow toward the west. The site elevation ranges between 88 and 92 feet as per Google Earth.

2.5 Current Site Use

The Site is currently occupied by a commercial building housing several businesses, including an unoccupied household appliance storage space (434 Riverdale Avenue), a grocery store (436 Riverdale Avenue), a nail salon (438 Riverdale Avenue), a restaurant (440 Riverdale Avenue), a delicatessen (442 Riverdale Avenue), and a laundromat (97-99 St. Andrews Place).

2.6 Future Site Use

The existing general Site use is not intended to change.

2.7 Previous Environmental Reports

No previous intrusive environmental studies have been conducted at the Site; however, a Limited Phase II Environmental Site Investigation (ESI) was performed by CBRE, Inc. (CBRE) at the north adjoining property (432 Riverdale Avenue) in May 2018. Subsequently, an environmental review memorandum of the 434 Riverdale Avenue portion of the Site was prepared by Tenen Environmental in March 2019. These reports are included in the SCWP, which is included as **Appendix A**.

2.7.1 May 2018 Limited Phase II Investigation by CBRE

In May 2018, CBRE conducted a Limited Phase II ESI on the north adjoining property (432 Riverdale Avenue). An initial Transaction Screen Analysis (TSA) identified historical dry-cleaning operations at the Site as a Recognized Environmental Condition (REC). A subsequent limited Phase II ESI was conducted at 432 Riverdale Avenue to assess the presence of chlorinated solvents in soil vapor, indoor air, and ambient air. One sub-slab soil vapor sample, two indoor air samples, and one outdoor ambient air sample (from the rear yard of the building) were collected and analyzed for volatile organic compounds (VOCs).

The results of the sample analysis showed tetrachloroethene (PCE), a common dry-cleaning solvent, and cis-1,2-dichloroethene (DCE), a breakdown product of PCE, were detected in the sub-slab soil vapor sample collected directly north of the Site at elevated concentrations. Based on the New York State Department of Health (NYSDOH) soil vapor decision matrices contained in the Final Guidance for Evaluating Soil Vapor Intrusion in the

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State of New York (NYSDOH, October 2006, updated May 2017), the concentrations of PCE and DCE detected in sub-slab soil vapor and indoor air are within the range where mitigation is recommended. Concentrations of PCE and trichloroethene (TCE), a breakdown product of PCE, were detected in the indoor air sample co-located with the soil vapor sample directly north of the Site at concentrations exceeding their respective NYSDOH Air Guidance Values. The limited Phase II ESI identified Site operations as the potential source of chlorinated solvents in soil vapor and indoor air at 432 Riverdale Avenue.

Based upon the findings of the CBRE investigation, an active sub-slab depressurization system (SSDS) was installed at 432 Riverdale Avenue to address the soil vapor intrusion of chlorinated volatile organic contaminants (CVOCs) into indoor air. A pilot study was conducted in November 2018 and the SSDS was installed in March 2019. PWGC did not have access to a full report documenting the system installation; however, PWGC was provided with a data table that included system influent results from March 2019, July 2019, October 2019, and January 2022. PCE in the March 2019 influent sample was 90,000 µg/m^3; the three subsequent results were 360 µg/m^3 or less. Similar dramatic decreases were observed in the TCE and DCE concentrations during the same time period.

2.7.2 March 2019 Environmental Review Memorandum by Tenen

An environmental review memorandum was prepared by Tenen in March 2019 for 434 Riverdale Avenue which summarized the historical information pertaining to the Site, specifically that it contained a drycleaning operating from at least 2000 to 2014, and discusses other potential sources of the environmental impacts observed at 432 Riverdale Avenue which included several other drycleaning operations in the vicinity of the Site.

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3.0 STANDARDS, CRITERIA, AND GUIDANCE (SCGS)

Based on previous investigations at the Site and neighboring property, the primary chemicals of potential concern (COPC) to be encountered at the Site are VOCs related to the historical usage of the Site as a dry-cleaning facility.

Applicable regulations at NYSDEC 6 NYCRR Part 375 provide soil cleanup objectives (SCOs) for Unrestricted Use, or restricted use based on the intended usage of the property. Restricted use SCOs include Commercial Use SCOs. The goal of the Site Characterization is to investigate the potential contamination related to the former dry-cleaning facility on a commercial property; therefore, soil sample results will be compared to both Unrestricted Use SCOs and Commercial Use SCOs.

Groundwater sample results will be compared to the NYSDEC Class GA Ambient Water Quality Standards (AWQS) as specified in the Technical Operation and Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards and Guidance Values.

Soil vapor and indoor air results will be compared to the applicable Soil Vapor/Indoor Air Decision Matrices specified in NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

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4.0 SITE CHARACTERIZATION INVESTIGATION

The primary objective of the work performed as part of this Site Characterization was to collect information and field data necessary to investigate and assess the potential onsite contamination. The Scope of Work for this Site Characterization to address the AOCs detailed above included the following tasks:

- Characterization of onsite soils
- Characterization of onsite and upgradient groundwater
- Characterization of onsite soil vapor

This Site Characterization was performed in accordance with Eastern's SCWP and PWGC's Addendum to the SCWP.

4.1 Community Air Monitoring Program (CAMP)

CAMP monitoring was initially performed using a handheld photoionization detector (PID) and a personal DataRAM (PDR) dust monitor prior to deployment of a CAMP monitoring station downwind of intrusive sitework performed on St Andrews Place during the installations of MW001 and MW002. Upwind and downwind data was compared to evaluate potential impact to air quality. Evidence of elevated VOCs and / or dust at concentrations greater than action levels attributed to Site activities was not identified**.**

4.2 Soil Lithology

In general, soil lithology beneath the Site was catalogued from grade to the point of the groundwater table, which varied from approximately 8.5 feet to 13.22 feet below sidewalk grade. The depth to groundwater beneath the top of basement slab grade ranged from 0.5 feet to 5.22 feet. The differential in the depth to groundwater is believed to be primarily as a result of the varied site elevation, which ranged approximately four feet across the site. Soils were field screened for the presence of VOCs using a photoionization detector (PID) and classified in accordance with the Unified Soil Classification System (USCS). Soils varied in composition from native soils consisting of grey-brown silts and fine sand, to fill materials comprised of silty fill with concrete and corroded metals with trace paper, plastic film, to incineration byproducts consisting of ash, slag, and coal fragments. It appeared that some areas had evidence of historic fill and soils encountered onsite were non-homogenous. Evidence of CVOC impact in the form of a PID response, visible staining, or a solvent odor was not identified. Soil boring logs are included as **Appendix B**.

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4.3 Soil Quality Evaluation

To further characterize subsurface conditions at the Site, seven soil borings were installed (SB001 through SB007). Soil boring locations are illustrated in **Figure 2**.

Soil borings were installed utilizing a hand auger and/or a jackhammer fitted with a direct-push rod to advance through tighter formations at depth. Soils were collected continuously from ground surface to the groundwater table, which ranged from approximately 8.5 feet to 13.22 feet below sidewalk grade. The depth to groundwater beneath the top of basement slab grade ranged from 0.5 feet to 5.22 feet. The differential in the depth to groundwater is believed to be primarily as a result of the varied site elevation, which ranged approximately four feet across the site. Non-dedicated sampling equipment was decontaminated using an Alconox cleansing solution and distilled water.

4.3.1 Sampling Protocol

One soil sample was collected from each boring location for laboratory analysis. The blind duplicate (DUP001) was collected from SB-002 (0-2'). Due to the lack of evidence of CVOC contamination, samples were collected from the 0 to 2' interval in each soil boring, which is located at or just above the water table.

Samples were collected in pre-cleaned, pre-preserved, laboratory-supplied glassware and stored in a cooler on ice for transport to the laboratory. Samples were submitted to York Analytical of Stratford, Connecticut (York), a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory (ELAP ID: 10854). Each of the collected soil samples were analyzed for:

- TCL VOCs by USEPA Method 8260

Soil samples were collected in Terra-core sampling devices to minimize VOC loss.

4.3.2 Analytical Results

Soil sample results are compared to the Unrestricted Use SCOs and Commercial Use SCOs specified in 6 NYCRR Part 375, Environmental Remediation Programs (December 2006). Analytical data are summarized in **Table 1**; laboratory reports are included as **Appendix C**.

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None of the sampling results were detected at or greater than their Unrestricted Use SCOs or Commercial Use SCOs; however, the compounds PCE (max 0.096 mg/kg), TCE (max 0.069 mg/kg), and/or DCE (max (0.19 mg/kg) were detected in three of the soil samples from SB-001, SB-002, and SB-007.

4.3.3 Discussion of Results

No significant evidence of VOC impact to soils was observed at the Site, with no analytes detected at concentrations that exceeded their Unrestricted Use SCOs or Commercial Use SCOs. The detectable concentrations of chlorinated solvents were identified in SB-001 and SB-002 which were both collected from the smear zone of the groundwater table and their detections could potentially be related to contaminants observed in the groundwater, discussed in Section 4.4.

4.4 Groundwater Quality Evaluation

To evaluate water quality upgradient, downgradient, and within the footprint of the property, a total of six monitoring wells were installed within the Site and in the vicinity of the Site, developed, and sampled. Copies of the monitoring well construction logs are included in **Appendix B.** The monitoring well locations are illustrated in **Figure 2**.

4.4.1 Well Installation

Six monitoring wells (MW001 through MW006) were installed during the Site characterization. A Geoprobe ® 7822DT utilizing direct push technology was used to install the two off-Site monitoring wells (MW001 and MW002) to an approximate depth of 18-20 ft below sidewalk grade. These two wells were comprised of 10-foot sections of 2-inch Schedule-40 PVC screens (0.010-inch slot) with a 2-inch Schedule-40 casing that extended to grade. The annulus around these screen sections was filled with a sand filter pack (FilPro #1), before a 2-foot section of wetted bentonite was applied to seal the annulus around the casing.

The remaining four wells were installed in the basements of the existing buildings and were installed using a hand auger to insert a 5-foot section of 1-inch screen Schedule-40 PVC screen into the groundwater interface, which was encountered between approximately 0.5 feet and 5.22-feet below basement grade. Due to tight formations and/or obstructions encountered during hand auger borings, a Bosch Jackhammer was used to facilitate advancement for the install of MW005 and MW006.

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Monitoring wells installed on the sidewalk and within active working areas were secured with a flush mount well casing. Monitoring well construction logs are included in **Appendix B**.

4.4.2 Well Development

Following installation, monitoring wells were developed by over-pumping to restore the hydraulic properties of the aquifer. Well development continued until the turbidity of the groundwater was less than or equal to 50 Nephelometric Turbidity Units (NTUs), and pH, temperature, and conductivity measurements were stabilized. Stabilization was considered achieved when three consecutive readings of these field parameters are within five percent of each other over a period of 15 minutes. Due to the low yield of the installed 1-inch monitoring wells (MW003 through MW006), these wells were not able to be stabilized, but were purged dry. Purged wastewater was containerized and disposed at an authorized wastewater disposal facility. The Well Development Logs are attached as **Appendix D**. Disposal receipts for purged water are included as **Appendix E**.

4.4.3 Sampling Protocol

Groundwater samples were collected using a peristaltic pump fitted with dedicated low-density polyethylene (LDPE) and Polytetrafluoroethylene (Masterflex) tubing in accordance with United States Environmental Protection Agency (USEPA) Low Stress (Low Flow) Purging and Sampling Procedure for The Collection of Groundwater Samples from Monitoring Wells (September 2017). A Horiba U-52 multi-parameter water quality meter outfitted with a flow through cell was utilized to monitor field parameters (turbidity, pH, temperature, oxidation reduction potential (ORP), dissolved oxygen (DO) and conductivity) at 5-minute intervals. Upon stabilization of field parameters (when feasible) groundwater samples were collected. Stabilization was not able to be achieved at MW002 due to the pump malfunctioning at the end of the day. Due to the low yield of the installed 1" monitoring wells (MW003 through MW006), these wells were not able to be stabilized, but were purged beyond the point of reasonable recharge and were purged dry. Once these wells did recharge, samples were collected which are considered representative of the surrounding aquifer. The blind duplicate sample was collected from MW001. Samples were collected and handled in accordance with Section 3.2- Groundwater Sampling and 3.4 Quality Assurance/ Quality Control (QA/QC) of the approved Site Characterization Work Plan. Non-dedicated sampling equipment was decontaminated using an Alconox solution and distilled water rinse. Disposal receipts for purged water are included as **Appendix E**. Well Sampling Logs are included as **Appendix F.**

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Samples were collected in pre-cleaned, pre-preserved, laboratory supplied glassware and stored in a cooler on ice for transport to the laboratory. Samples were submitted to York. Each groundwater sample was analyzed for the following:

- TCL VOCs by USEPA Method 8260

4.4.4 Analytical Results

Groundwater sample results are compared to the Class GA Ambient Water Quality Standards (AWQS) specified in Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values on Groundwater Effluent Limitations, June 1998. Analytical data are summarized in **Table 2**; laboratory reports are included as **Appendix C**.

PCE, TCE, or DCE were detected in five of the six samples; however, only well MW003 contained exceedances of AWQSs for these three compounds. PCE was detected at 32.1 µg/L, TCE was detected at 7.38 µg/L, and DCE was detected at a concentration of 48.6 µg/L. MW003 is located in the northwestern portion of the Site, within the area identified as the former Riverdale Dry-Cleaners.

4.4.5 Discussion of Results

Groundwater exceedances at the Site were confined the area of MW003, located within the footprint of the former Riverdale Dry-Cleaners. Of the two off-Site wells that were installed at a location potentially up-gradient of the Site, it does not appear that they are contributing to contamination observed beneath the Site or the adjoining property at 432 Riverdale Avenue.

4.5 Soil Vapor Evaluation

To evaluate potential soil vapor impact beneath the Site, five soil vapor samples were collected, with at least one from each of the four compartmentalized basement spaces. Each of the installed sub-slab vapor points was accompanied by a corresponding indoor ambient air sample, placed in the vicinity of each sub-slab vapor point. An outdoor ambient air sample was placed at an upwind location from the Site. Based upon observed site conditions on the sampling date, the outdoor ambient air sample was placed on the adjacent sidewalk northwest of the Site. Each of the indoor and outdoor ambient air samples were placed in the breathing zone (three to five feet above the local grade). Soil vapor sampling points are illustrated in **Figure 2**.

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4.5.1 Sampling Protocol

Sampling points were installed using a hammer drill rig to penetrate the slab to a depth of approximately two inches beneath the slab. Sampling points were fitted with inert polyethylene tubing to grade. Each sampling point was sealed above the sampling zone with bentonite slurry to grade to prevent outdoor air infiltration.

A tracer gas (helium) was utilized to test the seal around the soil vapor points. Once the integrity of the seal was confirmed at each location, three volumes of air were extracted from each point prior to sample collection with a flow rate of less than 0.2 liters/minute. Soil vapor samples were collected using batch certified 6-liter SUMMA vacuum canisters fitted with 24-hour flow control regulators with a flow rate of less than 0.2 liters/minute. Methodologies used for soil vapor assessment conform to the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006. A copy of the Soil Vapor Sampling Logs is included as **Appendix G.**

Samples were submitted to York. Each soil vapor was analyzed for VOCs by USEPA Method TO-15, while each corresponding indoor ambient sample and the outdoor ambient samples was analyzed for VOCs by USEPA Method TO-15 Secondary Ion Mass Spectrometry (SIMS).

4.5.2 Analytical Results

Soil vapor sample results are presented as data summaries as NYSDEC and NYSDOH have not established standards or guidance values for soil vapor impact. Analytical data are summarized in **Table 3**; laboratory reports are included as **Appendix C.**

Each sample contained multiple detections of VOCs. PCE, TCE, and/or DCE was detected in each sub-slab vapor sample and indoor air sample, but they were not detected in the outdoor air sample. The highest sub-slab vapor concentration of PCE (58.8 µg/m^3) was detected in the sample collected beneath the western side of the laundromat (south side of the property); the sample closest to the former drycleaner contained a PCE concentration of 3.58 µg/m^3. The highest indoor air concentration of PCE was detected in the western side of the laundromat at a concentration of 5.93 µg/m^3; the sample closest to the former drycleaner contained a PCE concentration of 1.35 µg/m^3.

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4.5.3 Discussion of Results

There are eight CVOCs included in the NYSDOH soil decision matrices. Five of these eight CVOCs for which NYSDOH has established soil vapor/indoor air decision matrices were detected in at least one soil vapor sample at the Site. The detected compounds were carbon tetrachloride, DCE, methylene chloride, PCE, and TCE. When comparing concentrations of these compounds with their respective matrices, a decision of no further action was yielded at each of the sample locations for each compound. The sample that contained the greatest concentration of total CVOCs (only those listed in Soil Vapor Matrices) was determined to be SV-Laundromat West, with a total concentration of 59.153 ($\mu g/m^3$), while the lowest observed concentration in a sub-slab sample was SV-Supermarket at 5.67 ($\mu g/m^3$). The lack of significant CVOC impact in soil vapor samples from these samples was generally consistent with the lack of CVOC impact to soil and groundwater in these areas. Soil vapor matrices are included as **Appendix H**.

Although higher sub-slab vapor concentrations of PCE were previously observed at the adjacent property prior to the installation of the SSDS, it appears that the volume of soil vapor contamination was relatively small and the operation of the system has removed the bulk of residual soil vapor contamination beneath the Site.

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5.0 QUALITY ASSURANCE/QUALITY CONTROL

The overall quality assurance quality control (QA/QC) objective for the field investigation was to develop and implement procedures that provide data of known and documented quality. QA/QC characteristics for data include precision, accuracy, representativeness, completeness, and comparability. The purpose of the QA/QC activities developed for this Site were to verify the integrity of the work performed and data collected is of the appropriate type and quality for the intended use.

5.1 QA/QC Samples

To assess the adequacy of the sample collection and decontamination procedures performed in the field, QA/QC samples were collected and analyzed throughout the field sampling program. In general, QA/QC samples confirmed that the procedures performed in the field were consistent and acceptable. Reported detections in the trip and field blanks did not impact the interpretation of sample data. QA/QC samples included trip blanks, equipment blanks, blind duplicates, matrix spike (MS), and matrix spike duplicates (MSD). Types and frequencies of field QA/QC samples are listed in the table below:

Type	Frequency
Trip Blank	One per day (when VOC samples collected)
Equipment Blank	One per matrix sampled
Blind Duplicate	One per 20 samples per matrix
Matrix Spike/Matrix Spike Duplicate (MS/MSD)	One per 20 samples per matrix

During the project two blind duplicates (one soil and one water), two MS/MSD (one soil and one water), three trip blanks, and three equipment blanks were prepared and submitted for analysis in accordance with the project QAPP.

Targeted analytes were detected at concentrations greater than the laboratory MDL in all three trip blanks and one equipment blank. These analytes include:

- Low-level concentrations of acetone, 2-butanone, and 2-hexanone in all three trip blanks included in coolers. One detection of acetone was accompanied by a B qualifier, which indicates that the analyte was found in the analysis batch blank.

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- Four analytes were detected in the equipment blank collected on March 9, 2022. The equipment blank was collected from a decontaminated hand auger used to collected soil samples. Analytes detected in the equipment blank include 1,1,2-Trichloroethane, 1,2-Dichloroethane, 4-methyl-2-pentanone, and tert-Butyl alcohol. Two of these analytes, 1,1,2-Trichloroethane and 1,2-Dichloroethane, were detected at concentrations that exceed their respective AWQS standards
    - 1,1,2-Trichloroethane (New York TOGS 1.1.1 Ambient Water Quality Standards 1 ug/L)
        - 03/09/2022- 2.160 ug/L
    - 1,2-Dichloroethane (New York TOGS 1.1.1 Ambient Water Quality Standards 0.6 ug/L)
        - 03/09/2022- 0.770 ug/L

The compounds detected in the field and equipment blanks were not detected in soil or groundwater samples collected from the Site at concentrations exceeding their applicable standards. This indicates that sample collection procedures and/or ambient conditions are unlikely to have significantly impacted environmental samples collected from the Site during implementation of the SC.

5.2 Data Usability and Validation

In accordance with the approved SCWP, independent third-party data validation was performed by Laboratory Data Consultants, Inc., of Carlsbad, California. Full data validation was performed on 5% of the data generated or one sample per Sample Delivery Group (SDG), whichever was greater. Remaining data received a summary validation as detailed in the Data Usability Summary Reports (DUSRs).

All data were deemed acceptable by the data validator, with minor qualifications due to calibration outliers (secondary source verification exceedances and continuing calibration exceedances), trip blank and equipment blank contamination (which resulted in the modification of one 2-Butanone detection [SB-002 0-2'] and one Acetone detection [SB-007 0-2'] each to non-detects at the reporting limit), or laboratory quality control outliers (low LCS/LCSD percent recoveries).

A copy of the DUSR is included as **Appendix I**.

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6.0 Deviations from Approved Site Characterization Workplan and SCWP Addendum

Deviations from the approved SCWP were as follows:

- MW002 was moved further east along the sidewalk on the south side of St Andrews Place due to repeated drilling refusal.
- MW001 was installed in the sidewalk on north side of St. Andrews Place as opposed to the originally proposed location on west side of Gray Place to avoid overhead obstructions and to allow for drilling accessibility.
- The proposed monitoring well in the onsite courtyard was not installed due to the lack of Geoprobe access. Hand tools were utilized in an attempt to install the well; however, multiple refusals were encountered and it could not be installed.
- An additional soil vapor point and corresponding indoor ambient air sample was placed in the basement of the El Valle Restaurant, which does not connect to adjacent basement spaces.
- A monitoring well survey was not performed due to the complexity of the basement configurations where the majority of the monitoring wells were located.

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7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Site Characterization Investigation

Eastern Environmental prepared an SCWP dated August 2021, that was approved by NYSDEC on August 10, 2021. An SCWP Addendum, dated January 2022, was prepared by PWGC and approved by NYSDEC on January 31, 2021. The purpose of the Site Characterization was intended to evaluate the potential presence of CVOC contamination within the property boundary. The implementation of the SCWP resulted in the following findings:

- The static water table elevation at the Site ranges from six inches below the basement slab at MW003 and MW004 (estimated 8.5-9.5 ft below sidewalk grade), to approximately 5 feet below the basement slab at MW005 (estimated 13-13.5 ft below sidewalk grade). The differential in the depth to groundwater is believed to be primarily as a result of the varied site elevation, which ranged approximately four feet across the site.
- A total of six soil borings were installed at the Site. Borings were installed to depths of up to 9 feet below grade, with a soil sample collected from the 0-2' interval in each boring. The soil lithology consisted of historic fill overlaying sandy silt. Evidence of CVOC contamination in the form of PID response, visible staining, or a solvent odor was not identified
    - There were no exceedances of Unrestricted Use SCOs in the soil samples; however, PCE, TCE, and/or DCE were detected at low concentrations in three of the samples beneath the building.
- A total of six monitoring wells were installed and six groundwater samples were collected. Two of the monitoring wells were off-site to evaluate the potential for off-site contamination migrating beneath the Site.
    - One monitoring well contained exceedances of AWQSs and is located in the vicinity of the former drycleaner unit. PCE was detected at 32.1 µg/L, TCE was detected at 7.38 µg/L, and DCE was detected at 48.6 µg/L. The presence of TCE and DCE indicates that the PCE is naturally degrading. PCE, TCE, and/or DCE were detected in five of the six wells; however, they included estimated concentrations that did not exceed AWQSs. The off-site wells did not indicate the presence of an off-site source in these areas.
- Five soil vapor samples were collected throughout the footprint of the Site. VOC concentrations detected in soil vapor and indoor air were not observed at concentrations that included a recommendation of additional monitoring or remediation via the NYSDOH soil vapor matrices.

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- The soil vapor sample SV-Supermarket was the sample located in the immediate area of the former Riverdale Dry-Cleaners and the monitoring well that contained exceedances of PCE, TCE, and DCE. The PCE concentration in this soil vapor sample was 3.58 µg/m^3. The highest sub-slab soil vapor sample was collected beneath the laundromat which contained a PCE concentration of 58.8 µg/m^3 and is the furthest sample from the active SSDS located at 432 Riverdale Ave.

7.2 Recommendations

Based upon the observations and data generated during the SC, PWGC believes that the contaminants of concern have been sufficiently investigated and have determined that no further action is necessary. Analytical data collected during the site investigation indicates that limited contamination was identified and that the operation of the adjacent, active SSDS likely removed the bulk of the sub-slab vapor contamination while contamination in the one monitoring well closest to the source area is naturally attenuating.

Prior to converting the active SSDS at the neighboring property to a passive system, PWGC does recommend that a soil vapor intrusion study, to be approved by NYSDEC, be performed to confirm that a rebound effect has not occurred.

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8.0 REFERENCES

- NYSDEC, Division of Environmental Restoration, 6 NYCRR Part 375 Subpart 6, Remedial Program Soil Cleanup Objectives, December 14, 2006.
- NYSDEC, Division of Environmental Remediation, December 2002, DER-10, Technical Guidance for Site Investigation and Remediation, May 3, 2010.
- NYSDEC, Division of Water, June 1998, Addendum April 2000, Technical and Operational Guidance Series 1:1:1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998.
- NYSDOH, Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006
    - Updates to Soil Vapor/ Indoor Air Decision Matrices, May 2017
- USEPA, Standard Operating Procedure SOP 2042, Soil Gas Sampling.
- USEPA, Low Stress (Low Flow) Purging and Sampling Procedure for The Collection of Groundwater Samples from Monitoring Wells, September 2017.
- Eastern Environmental, Riverdale Dry Cleaners Site Characterization Workplan, August 2021
- PWGC, Site Characterization Work Plan- Addendum 001, January 2022

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FIGURES

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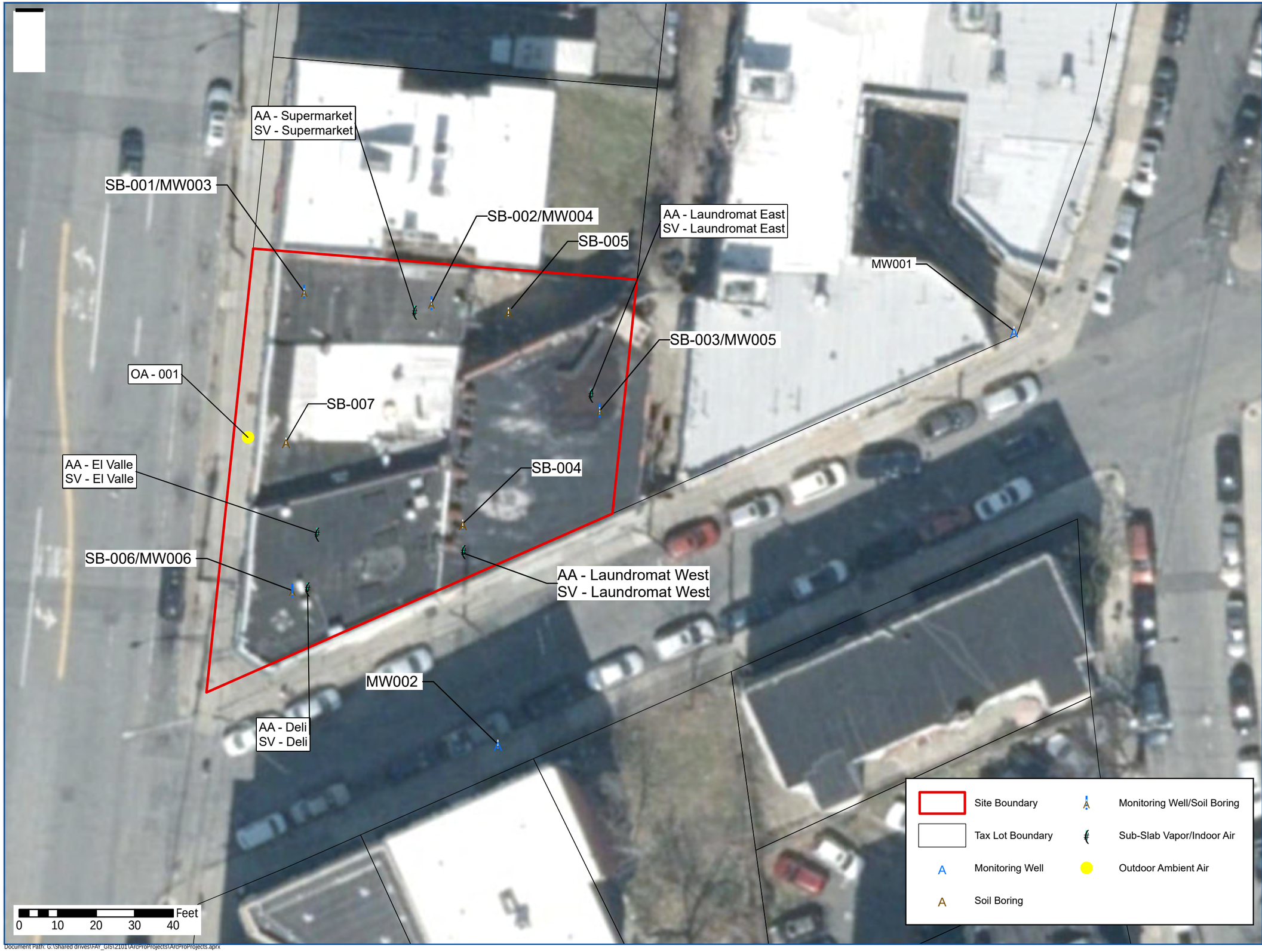
SITE LOCATION

434 Riverdale Ave
Yonkers, NY

0 ¼ ½ ¾ 1 Miles

Project:	FAY2101
Date:	4/4/2022
Designed by:	MG
Drawn by:	OA
Approved by:	MG
Figure No:	1

Document Path: G:\Shared drives\FAY_GIS\2101\ArcProProjects\ArcProProjects.aprx



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Project:	FAY2101	Designed by:	MG
Date:	5/11/2022	Drawn by:	OA
Scale:	AS SHOWN	Approved by:	MG

Site Plan with Sampling Locations

434 Riverdale Ave
Yonkers, NY

FIGURE NO:

2

TABLES

Table 1
Soil Analytical Results - VOCs
434 Riverdale Ave, Yonkers, NY

Sample ID: / Soil Depth: / Sampling Date: / Lab Sample ID:	CAS Number	NYSDEC Unrestricted Use SCOs[1]	NYSDEC Restricted Use SCOs-Commercial[2]	SB-001 0-2' 3/9/2022 22C0596-06	SB-002 0-2' 3/9/2022 22C0596-05	SB-003 0-2' 3/9/2022 1 22C0596-03	SB-004 0-2' 3/9/2022 22C0596-02	SB-005 0-2' 3/10/2022 22C0658-01	SB-006 0-2' 3/10/2022 22C0658-02	SB-007 0-2' 3/10/2022 22C0658-03	DUP001* 0-2' 3/9/202 22C0596-04
Volatile Organic Compounds by EPA 8260 - (mg/kg)											
1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,1,1-Trichloroethane	71-55-6	0.68	500	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,1,2,2-Tetrachloroethane	79-34-5	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,1,2-Trichloroethane	79-00-5	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,1-Dichloroethane	75-34-3	0.27	240	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,1-Dichloroethylene	75-35-4	0.33	500	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,1-Dichloropropylene	563-58-6	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,2,3-Trichlorobenzene	87-61-6	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,2,3-Trichloropropane	96-18-4	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,2,4-Trichlorobenzene	120-82-1	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,2,4-Trimethylbenzene	95-63-6	3.6	190	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,2-Dibromo-3-chloropropane	96-12-8	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,2-Dibromoethane	106-93-4	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,2-Dichlorobenzene	95-50-1	1.1	500	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,2-Dichloroethane	107-06-2	0.02	30	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,2-Dichloropropane	78-87-5	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,3,5-Trimethylbenzene	108-67-8	8.4	190	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,3-Dichlorobenzene	541-73-1	2.4	280	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,3-Dichloropropane	142-28-9	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,4-Dichlorobenzene	106-46-7	1.8	130	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
1,4-Dioxane	123-91-1	0.1	130	0.062 U	0.048 U	0.048 U	0.046 U	0.062 U	0.048 U	0.096 U	0.05 U
2,2-Dichloropropane	594-20-7	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
2-Butanone	78-93-3	0.12	500	0.0031 U	0.0048 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.017
2-Chlorotoluene	95-49-8	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
2-Hexanone	591-78-6	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
4-Chlorotoluene	106-43-4	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
4-Methyl-2-pentanone	108-10-1	NS	NS	0.0031 U	0.0024 UJ	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 UJ	0.0025 U
Acetone	67-64-1	0.05	500	0.0079 J	0.024 J	0.0048 U	0.0046 U	0.0062 U	0.0048 U	0.016 UJ	0.038
Acrolein	107-02-8	NS	NS	0.0062 U	0.0048 UJ	0.0048 U	0.0046 U	0.0062 U	0.0048 U	0.0096 UJ	0.005 U
Acrylonitrile	107-13-1	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Benzene	71-43-2	0.06	44	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Bromobenzene	108-86-1	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Bromochloromethane	74-97-5	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Bromodichloromethane	75-27-4	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Bromoform	75-25-2	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Bromomethane	74-83-9	NS	NS	0.0031 U	0.0024 UJ	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 UJ	0.0025 U
Carbon disulfide	75-15-0	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0031 J
Carbon tetrachloride	56-23-5	0.76	22	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Chlorobenzene	108-90-7	1.1	500	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Chloroethane	75-00-3	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Chloroform	67-66-3	0.37	350	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Chloromethane	74-87-3	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
cis-1,2-Dichloroethylene	156-59-2	0.25	500	0.19	0.031	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.08
cis-1,3-Dichloropropylene	10061-01-5	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Cyclohexane	110-82-7	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Dibromochloromethane	124-48-1	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Dibromomethane	74-95-3	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Dichlorodifluoromethane	75-71-8	NS	NS	0.0031 U	0.0024 UJ	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 UJ	0.0025 U
Ethyl Benzene	100-41-4	1	390	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Hexachlorobutadiene	87-68-3	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Isopropylbenzene	98-82-8	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Methyl acetate	79-20-9	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Methyl tert-butyl ether (MTBE)	1634-04-4	0.93	500	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Methylcyclohexane	108-87-2	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Methylene chloride	75-09-2	0.05	500	0.0062 U	0.0081 J	0.0053 J	0.011	0.0062 U	0.0069 J	0.0096 U	0.005 U
n-Butylbenzene	104-51-8	12	500	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
n-Propylbenzene	103-65-1	3.9	500	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
o-Xylene	95-47-6	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
p- & m- Xylenes	179601-23-1	NS	NS	0.0062 U	0.0048 U	0.0048 U	0.0046 U	0.0062 U	0.0048 U	0.0096 U	0.005 U
p-Isopropyltoluene	99-87-6	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
sec-Butylbenzene	135-98-8	11	500	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Styrene	100-42-5	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
tert-Butyl alcohol (TBA)	75-65-0	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
tert-Butylbenzene	98-06-6	5.9	500	0.0031 U	0.0024 UJ	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 UJ	0.0025 U
Tetrachloroethylene	127-18-4	1.3	150	0.096	0.0024 UJ	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.014 J	0.0052
Toluene	108-88-3	0.7	500	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
trans-1,2-Dichloroethylene	156-60-5	0.19	500	0.0031 U	0.055	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.12
trans-1,3-Dichloropropylene	10061-02-6	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Trichloroethylene	79-01-6	0.47	200	0.069	0.0037 J	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0081
Trichlorofluoromethane	75-69-4	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Vinyl acetate	108-05-4	NS	NS	0.0031 U	0.0024 U	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 U	0.0025 U
Vinyl Chloride	75-01-4	0.02	13	0.0031 U	0.0024 UJ	0.0024 U	0.0023 U	0.0031 U	0.0024 U	0.0048 UJ	0.0025 U
Xylenes, Total	1330-20-7	0.26	500	0.0093 U	0.0072 U	0.0072 U	0.007 U	0.0094 U	0.0072 U	0.014 U	0.0075 U

Notes:

(1) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use of Soil Cleanup Objective Table 375-6.8a 12/06

(2) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Restricted Use of Soil Cleanup Objective Table 375-6.8b 12/06

Highlighted text denotes concentrations exceeding the applicable NYSDEC Unrestricted Use SCO

Highlighted text denotes concentrations exceeding the applicable NYSDEC Commercial Use SCO

DUP001* is a duplicate sample of SB-002 (0-2')

U- Analyte not detected at or above the level indicated

J- Denotes an estimated concentration

NS - No Standard

Table 2
Groundwater Analytical Results - VOCs
434 Riverdale Ave, Yonkers, NY

Sample ID: / Sampling Date: / Lab Sample ID:	CAS Number	NYS AWQS & GVs June 1998[1]	MW001 3/21/2022 22C1250-03		MW002 3/21/2022 22C1250-04		MW003 3/21/2022 22C1250-05		MW004 3/21/2022 22C1250-06		MW005 3/21/2022 22C1250-07		MW006 3/21/2022 22C1250-08		DUP* 3/21/2022 22C1250-09	
Volatile Organic Compounds by EPA 8260 - (mg/kg)																
1,1,1,2-Tetrachloroethane	630-20-6	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,1,1-Trichloroethane	71-55-6	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,1,2,2-Tetrachloroethane	79-34-5	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,1,2-Trichloroethane	79-00-5	1	0.2	U	0.2	UJ	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,1-Dichloroethane	75-34-3	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,1-Dichloroethylene	75-35-4	5	0.2	U	0.2	UJ	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,2,3-Trichlorobenzene	87-61-6	5	0.2	U	0.2	UJ	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,2,3-Trichloropropane	96-18-4	0.04	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,2,4-Trichlorobenzene	120-82-1	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,2,4-Trimethylbenzene	95-63-6	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,2-Dibromo-3-chloropropane	96-12-8	0.04	0.2	U	0.2	UJ	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,2-Dibromoethane	106-93-4	0.0006	0.2	U	0.2	UJ	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,2-Dichlorobenzene	95-50-1	3	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,2-Dichloroethane	107-06-2	0.6	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,2-Dichloropropane	78-87-5	1	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,3,5-Trimethylbenzene	108-67-8	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,3-Dichlorobenzene	541-73-1	3	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,3-Dichloropropane	142-28-9	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,4-Dichlorobenzene	106-46-7	3	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,4-Dioxane	123-91-1	NS	40	U	40	U	40	U	40	U	40	U	40	U	40	U
2-Butanone	78-93-3	50	0.3	J	0.2	U	0.2	U	0.28	J	1.38		0.2	U	1.16	
2-Hexanone	591-78-6	50	0.2	U	0.2	U	0.2	U	0.2	U	0.2	J	0.2	U	0.2	U
4-Methyl-2-pentanone	108-10-1	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Acetone	67-64-1	50	1	U	1	UJ	1	U	1	U	1.58	J	1.3	J	1.56	J
Acrolein	107-02-8	NS	0.2	U	0.2	UJ	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Acrylonitrile	107-13-1	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Benzene	71-43-2	1	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Bromochloromethane	74-97-5	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Bromodichloromethane	75-27-4	50	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Bromoform	75-25-2	50	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Bromomethane	74-83-9	5	0.2	U	0.2	UJ	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Carbon disulfide	75-15-0	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Carbon tetrachloride	56-23-5	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Chlorobenzene	108-90-7	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Chloroethane	75-00-3	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Chloroform	67-66-3	7	0.43	J	0.49	J	1.04		1.1		0.66		0.32	J	0.38	J
Chloromethane	74-87-3	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
cis-1,2-Dichloroethylene	156-59-2	5	0.2	U	0.2	U	48.6		3.94		0.2	U	0.2	U	0.2	U
cis-1,3-Dichloropropylene	10061-01-5	0.4	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Cyclohexane	110-82-7	NS	0.2	U	0.2	UJ	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Dibromochloromethane	124-48-1	50	0.2	U	0.2	UJ	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Dibromomethane	74-95-3	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Dichlorodifluoromethane	75-71-8	5	0.2	U	0.2	UJ	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Ethyl Benzene	100-41-4	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Hexachlorobutadiene	87-68-3	0.5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Isopropylbenzene	98-82-8	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Methyl acetate	79-20-9	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Methyl tert-butyl ether (MTBE)	1634-04-4	10	0.2	U	0.2	UJ	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Methylcyclohexane	108-87-2	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Methylene chloride	75-09-2	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Naphthalene	91-20-3	10	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U
n-Butylbenzene	104-51-8	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
n-Propylbenzene	103-65-1	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
o-Xylene	95-47-6	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
p- & m- Xylenes	179601-23-1	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Diethylbenzene	105-05-5	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
p-Ethyltoluene	622-96-8	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
p-Isopropyltoluene	99-87-6	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
sec-Butylbenzene	135-98-8	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Styrene	100-42-5	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
tert-Butyl alcohol (TBA)	75-65-0	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	98-06-6	5	0.2	U	0.2	UJ	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Tetrachloroethylene	127-18-4	5	0.2	U	0.26	J	32.1		0.67		0.4	J	0.51		0.2	U
Toluene	108-88-3	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
trans-1,2-Dichloroethylene	156-60-5	5	0.2	U	0.2	U	0.57		3.22		0.2	U	0.2	U	0.2	U
trans-1,3-Dichloropropylene	10061-02-6	0.4	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Trichloroethylene	79-01-6	5	0.2	U	0.2	U	7.38		1.03		0.2	U	0.2	U	0.2	U
Trichlorofluoromethane	75-69-4	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Vinyl Chloride	75-01-4	2	0.2	U	0.2	UJ	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Xylenes, Total	1330-20-7	5	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U

Notes:

(1) NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) - Ambient Water Quality Standards and Guidance Values - GA Water Class, Type H(WS) - Source of Drinking Water (Groundwater)

Highlighted text denotes concentrations exceeding the applicable NYSDEC Ambient Water Quality Standard

DUP* is a duplicate sample of

J- Analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U- Analyte not detected at or above the level indicated

NS - No Standard

Table 3
Soil Vapor Analytical Data - VOCs
434 Riverdale Ave, Yonkers, NY

Client Sample ID:	CAS Number	SV-El Valle		AA-El Valle		SV-Deli		AA-Deli		SV-Super-market		AA-Super-market		SV-Laundro-mat East		AA-Laundro-mat East		SV-Laundro-mat West		AA-Laundro-mat West		OA-001	
Sampling Date:		3/22/2022		3/22/2022		3/22/2022		3/22/2022		3/22/2022		3/22/2022		3/22/2022		3/22/2022		3/22/2022		3/22/2022		3/22/2022	
Lab Sample ID:		22C1239-01		22C1239-02		22C1239-03		22C1239-04		22C1239-05		22C1239-06		22C1239-07		22C1239-08		22C1239-09		22C1239-10		22C1239-11	
Volatile Organic Compounds by EPA Method TO-15 - (µg/m³)																							
1,1,1,2-Tetrachloroethane	630-20-6	4.89	U	0.603	U	1.1	U	0.581	U	2.59	U	0.571	U	1.3	U	0.62	U	0.963	U	0.697	U	0.607	U
1,1,1-Trichloroethane	71-55-6	3.89	U	0.48	U	0.874	U	0.462	U	2.06	U	0.454	U	1.04	U	0.493	U	0.766	U	0.554	U	0.482	U
1,1,2,2-Tetrachloroethane	79-34-5	4.89	U	0.603	U	1.1	U	0.581	U	2.59	U	0.571	U	1.3	U	0.62	U	0.963	U	0.697	U	0.607	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	5.46	U	0.674	D	1.23	U	0.648	U	2.89	U	0.638	U	1.45	U	0.692	U	1.08	U	0.779	U	0.677	D
1,1,2-Trichloroethane	79-00-5	3.89	U	0.48	U	0.874	U	0.462	U	2.06	U	0.454	U	1.04	U	0.493	U	0.766	U	0.554	U	0.482	U
1,1-Dichloroethane	75-34-3	2.89	U	0.356	U	0.648	U	0.342	U	1.53	U	0.337	U	0.768	U	0.365	U	0.568	U	0.411	U	0.358	U
1,1-Dichloroethylene	75-35-4	1.41	U	0.174	U	0.318	U	0.168	U	0.748	U	0.165	U	0.376	U	0.179	U	0.278	U	0.201	U	0.175	U
1,2,4-Trichlorobenzene	120-82-1	5.29	U	0.652	U	1.19	U	0.628	U	2.8	U	0.617	U	1.41	U	0.67	U	1.04	U	0.754	U	0.656	U
1,2,4-Trimethylbenzene	95-63-6	3.5	U	1.08	D	8.35	D	0.416	U	1.85	U	0.532	D	9.33	D	0.932	D	12	D	0.649	D	0.435	U
1,2-Dibromoethane	106-93-4	5.48	U	0.675	U	1.23	U	0.65	U	2.9	U	0.639	U	1.46	U	0.694	U	1.08	U	0.781	U	0.679	U
1,2-Dichlorobenzene	95-50-1	4.29	U	0.528	U	0.963	U	0.509	U	2.27	U	0.5	U	1.14	U	0.543	U	0.844	U	0.611	U	0.531	U
1,2-Dichloroethane	107-06-2	2.88	U	0.356	U	0.648	U	0.342	U	1.53	U	0.337	U	0.768	U	0.365	U	0.568	U	0.411	U	0.358	U
1,2-Dichloropropane	78-87-5	3.29	U	0.406	U	0.74	U	0.391	U	1.74	U	0.384	U	0.877	U	0.417	U	0.648	U	0.469	U	0.408	U
1,2-Dichlorotetrafluoroethane	76-14-2	4.98	U	0.614	U	1.12	U	0.591	U	2.64	U	0.582	U	1.33	U	0.631	U	0.981	U	0.71	U	0.618	U
1,3,5-Trimethylbenzene	108-67-8	3.5	U	0.432	U	2.21	D	0.416	U	1.85	U	0.409	U	2.33	D	0.444	U	3.24	D	0.499	U	0.435	U
1,3-Butadiene	106-99-0	4.73	U	0.583	U	1.06	U	0.561	U	2.5	U	0.552	U	1.26	U	0.599	U	0.931	U	0.674	U	0.587	U
1,3-Dichlorobenzene	541-73-1	4.29	U	0.528	U	0.963	U	0.509	U	2.27	U	0.5	U	1.14	U	0.543	U	0.844	U	0.611	U	0.531	U
1,3-Dichloropropane	142-28-9	3.29	U	0.406	U	0.74	U	0.391	U	1.74	U	0.384	U	0.877	U	0.417	U	0.648	U	0.47	U	0.409	U
1,4-Dichlorobenzene	106-46-7	4.29	U	4.6	D	0.963	U	0.509	U	2.27	U	0.5	U	1.14	U	4.29	D	0.844	U	9.83	D	0.531	U
1,4-Dioxane	123-91-1	5.14	U	0.633	U	1.15	U	0.61	U	2.72	U	0.6	U	1.37	U	0.651	U	1.01	U	0.732	U	0.637	U
2-Butanone	78-93-3	7.36	D	3.11	D	9.17	D	0.923	D	12.1	D	4.76	D	10.8	D	0.639	D	15	D	0.869	D	1.15	D
2-Hexanone	591-78-6	5.84	U	0.72	U	9.25	JD	0.693	U	3.09	U	0.682	U	6.29	D	0.74	U	7.93	D	0.832	U	0.724	U
3-Chloropropene	107-05-1	11.2	U	1.38	U	2.51	U	1.32	U	5.9	U	1.3	U	2.97	U	1.41	U	2.2	U	1.59	U	1.38	U
4-Methyl-2-pentanone	108-10-1	2.92	U	0.36	U	0.656	U	0.347	U	1.54	U	0.341	U	0.777	U	0.37	U	0.575	U	0.416	U	0.362	U
Acetone	67-64-1	1100	D	712	D	5.63	JD	39.7	D	18.5	D	6.11	D	5.27	D	19.9	D	11.7	D	74.4	D	14.8	D
Acrylonitrile	107-13-1	5.72	D	0.191	U	0.348	U	0.184	U	0.818	U	0.181	U	0.412	U	0.196	U	0.304	U	0.22	U	0.192	U
Benzene	71-43-2	2.28	U	0.702	D	0.512	D	0.514	D	1.2	U	0.319	D	0.606	U	0.462	D	0.807	D	0.519	D	0.593	D
Benzyl chloride	100-44-7	3.69	U	0.455	U	0.829	U	0.438	U	1.95	U	0.431	U	0.982	U	0.467	U	0.726	U	0.526	U	0.458	U
Bromodichloromethane	75-27-4	14.8	D	0.589	U	1.07	U	0.567	U	2.53	U	0.557	U	1.27	U	0.605	U	0.94	U	0.681	U	0.592	U
Bromoform	75-25-2	7.37	U	0.909	U	1.66	U	0.874	U	3.9	U	0.86	U	1.96	U	0.933	U	1.45	U	1.05	U	0.914	U
Bromomethane	74-83-9	2.77	U	0.341	U	0.622	U	0.329	U	1.46	U	0.323	U	0.737	U	0.351	U	0.545	U	0.395	U	0.343	U
Carbon disulfide	75-15-0	2.22	U	0.274	U	0.748	D	0.263	U	1.29	D	0.492	D	2.6	D	0.281	U	1.66	D	0.316	U	0.275	U
Carbon tetrachloride	56-23-5	1.12	U	0.387	D	0.403	D	0.426	D	0.593	U	0.209	D	0.298	U	0.454	D	0.353	D	0.447	D	0.445	D
Chlorobenzene	108-90-7	3.28	U	0.405	U	0.738	U	0.389	U	1.74	U	0.383	U	0.873	U	0.416	U	0.646	U	0.468	U	0.407	U
Chloroethane	75-00-3	1.88	U	0.232	U	0.423	U	0.223	U	0.995	U	0.22	U	0.501	U	0.238	U	0.37	U	0.268	U	0.233	U
Chloroform	67-66-3	467	D	5.92	D	0.782	U	0.537	D	1.84	U	0.406	U	4.91	D	5.56	D	5.62	D	6.99	D	0.432	U
Chloromethane	74-87-3	1.47	U	1.47	D	0.331	UJ	1.36	D	1.56	D	0.172	U	0.392	U	1.68	D	0.29	U	1.68	D	2.03	D
cis-1,2-Dichloroethylene	156-59-2	1.41	U	0.418	D	0.318	U	0.168	U	2.09	D	0.693	D	0.376	U	0.179	U	0.278	U	0.201	U	0.175	U
cis-1,3-Dichloropropylene	10061-01-5	3.24	U	0.399	U	0.727	U	0.384	U	1.71	U	0.378	U	0.861	U	0.41	U	0.637	U	0.461	U	0.401	U
Cyclohexane	110-82-7	2.45	U	0.303	U	0.551	U	0.291	U	1.3	U	0.286	U	0.653	U	0.311	U	0.58	D	0.35	U	0.304	U
Dibromochloromethane	124-48-1	6.07	U	0.749	U	1.36	U	0.721	U	3.21	U	0.709	U	1.62	U	0.769	U	1.2	U	0.865	U	0.753	U
Dichlorodifluoromethane	75-71-8	3.52	U	2.48	D	2.77	D	2.76	D	2.98	D	1.32	D	2.91	D	2.55	D	3.47	D	2.61	D	3.63	D
Ethyl acetate	141-78-6	5.14	U	10.2	D	1.15	U	1.43	D	2.72	U	0.6	U	1.37	U	0.651	U	1.01	U	0.952	D	0.637	U
Ethyl Benzene	100-41-4	3.1	U	0.496	D	2.43	D	0.367	U	1.64	U	0.361	U	1.98	D	0.392	U	3.05	D	0.441	U	0.384	U
Hexachlorobutadiene	87-68-3	7.6	U	0.937	U	1.71	U	0.902	U	4.02	U	0.887	U	2.02	U	0.963	U	1.5	U	1.08	U	0.943	U
Isopropanol	67-63-0	2120	D	32	D	4.84	JD	2.37	D	3.24	D	0.675	D	12.8	D	53.6	D	6.1	D	41.8	D	0.739	D
Methyl Methacrylate	80-62-6	2.92	U	5.11	D	0.656	U	0.346	U	1.54	U	0.341	U	0.777	U	0.37	U	0.574	U	1.08	D	0.362	U
Methyl tert-butyl ether (MTBE)	1634-04-4	2.57	U	0.317	U	0.578	U	0.305	U	1.36	U	0.3	U	0.684	U	0.326	U	0.506	U	0.366	U	0.319	U
Methylene chloride	75-09-2	4.95	U	2.29	D	3.17	D	0.852	D	2.62	U	0.751	D	1.52	D	2.29	D	0.975	U	4.69	D	2.09	D
n-Heptane	142-82-5	2.92	U	0.396	D	2.36	D	0.347	U	1.55	U	0.341	U	1.4	D	0.37	U	3.05	D	0.416	U	0.362	U
n-Hexane	110-54-3	2.51	U	0.341	D	0.734	D	0.298	U	1.33	U	0.293	U	0.669	U	0.318	U	1.09	D	0.358	U	0.312	U
o-Xylene	95-47-6	3.09	U	0.649	D	4.87	D	0.367	U	1.64	U	0.361	U	4.37	D	0.392	U	6.03	D	0.441	U	0.384	U
p- & m- Xylenes	179601-23-1	6.19	U	2.25	D	10.7	D	0.735	U	3.27	U	0.722	U	9.39	D	0.784	U	13.3	D	0.882	U	0.768	U
p-Ethyltoluene	622-96-8	3.5	U	0.907	D	7.56	D	0.416	U	1.85	U	0.491	D	7.83	D	0.577	D	10.4	D	0.499	D	0.435	U
Propylene	115-07-1	1.23	U	0.151	U	0.276	U	0.146	U	0.649	U	0.143	U	0.326	U	0.155	U	0.241	U	0.175	U	0.715	D
Styrene	100-42-5	3.04	U	0.374	U	0.682	U	0.36	U	1.61	U	0.354	U	0.808	U	0.385	U	0.598	U	0.433	U	0.377	U
Tetrachloroethylene	127-18-4	27.6	D	1.37	D	9.45	D	0.574	U	3.58	D	1.35	D	6.18	D	0.612	D	58.8	D	5.93	D	0.6	U
Tetrahydrofuran	109-99-9	4.2	U	1.19	D	0.945	U	0.499	U	3.34	D	1.37	D	1.12	U	0.533	U	0.828	U	0.599	U	0.521	U
Toluene	108-88-3	2.69	U	1.09	D	6.7	D	0.446	D	1.42	U	0.408	D	4.86	D	1.16	D	7.19	D	1.34	D	0.466	D
trans-1,2-Dichloroethylene	156-60-5	2.83	U	0.349	U	0.635	U	0.335	U	1.5	U	0.33	U	0.752	U	0.358	U	0.556	U	0.403	U	0.35	U
trans-1,3-Dichloropropylene	10061-02-6	3.24	U	0.399	U	0.727	U	0.384	U	1.71	U	0.378	U	0.861	U	0.41	U	0.637	U	0.461	U	0.401	U
Trichloroethylene	79-01-6	0.958	U	0.142	D	0.215	U	0.114	U	0.507	U	0.134	D	0.255	U	0.121	U	0.188	U	0.136	U	0.119	U
Trichlorofluoromethane (Freon 11)	75-69-4	4.01	U	1.48	D	1.62	D	2.76	D	2.12	U	0.608	D	1.6	D	1.42	D	1.66	D	1.54	D	1.59	D
Vinyl acetate	108-05-4	2.51	U	0.31	U	0.564	U	0.298	U	1.33	U	0.293	U	0.668	U	0.318	U	0.494	U	0.358	U	0.311	U
Vinyl bromide	593-60-2	3.12	U	0.384	U	0.701	U	0.37	U	1.65	U	0.364	U	0.83	U	0.395	U	0.614	U	0.444	U	0.387	U
Vinyl Chloride	75-01-4	0.911	U	0.112	U	0.205	U	0.108	U	0.482	U	0.106	U	0.242	U	0.115	U	0.179	U	0.13	U	0.113	U
Total CVOC		27.6		4.607		13.023		1.278		5.67		2.235		7.7		3.356		59.153		11.067		2.535	

Notes:

D- Result is from an analysis that required a dilution

U- Analyte not detected at or above the level indicated

Highlighted text denotes results identified at a detectable concentration.

Highlighted text denotes analytes that represent NYSDOH matrix compounds.

APPENDIX A
SITE CHARACTERIZATION WORK PLAN AND ADDENDUM

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January 20, 2021

Mr. R. Scott Deyette
New York State Department of Environmental Conservation
625 Broadway, 12th Floor
Albany, NY 12233-7014

RE: Site Characterization Work Plan – Revised Addendum 001
436-440 Riverdale Avenue (Tax Map/Parcel No.: 1.-132-12.16), Yonkers, New York
NYSDEC Site #360197

Dear Mr. Deyette,

P.W. Grosser Consulting, Inc. (PWGC) has prepared this letter, on behalf of Fay Realty Inc., to detail proposed changes to the scope of work presented in the previously approved August 2021 Site Characterization Work Plan (SCWP) prepared by Eastern Environmental.

Based upon the primary contaminants of concern affiliated with the site (chlorinated solvents) and previous discussions with the New York State Department of Environmental Conservation (NYSDEC), PWGC is proposing to reduce the analytical methods for all media to be sampled to volatile organic compounds (VOCs) only. This entails reducing soil sample analysis from Target Compound List (TCL) VOCs, TCL semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), metals and emerging contaminants including 1,4-dioxane and per-polyfluoroalkyl substances (PFAS) to TCL VOCs only, reducing groundwater sample analysis from TCL VOCs, TCL SVOCs, Pesticides, PCBs, total and dissolved metals, 1,4-dioxane, and PFAS to TCL VOCs only and keeping soil vapor / ambient air analysis as TO-15 VOCs only. QA/QC samples will be collected at a frequency in accordance with the Quality Assurance Project Plan (QAPP) in the NYSDEC-approved SCWP. However, the QA/QC samples will be analyzed for VOCs only.

Second, based upon PWGC's review of the SCWP, PWGC's research regarding other sites of concern in the surrounding area, a site visit by PWGC, and previous discussions with the NYSDEC, PWGC is proposing change the frequency and locations of the soil borings, groundwater monitoring wells, and sub-slab soil vapor / indoor air sampling points at the site. PWGC's proposed changes are to allow for more widespread soil and groundwater sampling coverage at the site and to allow for the assessment of potential offsite, up gradient sources of VOC contamination in groundwater. A new proposed sampling figure has been included as **Attachment 1**.

Third, PWGC is proposing the collection of 24-hour samples for the proposed sub-slab soil vapor, indoor air and outdoor air samples based upon the current usages and exposure scenarios present at the site.

Fourth, PWGC is proposing to change the soil boring sampling intervals. If contamination is observed, PWGC is proposing to collect one sample from the two-foot interval with the most significant evidence of contamination and one sample from the two-foot interval from grade to two feet below grade. If this

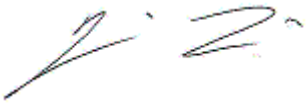
two-foot interval is the same, only one sample will be collected. If no contamination is detected, one sample will be collected from the two-foot interval from grade to two feet below grade.

Finally, it should be noted that the original Health and Safety Plan (HASP) that was previously submitted with the August 2021 SCWP will be followed, including the Special Requirements for CAMP monitoring.

Please call if you have any questions or would like to discuss the project further. I look forward to hearing from you.

Very truly yours,
P.W. Grosser Consulting

Michael Gaul
Project Manager



Jennifer Lewis, P.G.
Vice President

ATTACHMENT 1

Document Path: G:\Shared drives\FAY_GIS\2101\ArcProProjects\ArcProProjects.aprx

PWGC
CLIENT DRIVEN SOLUTIONS
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DRAWING PREPARED FOR:

REVISION	DATE	INITIAL	COMMENTS

DRAWING INFORMATION:

Project:	FAY2101	Designed by:	MG
Date:	12/9/2021	Drawn by:	OA
Scale:	AS SHOWN	Approved by:	MG

Proposed Site Characterization Sampling Plan

434 Riverdale Ave
Yonkers, NY

FIGURE NO:

1

Riverdale Dry Cleaners
Site Characterization Work Plan

436-440 Riverdale Avenue
Yonkers, New York
Tax Map/Parcel No.: 1.-132-12.16
NYSDEC Site #360197

Submitted to:
New York State Department of Environmental Conservation
21 S Putt Corners Road
New Paltz, NY 12561

Prepared for:
Fay Realty Inc.
85 Nassau Drive
Great Neck, NY 11021

Prepared by:
Eastern Environmental
258 Line Road
Manorville, NY 11949

August 2021

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Appendix A – Records Search Documents

Limited Phase II Environmental Site Assessment
CBRE, Inc., dated May 4, 2018
Summary of Environmental Review
Tenen Environmental, dated February 25, 2019

Appendix B – Health and Safety Plan

Appendix C – Quality Assurance Project Plan

CERTIFICATION

I, James R. Mulvey, certify that I am currently a Qualified Environmental Professional as defined in 6NYCRR Part 375 and that this Site Characterization Work Plan was prepared in accordance with all applicable statues and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

James R Mulvey

James R. Mulvey

8/4/21

Date

1.0 INTRODUCTION

On behalf of Fay Realty Inc. (the Respondent), Eastern Environmental Solutions (Eastern) has prepared this Site Characterization Work Plan (Work Plan) for the property located at 434-440 Riverdale Avenue (identified as Tax Map/Parcel No.: 1.-132-14.16) in Yonkers, Westchester County, New York (Site). The Site location and layout are shown in Figures 1 and 2.

The Work Plan has been developed to address the requirements of an Administrative Consent Order and Administrative Settlement (ACO) between the Respondent and the New York State Department of Environmental Conservation (NYSDEC) executed on July 29, 2020 and filed as Index #CO3-20191223-299. The Work Plan scope of work was prepared to assess whether historic operations at the Site have created a condition that threatens public health or the environment. This Work Plan has been prepared in accordance with the NYSDEC Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10, May 3, 2010).

1.1 Work Plan Organization

This Work Plan includes an introduction (Section 1), background information (Section 2), scope of work (Section 3) and project schedule (Section 4). In addition, quality assurance/quality control, health and safety (including community air monitoring) and project team information are addressed in separate appendices. Supporting figures referenced throughout are included at the end of this report.

1.2 Work Plan Objective

A previous limited environmental investigation at the north adjacent property, detailed in Section 2.5, indicated the presence of chlorinated solvents in the soil vapor. The objective of this Work Plan is to determine whether the chlorinated solvents are related to historic Site operations and, if so, whether the concentrations related to Site operations threaten public health or the environment. Based on the prior environmental investigation at the north adjacent property, an investigation of soil vapor, soil and possible the groundwater (or perched/runoff water, field borings will determine) will be conducted at the Site to determine if chlorinated solvent impacts related to historic Site operations and potential impacts to public health and the environment are present at the Site.

2.0 BACKGROUND

This section includes a description of the Site and surrounding uses; summaries of Site characteristics, historic operations and regulatory interactions.

2.1 Site Description and Surrounding Uses

The Site is located at 434-440 Riverdale Avenue in the City of Yonkers in Westchester County, New York. The Site is an irregularly shaped parcel located on the northeast corner of the intersection of Riverdale Avenue and St. Andrew's Place. The Site is identified as Westchester County Tax Map/Parcel No.: 1.-132-14.16. The Site location and layout are shown on Figure 1. The Site is located in a mixed-use commercial and residential area.

The Site is currently occupied by a commercial building housing several businesses. The northernmost commercial space, 434 Riverdale Avenue, was occupied by a dry cleaner from approximately 2000 through 2014. The space has remained vacant since that time. The former dry-cleaning equipment was historically located toward the front of the space, nearest to Riverdale Avenue. There is no records or accounts of where the former dry-cleaner waste was disposed of.

Other addresses associated with the Site and the current occupants are listed below and shown on Figure 1.

434 Riverdale Avenue – Formerly a Dry Cleaner, but currently vacant
436 Riverdale Avenue – Formerly a 99-cent store, but currently vacant
438 Riverdale Avenue – Salon Fancy Spa, a nail salon
440 Riverdale Avenue – El Valle Restaurant
442 Riverdale Avenue – Food Center Deli
97-99 St. Andrew's Place – D&K Laundry (a laundromat)

The basement spaces beneath 434 through 438 Riverdale Avenue are connected by doors. The basements in the remaining spaces are accessible only from the ground floor and are not connected.

The Site is bounded by a commercial and residential building to the north, St. Andrew's Place to the south, Riverdale Avenue to the west and commercial and residential buildings to the east. The majority of the surrounding properties are zoned as mixed residential and commercial use.

2.2 Site Characteristics

The Site is mapped on the Yonkers Quadrangle New York-New Jersey 7.5 Minute Topographic Map, published by the United States Geological Survey (USGS) (Figure 1). Review of the topographic map reveals that the Site is located at approximately 75 feet above mean sea level (ft-msl).

The local topography slopes toward the west. Groundwater flow in the surrounding area is anticipated to flow west, toward the Hudson River. Based on the regional bedrock well information available through the USGS, the groundwater is presumed to be approximately ten feet below grade (ft-bg), and is likely perched water.

2.3 Historic Operations

Prior to 1942, the Site was developed with the existing one-story building. Historic uses of the Site include the following: dry cleaning operations, a laundromat, pharmacies, a 99-cent store, grocery stores, restaurants, offices, nail salons, a stationary store, a housewares shop, a peddler and a cleaning service. The northern portion of the Site (434 Riverdale Avenue) operated as a dry cleaner for approximately 14 years, from 2000 to 2014. The Site is currently occupied by a nail salon, a restaurant, a grocery store, a delicatessen, and a laundromat (see figure 2).

2.4 Regulatory Interaction

NYSDEC has designated the Site as a potential site (p-site), indicating that the available information suggests the presence of hazardous waste at the Site and that a site characterization is needed. An Administrative Consent Order and Administrative Settlement (ACO) between Fay Realty and NYSDEC was executed on July 29, 2020 and filed as Index #CO3-20191223-299. Requirements contained in the ACO include the preparation of a SCWP and payment of past and future costs incurred by NYSDEC in connection with the Site.

2.5 Previous Investigations

No previous environmental studies have been conducted at the Site. A Limited Phase II Environmental Site Investigation (ESI) was performed by CBRE, Inc. (CRBE) at the north adjoining property (432 Riverdale Avenue) in May 2018. Subsequently, an environmental review memorandum of the 434 Riverdale Avenue portion of the Site was prepared by Tenen Environmental in March 2019. The Limited Phase II ESI and environmental review memorandum are included in Appendix A.

2.5.1 May 2018, CBRE

In May 2018, CBRE conducted a Limited Phase II ESI on the north adjoining property (432 Riverdale Avenue). An initial Transaction Screen Analysis (TSA) identified historical dry cleaning operations at the Site as a Recognized Environmental Condition (REC). A subsequent limited Phase II ESI was conducted at 432 Riverdale Avenue to assess the presence of chlorinated solvents in soil vapor, indoor air, and ambient air. One sub-slab soil vapor sample, two indoor air samples, and one ambient air sample (from the rear yard of the building) were collected and analyzed for volatile organic compounds (VOCs).

The results of the sample analysis showed tetrachloroethene (PCE), a common dry cleaning solvent, and cis-1,2-dichloroethene (cis-1,2-DCE), a breakdown product of PCE, were detected in the sub-slab soil vapor sample collected directly north of the Site at elevated concentrations. Based on the New York State Department of Health (NYSDOH) soil vapor decision matrices contained in the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH, October 2006, updated May 2017), the concentrations of PCE and cis-1,2-DCE detected in sub-slab soil vapor and indoor air are within the range where mitigation is recommended. Concentrations of PCE and trichloroethene (TCE), a breakdown product of PCE, were detected in the indoor air sample co-located with the soil vapor sample directly north of the Site at concentrations exceeding their respective NYSDOH Air Guidance Values. The limited Phase II ESI identified Site operations as the potential source of chlorinated solvents in soil vapor and indoor air at 432 Riverdale Avenue.

Based upon the findings of the CBRE investigation, an active sub-slab depressurization system (SSDS) was installed at 432 Riverdale Avenue to address the potential for vapor intrusion of chlorinated volatile organic contaminants (cVOCs) into indoor air. Pre-installation work, performed in November 2018, included installation of extraction wells, vapor monitoring points, a sump pump to address perched groundwater and a blower test. The system was installed in February-March 2019. System effluent testing conducted in March 2019 indicated 99.7-100 percent reduction in concentrations of PCE, TCE and cis,1-2 DCE from those measured in the influent.

2.5.2 March 2019, Tenen

An environmental review memorandum was prepared by Tenen in March 2019 for 434 Riverdale Avenue which summarizes the historical information pertaining to the Site and discusses other potential sources of the environmental impacts at 432 Riverdale Avenue.

Based on the available information, Eastern recommends a limited Phase II investigation be performed at the Site to ascertain the distribution of chlorinated solvent impacts on the Site.

2.5.3 Summary

The following conclusions are based on the results of the investigations conducted to date:

1. A Phase II Investigation is recommended at the Site to assess the extent chlorinated solvents impacts at the Site.

As indicated in Section 1.2, additional characterization is required in order to determine if the presence of chlorinated solvents in environmental media is related to historic Site operations and, if so, whether these concentrations threaten public health or the environment.

3.0 SCOPE OF WORK

A phased Site characterization investigation will be implemented, consisting of the scope of work described below. A summary table of all proposed sampling locations and quality assurance / quality control (QA/QC) samples is included in Section 3.4. Access to all commercial spaces will be arranged by Fay Realty, Inc., the owner of the Site.

3.1 Soil Sampling

In order to characterize the soil at the Site, the following scope of work will be implemented:

- advance four soil borings on the Site and one boring in the adjacent sidewalk to investigate the potential presence of a soil source;
- collect soil samples from newly installed soil borings;
- analyze soil samples for Target Compound List (TCL) VOCs, TCL semivolatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), metals and emerging contaminants including 1,4-dioxane and per-polyfluoroalkyl substances (PFAS) as per NYSDEC requirements for State Remedial programs.

A total of five soil borings are proposed in the following locations to investigate the presence of a potential on-Site soil source. All locations are shown on Figure 3.

Proposed Boring Locations and Rationale for Placement

- SB-1/MW-1 and SB-2 – located in the basement, below the area formerly occupied by the dry cleaning machinery.
- SB-3/MW-2 – located in the southern portion of the former dry cleaner basement,
- SB-4/MW-3 – located in the back courtyard of the former dry cleaner.
- SB-5/MW-4 – located off-site in the sidewalk, downgradient of the former dry cleaner.

Based on field measurements and observations, boring locations may be moved or added in coordination with NYSDEC.

Soil samples will be screened with a photoionization device (PID) and any visual signs of contamination or odors will be recorded. If contamination is encountered, additional soil cores may be collected.

A maximum of two samples will be collected for lab analysis from each boring. If contamination if observed, one sample will be collected from the zone with the highest suspected contamination and one sample will be collected from the first apparent non-impacted zone. If no contamination is detected, one sample will be collected at the bedrock interface.

Samples will be collected in laboratory-supplied containers and will be sealed, labeled, and placed in a cooler containing ice (to maintain a temperature of approximately 4 degrees Celsius) for delivery to a NYSDOH Environmental Laboratory Accreditation Program (ELAP)-certified analytical laboratory. Soil samples will be analyzed for volatile organic compounds (VOCS), semi

volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), metals and emerging contaminants including 1,4-dioxan and PFAS. Product samples, if encountered, will be submitted for gas chromatography-mass spectrometer fingerprint analysis. QA/QC procedures to be followed are described in the Quality Assurance Project Plan (QAPP).

A record of each sample, including notation of any odors, color, or sample matrix, will be kept in the sampler's field logbook. A chain of custody will be maintained throughout the field sampling, transport of samples to the laboratory, and during lab analysis.

3.2 Groundwater Sampling

The following scope of work is proposed to further characterize the groundwater at the Site ***and is contingent on the presence of perched groundwater***:

- install four groundwater monitoring wells screened across the groundwater interface;
- Soil borings SB-1, SB-3, SB-4 and SB-5 will be converted to monitoring wells MW-1, MW-2, MW-3 and MW-4, respectively;
- survey the newly-installed wells;
- collect one round of depth-to-groundwater measurements from the newly-installed wells;
- collect groundwater samples from four wells and analyze for TCL VOCs, TCL SVOCs, Pesticides, PCBs, total and dissolved metals, 1,4-dioxane, and per-fluoroalkyl substances (PFAS).

The locations of the proposed wells and rationale for placement are listed below. All locations are shown on Figure 4.

<u>Proposed Monitoring Well Locations and Rationale for Placement</u>

- SB-1/MW-1 – located within the vicinity of the former dry cleaner space in the presumed source area.
- SB-3/MW-2 – located in the former dry cleaner space in the presumed cross gradient border.
- SB-4/MW-3- located in the former dry cleaner space on the presumed upgradient border.
- SB-5/MW-4 – located in the sidewalk along Riverdale Avenue, in the presumed downgradient direction from the Site.

Monitoring well installation will be completed using a Geoprobe®. Monitoring well construction will consist of a five-foot one-inch slotted PVC (0.02-inch) screen with riser to grade. A sand filter pack (US Std. sieve sizes 30 to 8) will placed in the annular space around the screens and will be extended two feet above the screen.

The annular area around the well casing will be sealed with bentonite pellets for an interval of two feet above the filter pack. The annular space above the bentonite pellets to one foot below grade will be backfilled with drilling cuttings. The remaining one foot will be sealed with a concrete cap and well apron (expanding cement). A locking well cap will be installed upon completion of each well.

Following installation, at least three well volumes will be removed using a submersible pump. All permanent wells will be surveyed to a common site datum.

Samples will be collected using low-flow techniques in accordance with EPA Region 1 Low-Stress (Low-Flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells. (EQASOP-GW 001 Revision 3 dated July 30, 1996 Revised: January 19, 2010). All groundwater samples will be analyzed for TCL VOCs, TCL SVOCs, Pesticides, PCBs, total and dissolved metals, 1,4-dioxane, and per-fluoroalkyl substances (PFAS).

3.3 Soil Vapor, Sub-Slab Soil Vapor, Indoor Air and Ambient Air Sampling

The following scope of work is proposed to further characterize the soil vapor at the Site and the potential distribution of VOCs in off-Site locations:

- install three soil vapor points;
- install five sub-slab soil vapor points;
- collect one co-located indoor air sample at each sub-slab soil vapor location;
- purge and collect soil vapor samples from all nine points;
- collect one ambient air sample; and;
- analyze soil vapor, sub-slab soil vapor, co-located indoor air and ambient air samples for TO-15 VOCs.

All sample locations are shown on Figure 5.

3.3.1 Soil Vapor and Ambient Air Sampling

The following soil vapor locations are proposed to further investigate the potential distribution of VOCs in soil vapor at off-Site locations. All locations are shown on Figure 5.

Proposed Soil Vapor Locations and Rationale for Placement

- SV-1– placed in the sidewalk in front of the former dry cleaning space
- SV-2 – placed in the rear yard of the former dry cleaning space.
- SV-3 – placed in the alleyway of a beer distributer, located north of the Site.

At each proposed sampling location, a disposable soil vapor point will be driven to approximately three feet below grade (ft-bg). The sampling probe consists of a 1.5-inch long hardened point and a 6-inch long perforated vapor intake. A vacuum pump will remove one to three volumes of air (volume of the sample probe and tube) prior to sample collection. The flow rate for both purging and collecting samples will not exceed 0.2 liter per minute.

The soil vapor samples will first be screened for organic vapors using a PID. Soil gas and co-located indoor air samples will be collected in 6-liter Summa canisters using eight-hour regulators and analyzed for VOCs using EPA Method TO-15. A tracer gas will be used in accordance with NYSDOH QA/QC protocols to verify the integrity of the soil vapor probe seal.

The ambient air sample will be collected from breathing height (three to five feet above the floor) at a nearby location downwind from the Site building. The sampling flow rate will not exceed 0.2 liters per minute (L/min). The ambient air sample will be collected in laboratory-supplied 6-liter canisters using an 8-hour regulator. The ambient air sample will be collected during soil vapor sample collection and will be analyzed for VOCs using EPA Method TO-15.

All samples will be collected in accordance with the NYSDOH Soil Vapor Guidance. Some sample locations may be adjusted based on field observations or conditions.

3.3.2 Sub-Slab Soil Vapor, Indoor Air and Ambient Air Sampling

The following soil vapor locations are proposed to further investigate the distribution of VOCs in soil vapor at the Site. All locations are shown on Figure 5.

Proposed Sub-Slab Soil Vapor Locations and Rationale for Placement

- SV-4 and SV-5 – placed in the vicinity of the former dry cleaner machinery to characterize the sub-slab soil vapor in the presumed source area. The results will aid in determining if an on-Site source is present and/or assessing potential impacts to the existing building.
- SV-6 through SV-10 – located within the other (non-historic dry cleaning) commercial spaces of the building to assess if any potential impacts from the former dry cleaning operations exist.

Sub-slab soil vapor points will be installed using a handheld rotary hammer. Access to the sub-slab will be gained by drilling through the top surface material.
Upon penetration through the surface material, a disposable sampling probe consisting of a Vapor Pin® or similar will be installed. The vapor intake will be installed so that the intake is not deeper than two inches below the slab. A vacuum pump will remove one to three volumes of air (volume of the sample probe and tube) prior to sample collection. The flow rate for both purging and collecting samples will not exceed 0.2 liter per minute.

The sub-slab soil vapor sample will be first screened for organic vapors using a PID. Soil gas and co-located indoor air samples will be collected in 6-liter Summa canisters using eight-hour regulators and analyzed for VOCs using EPA Method TO-15. A tracer gas will be used in accordance with NYSDOH QA/QC protocols to verify the integrity of the soil vapor probe seal.

The indoor air samples will be collected from breathing height (three to five feet above the floor) co-located with sub-slab soil vapor points, from within the Site building. The sampling flow rate will not exceed 0.2 liters per minute (L/min). Indoor air samples will be collected in laboratory-supplied six-liter canisters using 8-hour regulators. Indoor air samples will be collected during soil vapor sample collection and will be analyzed for VOCs using EPA Method TO-15.

All samples will be collected in accordance with the NYSDOH Soil Vapor Guidance. Some sample locations may be adjusted based on field observations or conditions.

3.4 Quality Assurance / Quality Control (QA/QC)

Samples will be collected in accordance with the Quality Assurance Project Plan (QAPP) included as Appendix C.

Sample analysis will be performed by a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory. The laboratory will report sample results on a 10-day turnaround time. An independent subconsultant will validate sample results and a Data Usability Summary Report (DUSR) will be prepared.

3.5 Summary Table of Proposed Sampling Locations

As required by Section 3.3(b)3 of DER-10, below is a table with all proposed sampling locations and QA/QC samples.

Proposed Sampling Locations and Analysis

Sample Location	Matrix	Sampling Interval (ft-bg)	Analytical Parameters	Sampling Method / Minimum Reporting Levels	Rationale
SB-1	Soil	Within each boring from the zone of highest suspected contamination (if encountered) and the next apparent non-impacted zone (as appropriate). If no contamination is observed, a sample will be collected from the bedrock interface.	TCL VOCs, TCL SVOCs, Pesticides, PCBs, total metals, 1,4-dioxane, and per-fluoroalkyl substances (PFAS)	MDL less than Unrestricted Use Soil Cleanup Objectives (SCOs) and NYSDEC PFOA and PFOS Guidance Values for Anticipated Site Use	Characterize the area of the former dry cleaner machinery
SB-2					
SB-3					Characterize the soil beneath the basement
SB-4					Assess the soil in the rear yard
SB-5					Assess the soil off-site, in the sidewalk downgradient of the former dry cleaner
MW-1	Ground-water – If Encountered	Screened above the bedrock interface		MDL less than the NYSDEC TOGS 1.1.1 Class GA Ambient Water Quality Standards (Class GA Standards); MDL less than 2 nanograms per liter (ng/L) for PFOA and PFAAs	Assess the area of the former dry cleaner machinery
MW-2					Access the former dry cleaner space on the presumed cross gradient border
MW-3					Access the former dry cleaner space on the presumed upgradient border
MW-4					Downgradient, in the sidewalk to allow for triangulation of groundwater flow

Sample Location	Matrix	Sampling Interval (ft-bg)	Analytical Parameters	Sampling Method / Minimum Reporting Levels	Rationale
SV-1	Soil Vapor	Soil Vapor	TO-15 VOCs	EPA TO-15 / MDL less than 1.00 micrograms per cubic meter (ug/m3) except TCE/PCE less than 0.25 ug/m3	Assess the potential for off-site distribution of VOCs
SV-2					
SV-3					
SV-4		Sub-slab			Assess the area of the former dry cleaner machinery
SV-5					
SV-6					Within the commercial spaces for site coverage
SV-7					
SV-8					
SV-9					
SV-10					
IA-4	Indoor Air	--			Co-located with SV-4
IA-5					Co-located with SV-5
IA-6					Co-located with SV-6
IA-7					Co-located with SV-7
IA-8					Co-located with SV-8
IA-9					Co-located with SV-9
IA-10					Co-located with SV-10
Ambient Air	Ambient Air	--			Assess the downwind ambient air
Trip Blanks	QA / QC	--	TCL VOCs, TCL SVOCs, Pesticides, PCBs, total and dissolved metals, 1,4-dioxane, and per-fluoroalkyl substances	Same as Soil or Groundwater Analysis	Quality assurance and quality control
Soil Duplicate					
Soil Blank					
Soil MS/MSD					
Groundwater Duplicate					
Groundwater MS/MSD					

MDL – Method Detection Limit

Reporting limits are laboratory- and sampling event-specific. The overall objective is to ensure that the minimum reporting levels are such that they can be used to evaluate potential sources, used to assess risk from detected compounds and compared against applicable regulatory standards.

3.6 Qualitative Exposure Assessment

Following receipt of the sample results, a qualitative exposure assessment will be completed. The assessment will be performed in accordance with Section 3.3(c)4 of DER-10 and the NYSDOH guidance for performing a qualitative EA (NYSDEC DER-10; Technical Guidance for Site Investigation and Remediation; Appendix 3 B). The results will be included in the characterization report.

3.7 Health and Safety Plan (HASP)

All work at the Site will be completed in accordance with the Health and Safety Plan (HASP) included in Appendix B.

3.8 Air Monitoring

The NYSDOH Special Requirements Community Air Monitoring Plan (CAMP) will be implemented during all ground-intrusive sampling activities. The NYSDEC Special Requirements CAMP is utilized for work within 20 feet of potentially exposed individuals or structures. Details of the Special Requirements CAMP are included in the HASP (Appendix B).

3.9 Investigation-Derived Waste (IDW)

If grossly-contaminated soil cuttings are encountered or excess soil cuttings are generated, they will be placed in 55-gallon drums. Following the completion of sampling, boreholes will be backfilled with clean cuttings or sand. Any purge water or other investigation-derived waste (IDW) will be containerized in 55-gallon drums. After the investigation is complete, the drum contents will be characterized and off-Site disposal will be arranged.

3.10 Reporting

A characterization report describing the investigation will be prepared to document Site conditions and will meet the requirements of DER-10. The report will include details of the sampling, tabulated sample results and an assessment of the data and conclusions. If warranted, recommendations for additional actions will be included.

Soil sample results will be compared to the Unrestricted Use and Commercial Use soil cleanup objectives (SCOs) as included in Part 375-6.8 and CP-51. Groundwater sample results will be compared to the Class GA Standards and guidance values for groundwater as listed in NYSDEC Technical and Operations Guidance Series (TOGS) 1.1.1 and to the Environmental Protection Agency (EPA) Drinking Water Health Advisory level. Soil vapor, indoor air and ambient sample results will be compared to the NYSDOH AGVs, matrices and/or ambient air background levels.

The report will also include the qualitative exposure assessment, CAMP results, laboratory data packages, DUSR, geologic logs, well construction diagrams and well purging/sampling logs. All data will also be submitted electronically to NYSDEC via the Environmental Information Management System (EIMS) in EqUIS format.

4.0 SCHEDULE

It is estimated that the soil sampling scope of work presented in this work plan can be completed within four field days with an additional ten days for well development. Project activities will be completed within approximately nine weeks after Work Plan approval by NYSDEC. The following project schedule has been developed:

Task	Estimated Duration (business days)	Total Duration (business days)
Work Plan Approval	0	0
Mobilization	7-14	7-14
Soil Sampling and Monitoring Well Installation	2-3	10-17
Monitoring Well Development	10	20-27
Groundwater, Soil Vapor, Sub-Slab Soil Vapor, Indoor Air and Ambient Air Sampling	2	22-29
Laboratory Analysis	10	32-39
Draft Report and Data Validation	30	62-69

5.0 REFERENCES

NYSDEC 2010. New York State Department of Environmental Conservation, Division of Environmental Remediation. DER Technical Guidance for Site Investigation and Remediation (DER-10). 2010.

NYSDEC 2010. New York State Department of Environmental Conservation DEC Policy. Commissioner's Policy 51 – Soil Cleanup Guidance. October 21, 2010.

Limited Phase II Environmental Site Investigation, 432 Riverdale Avenue, Yonkers, New York. CRBE, Inc., May 2018

Summary of Environmental Review, 434 Riverdale Avenue, Yonkers, New York. Tenen Environmental, dated February 25, 2019

Report of Sub-slab Depressurization Installation, 432 Riverdale Avenue, Yonkers, New York 10705. DT Consulting Services, Inc., dated April 28, 2019.

Figures

Appendix A
Records Search Documents

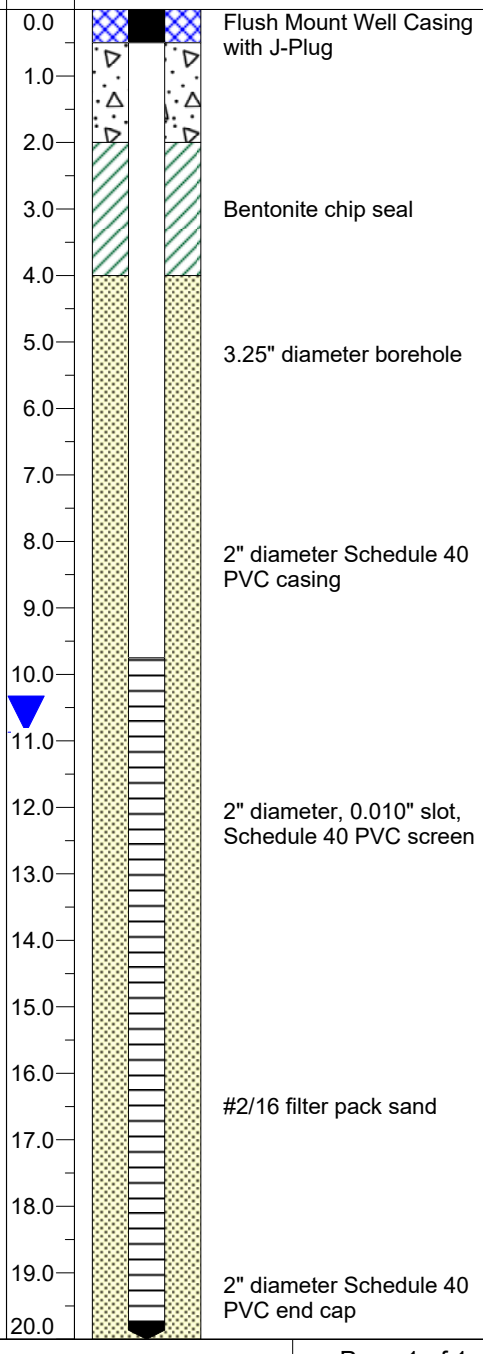
Appendix B
Health and Safety Plan

Appendix C
Quality Assurance Project Plan

APPENDIX B
SOIL BORING AND WELL CONSTRUCTION LOGS

PROJECT #:	FAY2101		
SITE ADDRESS:	434 Riverdale Avenue, Yonkers		
BORING ID:	N/A	BORING DEPTH (FT): 20	CORE LENGTH (FT): 5
WELL ID:	MW-001	BORING DIAMETER (IN): 3.25	WELL DIAMETER (IN): 2
DRILLING CONTRACTOR:	Eastern Environmental Solutions, Inc.	DATE STARTED: 03/08/2022	DATE FINISHED: 03/08/2022
DRILLING METHOD:	Direct Push	TIME STARTED: 11:10	TIME FINISHED: 13:10
DRILLING EQUIPMENT:	Geoprobe 7822DT	LATITUDE: N/A	LONGITUDE: N/A
SAMPLING METHOD:	Macrocore	PROJECT MANAGER: Michael Gaul	LOGGED BY: Matt Merrill

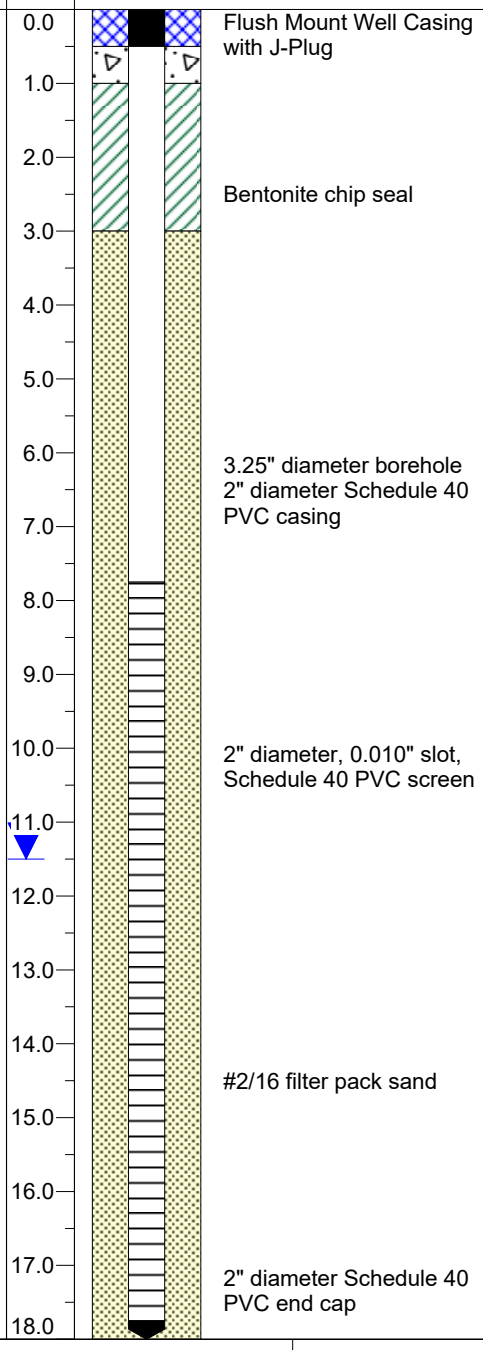
DEPTH (feet)	SAMPLE INTERVAL	USCS KEY	RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)
0.0 – 20.0					



P.W. Grosser Consulting	**End of Boring Depth (feet):** 20	**Water Table Symbol:** ▼	Page 1 of 1

PROJECT #:	FAY2101		
SITE ADDRESS:	434 Riverdale Avenue, Yonkers		
BORING ID:	N/A	BORING DEPTH (FT): 18	CORE LENGTH (FT): 5
WELL ID:	MW-002	BORING DIAMETER (IN): 3.25	WELL DIAMETER (IN): 2
DRILLING CONTRACTOR:	Eastern Environmental Solutions, Inc.	DATE STARTED: 03/09/2022	DATE FINISHED: 03/09/2022
DRILLING METHOD:	Direct Push	TIME STARTED: 07:50	TIME FINISHED: 10:20
DRILLING EQUIPMENT:	Geoprobe 7822DT	LATITUDE: N/A	LONGITUDE: N/A
SAMPLING METHOD:	Macrocore	PROJECT MANAGER: Michael Gaul	LOGGED BY: Matt Merrill

DEPTH (feet)	SAMPLE INTERVAL	USCS KEY	RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)
0.0 – 18.0					

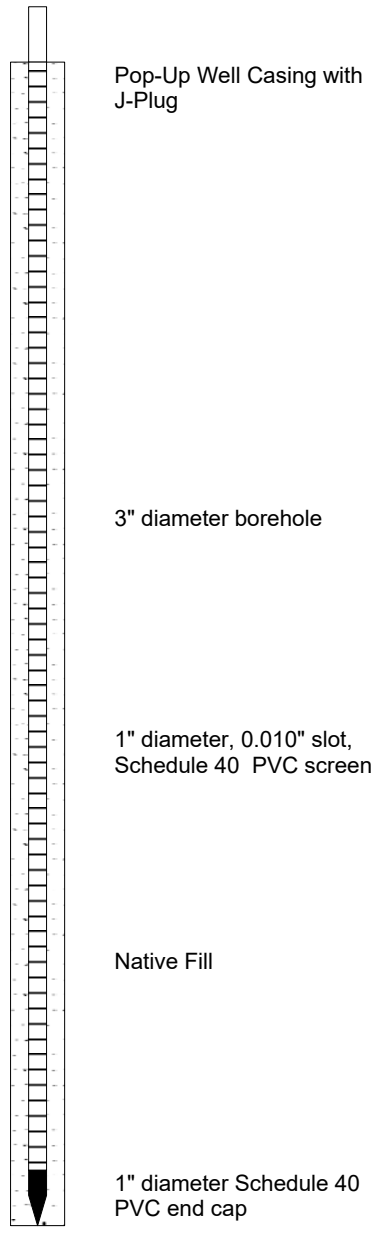


WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

P.W. Grosser Consulting	**End of Boring Depth (feet):** 18	**Water Table Symbol:** ▼

PROJECT #:	FAY2101		
SITE ADDRESS:	434 Riverdale Avenue, Yonkers		
BORING ID:	SB-001	BORING DEPTH (FT): 5	CORE LENGTH (FT): N/A
WELL ID:	MW-003	BORING DIAMETER (IN): 3	WELL DIAMETER (IN): 1
DRILLING CONTRACTOR:	Eastern Environmental Solutions, Inc.	DATE STARTED: 03/09/2022	DATE FINISHED: 03/09/2022
DRILLING METHOD:	Manual Auger	TIME STARTED: 11:00	TIME FINISHED: 11:30
DRILLING EQUIPMENT:	Hand Auger	LATITUDE: N/A	LONGITUDE: N/A
SAMPLING METHOD:	Hand Auger	PROJECT MANAGER: Michael Gaul	LOGGED BY: Matt Merrill

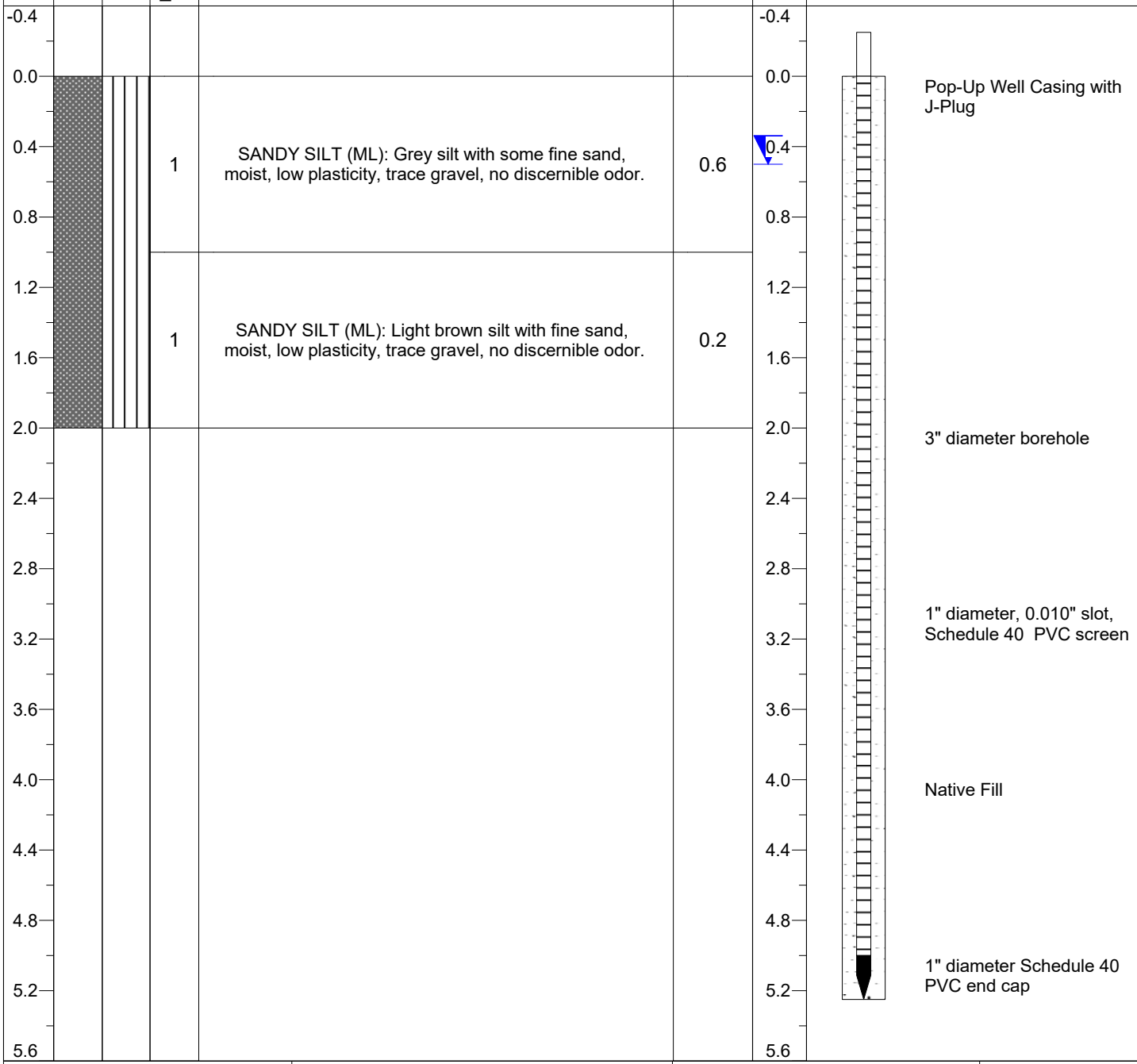
DEPTH (feet)	SAMPLE INTERVAL	USCS KEY	RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)
-0.4					
0.0					
0.4					
0.8			2	SANDY SILT (ML): Light brown silt with some fine sand, wet, low plasticity, trace gravel, no discernible odor.	2
1.2					
1.6					
2.0					
2.4					
2.8					
3.2					
3.6					
4.0					
4.4					
4.8					
5.2					
5.6					



P.W. Grosser Consulting	**End of Boring Depth (feet):** 5	**Water Table Symbol:** ▼	Page 1 of 1

PROJECT #:	FAY2101		
SITE ADDRESS:	434 Riverdale Avenue, Yonkers		
BORING ID:	SB-002	BORING DEPTH (FT): 5	CORE LENGTH (FT): N/A
WELL ID:	MW-004	BORING DIAMETER (IN): 3	WELL DIAMETER (IN): 1
DRILLING CONTRACTOR:	Eastern Environmental Solutions, Inc.	DATE STARTED: 03/09/2022	DATE FINISHED: 03/09/2022
DRILLING METHOD:	Manual Auger	TIME STARTED: 11:30	TIME FINISHED: 12:00
DRILLING EQUIPMENT:	Hand Auger	LATITUDE: N/A	LONGITUDE: N/A
SAMPLING METHOD:	Hand Auger	PROJECT MANAGER: Michael Gaul	LOGGED BY: Matt Merrill

DEPTH (feet)	SAMPLE INTERVAL	USCS KEY	RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)
-0.4					
0.0					
0.4			1	SANDY SILT (ML): Grey silt with some fine sand, moist, low plasticity, trace gravel, no discernible odor.	0.6
0.8					
1.2			1	SANDY SILT (ML): Light brown silt with fine sand, moist, low plasticity, trace gravel, no discernible odor.	0.2
1.6					
2.0					
2.4					
2.8					
3.2					
3.6					
4.0					
4.4					
4.8					
5.2					
5.6					



PROJECT #:	FAY2101		
SITE ADDRESS:	434 Riverdale Avenue, Yonkers		
BORING ID:	SB-003	BORING DEPTH (FT): 9	CORE LENGTH (FT): N/A
WELL ID:	MW-005	BORING DIAMETER (IN): 3	WELL DIAMETER (IN): 1
DRILLING CONTRACTOR:	Eastern Environmental Solutions, Inc.	DATE STARTED: 03/09/2022	DATE FINISHED: 03/10/2022
DRILLING METHOD:	Direct Push	TIME STARTED: 13:15	TIME FINISHED: 08:45
DRILLING EQUIPMENT:	Bosch Jackhammer	LATITUDE: N/A	LONGITUDE: N/A
SAMPLING METHOD:	Hand Auger	PROJECT MANAGER: Michael Gaul	LOGGED BY: Matt Merrill

DEPTH (feet)	SAMPLE INTERVAL	USCS KEY	RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)
0.0 – 3.0			3	FILL: Non-homegenous silty fill with some concrete, corroded metals, paper, trace glass, dry, low/no plasticity, no discernible odor.	0.3
3.0 – 5.0			2	SANDY SILT (ML): Light brown silt with fine sand, wet, low plasticity, trace gravel, no discernible odor.	0.1
5.0 – 9.0					

WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

P.W. Grosser Consulting	**End of Boring Depth (feet):** 9	**Water Table Symbol:** ▼	Page 1 of 1

PROJECT #:	FAY2101		
SITE ADDRESS:	434 Riverdale Avenue, Yonkers		
BORING ID:	SB-004	BORING DEPTH (FT): 2	CORE LENGTH (FT): N/A
WELL ID:	N/A	BORING DIAMETER (IN): 3	WELL DIAMETER (IN): N/A
DRILLING CONTRACTOR:	Eastern Environmental Solutions, Inc.	DATE STARTED: 03/09/2022	DATE FINISHED: 03/09/2022
DRILLING METHOD:	Manual Auger	TIME STARTED: 13:50	TIME FINISHED: 14:05
DRILLING EQUIPMENT:	Hand Auger	LATITUDE: N/A	LONGITUDE: N/A
SAMPLING METHOD:	Hand Auger	PROJECT MANAGER: Michael Gaul	LOGGED BY: Matt Merrill

DEPTH (feet)	SAMPLE INTERVAL	USCS KEY	RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0.0–1.9			2	SANDY SILT (ML): Light brown silt with fine sand, moist, low plasticity, trace gravel, no discernible odor.	0.3	0.0–1.9	

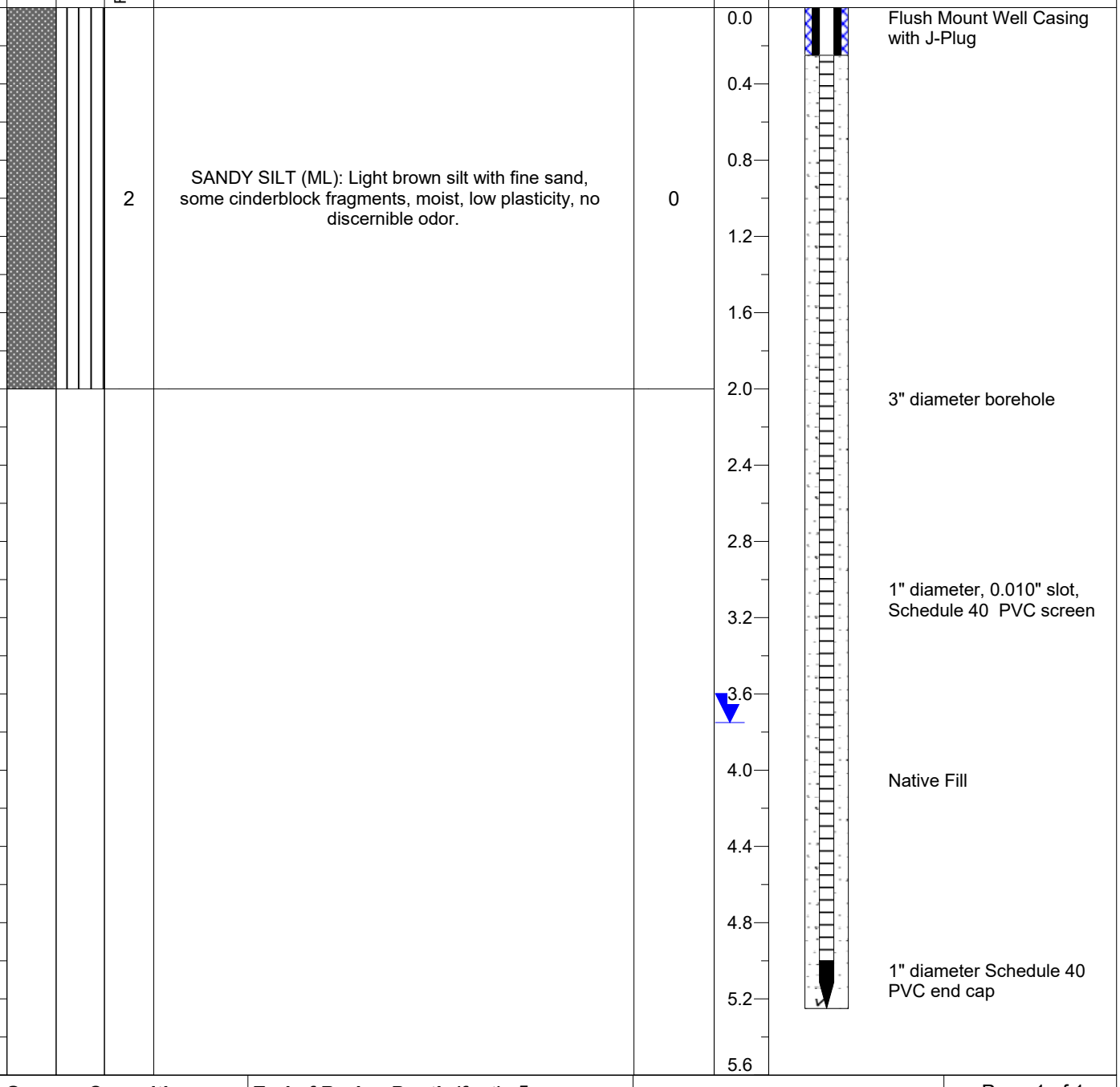
P.W. Grosser Consulting	**End of Boring Depth (feet):** 2	**Water Table Symbol:** ▼	Page 1 of 1

PROJECT #:	FAY2101		
SITE ADDRESS:	434 Riverdale Avenue, Yonkers		
BORING ID:	SB-005	BORING DEPTH (FT): 4	CORE LENGTH (FT): N/A
WELL ID:	N/A	BORING DIAMETER (IN): 3	WELL DIAMETER (IN): N/A
DRILLING CONTRACTOR:	Eastern Environmental Solutions, Inc.	DATE STARTED: 03/10/2022	DATE FINISHED: 03/10/2022
DRILLING METHOD:	Manual Auger	TIME STARTED: 08:45	TIME FINISHED: 10:00
DRILLING EQUIPMENT:	Hand Auger	LATITUDE: N/A	LONGITUDE: N/A
SAMPLING METHOD:	Hand Auger	PROJECT MANAGER: Michael Gaul	LOGGED BY: Matt Merrill

DEPTH (feet)	SAMPLE INTERVAL	USCS KEY	RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0.0 – 1.2			1.25	FILL: Dark brown loamy fill with some tile, brick caulk fragments, dry, no plasticity, no discernible odor.	0	0.0 – 1.2	
1.2 – 3.8			2.75	FILL: Chunky grey ash with slag, coal fragments, fuel ash corrosion, dry, no discernible odor.	0	1.2 – 3.8	

PROJECT #:	FAY2101		
SITE ADDRESS:	434 Riverdale Avenue, Yonkers		
BORING ID:	SB-006	BORING DEPTH (FT): 5	CORE LENGTH (FT): N/A
WELL ID:	MW-006	BORING DIAMETER (IN): 3	WELL DIAMETER (IN): 1
DRILLING CONTRACTOR:	Eastern Environmental Solutions, Inc.	DATE STARTED: 03/10/2022	DATE FINISHED: 03/10/2022
DRILLING METHOD:	Direct Push	TIME STARTED: 10:10	TIME FINISHED: 11:10
DRILLING EQUIPMENT:	Bosch Jackhammer	LATITUDE: N/A	LONGITUDE: N/A
SAMPLING METHOD:	Hand Auger	PROJECT MANAGER: Michael Gaul	LOGGED BY: Matt Merrill

DEPTH (feet)	SAMPLE INTERVAL	USCS KEY	RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)
0.0 – 2.0			2	SANDY SILT (ML): Light brown silt with fine sand, some cinderblock fragments, moist, low plasticity, no discernible odor.	0



PROJECT #:	FAY2101		
SITE ADDRESS:	434 Riverdale Avenue, Yonkers		
BORING ID:	SB-007	BORING DEPTH (FT): 2	CORE LENGTH (FT): N/A
WELL ID:	N/A	BORING DIAMETER (IN): 3	WELL DIAMETER (IN): N/A
DRILLING CONTRACTOR:	Eastern Environmental Solutions, Inc.	DATE STARTED: 03/10/2022	DATE FINISHED: 03/10/2022
DRILLING METHOD:	Manual Auger	TIME STARTED: 11:30	TIME FINISHED: 11:50
DRILLING EQUIPMENT:	Hand Auger	LATITUDE: N/A	LONGITUDE: N/A
SAMPLING METHOD:	Hand Auger	PROJECT MANAGER: Michael Gaul	LOGGED BY: Matt Merrill

DEPTH (feet)	SAMPLE INTERVAL	USCS KEY	RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0.0–1.9			2	FILL: Black, gritty fill with some brick, coal, and cinder fragments, dry, no discernible odor.	0	0.0–1.9	

P.W. Grosser Consulting	**End of Boring Depth (feet):** 2	**Water Table Symbol:** ▼	Page 1 of 1

APPENDIX C
LABORATORY ANALYTICAL REPORTS

Technical Report

prepared for:

P.W. Grosser Consulting
630 Johnson Avenue, Suite 7
Bohemia NY, 11716
Attention: Michael Gaul

Report Date: 03/17/2022
Client Project ID: FAY2101 434 Riverdale Ave, Yonkers
York Project (SDG) No.: 22C0596

Report Date: 03/17/2022
Client Project ID: FAY2101 434 Riverdale Ave, Yonkers
York Project (SDG) No.: 22C0596

P.W. Grosser Consulting
630 Johnson Avenue, Suite 7
Bohemia NY, 11716
Attention: Michael Gaul

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on March 10, 2022 and listed below. The project was identified as your project: **FAY2101 434 Riverdale Ave, Yonkers**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
22C0596-01	Equipment Blank	Water	03/09/2022	03/10/2022
22C0596-02	SB-004 (0-2)	Soil	03/09/2022	03/10/2022
22C0596-03	SB-003 (0-2)	Soil	03/09/2022	03/10/2022
22C0596-04	DUP001	Soil	03/09/2022	03/10/2022
22C0596-05	SB-002 (0-2)	Soil	03/09/2022	03/10/2022
22C0596-06	SB-001 (0-2)	Soil	03/09/2022	03/10/2022
22C0596-07	Trip Blank	Water	03/09/2022	03/10/2022

General Notes for York Project (SDG) No.: 22C0596

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By: **Date:** 03/17/2022

Cassie L. Mosher
Laboratory Manager

Sample Information

Client Sample ID: **Equipment Blank** **York Sample ID:** **22C0596-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Water	March 9, 2022 2:10 pm	03/10/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-00-5	**1,1,2-Trichloroethane**	**2.16**	QL-02	ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	**1,2-Dichloroethane**	**0.770**		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: **Equipment Blank** **York Sample ID:** **22C0596-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Water	March 9, 2022 2:10 pm	03/10/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	**4-Methyl-2-pentanone**	**0.530**		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: **Equipment Blank** **York Sample ID:** **22C0596-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Water	March 9, 2022 2:10 pm	03/10/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
105-05-5	* p-Diethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:			
622-96-8	* p-Ethyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:			
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	**tert-Butyl alcohol (TBA)**	**1.97**		ug/L	0.500	1.00	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: **Equipment Blank** **York Sample ID:** **22C0596-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Water	March 9, 2022 2:10 pm	03/10/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C	03/15/2022 06:15	03/15/2022 18:38	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*109 %*	*69-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*108 %*	*81-117*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*120 %*	*79-122*

Sample Information

Client Sample ID: SB-004 (0-2) **York Sample ID:** 22C0596-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 1:55 pm	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP		
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
123-91-1	1,4-Dioxane	ND		mg/kg dry	0.046	0.093	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-004 (0-2) **York Sample ID:** 22C0596-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 1:55 pm	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP		
78-93-3	2-Butanone	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
591-78-6	2-Hexanone	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	Acetone	ND		mg/kg dry	0.0046	0.0093	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		mg/kg dry	0.0046	0.0093	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-86-1	Bromobenzene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	Chloroform	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-004 (0-2) **York Sample ID:** 22C0596-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 1:55 pm	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	**Methylene chloride**	**0.011**		mg/kg dry	0.0046	0.0093	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.0046	0.0093	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-004 (0-2) **York Sample ID:** 22C0596-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 1:55 pm	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-88-3	Toluene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-05-4	Vinyl acetate	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.0023	0.0046	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		mg/kg dry	0.0070	0.014	1	EPA 8260C	03/16/2022 13:19	03/17/2022 09:49	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*104 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*98.1 %*	*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*110 %*	*76-130*

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**86.1**		%	0.100	1	SM 2540G	03/17/2022 16:30	03/17/2022 16:31	JTG
							Certifications:	CTDOH		

Sample Information

Client Sample ID: SB-003 (0-2) **York Sample ID:** 22C0596-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 1:40 pm	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP		
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-003 (0-2) **York Sample ID:** 22C0596-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 1:40 pm	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		mg/kg dry	0.048	0.096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP		
78-93-3	2-Butanone	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
591-78-6	2-Hexanone	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	Acetone	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-86-1	Bromobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	Chloroform	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-003 (0-2) **York Sample ID:** 22C0596-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 1:40 pm	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	**Methylene chloride**	**0.0053**	J	mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-003 (0-2) **York Sample ID:** 22C0596-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 1:40 pm	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-05-4	Vinyl acetate	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		mg/kg dry	0.0072	0.014	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:15	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*104 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*98.4 %*	*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*107 %*	*76-130*

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**85.6**		%	0.100	1	SM 2540G	03/17/2022 16:30	03/17/2022 16:31	JTG
							Certifications:	CTDOH		

Sample Information

Client Sample ID: **DUP001** **York Sample ID:** **22C0596-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 2:45 pm	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP		
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: DUP001 **York Sample ID:** 22C0596-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 2:45 pm	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		mg/kg dry	0.050	0.10	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP		
78-93-3	**2-Butanone**	**0.017**		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
591-78-6	2-Hexanone	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	**Acetone**	**0.038**	CCV-E	mg/kg dry	0.0050	0.010	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		mg/kg dry	0.0050	0.010	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-86-1	Bromobenzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	**Carbon disulfide**	**0.0031**	J	mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	Chloroform	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: **DUP001** **York Sample ID:** **22C0596-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 2:45 pm	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-59-2	**cis-1,2-Dichloroethylene**	**0.080**		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		mg/kg dry	0.0050	0.010	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.0050	0.010	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: DUP001 **York Sample ID:** 22C0596-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 2:45 pm	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	**Tetrachloroethylene**	**0.0052**	QL-02	mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-88-3	Toluene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
156-60-5	**trans-1,2-Dichloroethylene**	**0.12**		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
79-01-6	**Trichloroethylene**	**0.0081**		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-05-4	Vinyl acetate	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
1330-20-7	Xylenes, Total	ND		mg/kg dry	0.0075	0.015	1	EPA 8260C	03/16/2022 13:19	03/17/2022 10:41	BMC
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP			

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*104 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*98.2 %*	*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*107 %*	*76-130*

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**82.5**		%	0.100	1	SM 2540G	03/17/2022 16:30	03/17/2022 16:31	JTG
							Certifications: CTDOH			

Sample Information

Client Sample ID: SB-002 (0-2) **York Sample ID:** 22C0596-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 11:45 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP		
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-002 (0-2) **York Sample ID:** 22C0596-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 11:45 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		mg/kg dry	0.048	0.096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP		
78-93-3	**2-Butanone**	**0.0045**	J	mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
591-78-6	2-Hexanone	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	**Acetone**	**0.024**	CCV-E	mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-86-1	Bromobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	Chloroform	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-002 (0-2) **York Sample ID:** 22C0596-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 11:45 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-59-2	**cis-1,2-Dichloroethylene**	**0.031**		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	**Methylene chloride**	**0.0081**	J	mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-002 (0-2) **York Sample ID:** 22C0596-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 11:45 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	**trans-1,2-Dichloroethylene**	**0.055**		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	**Trichloroethylene**	**0.0037**	J	mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-05-4	Vinyl acetate	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		mg/kg dry	0.0072	0.014	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:07	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*102 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*98.9 %*	*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*108 %*	*76-130*

Total Solids

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**79.4**		%	0.100	1	SM 2540G	03/17/2022 16:30	03/17/2022 16:31	JTG
							Certifications:	CTDOH		

Sample Information

Client Sample ID: SB-001 (0-2) **York Sample ID:** 22C0596-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 11:25 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP		
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-001 (0-2) **York Sample ID:** 22C0596-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 11:25 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		mg/kg dry	0.062	0.12	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP		
78-93-3	2-Butanone	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
591-78-6	2-Hexanone	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	**Acetone**	**0.0079**	CCV-E, J	mg/kg dry	0.0062	0.012	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		mg/kg dry	0.0062	0.012	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-86-1	Bromobenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	Chloroform	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-001 (0-2) **York Sample ID:** 22C0596-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 11:25 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-59-2	**cis-1,2-Dichloroethylene**	**0.19**		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		mg/kg dry	0.0062	0.012	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.0062	0.012	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-001 (0-2) **York Sample ID:** 22C0596-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Soil	March 9, 2022 11:25 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	**Tetrachloroethylene**	**0.096**	QL-02	mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	**Trichloroethylene**	**0.069**		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-05-4	Vinyl acetate	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		mg/kg dry	0.0093	0.019	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:33	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*105 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*98.2 %*	*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*107 %*	*76-130*

Total Solids

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**75.5**		%	0.100	1	SM 2540G	03/17/2022 16:30	03/17/2022 16:31	JTG
							Certifications:	CTDOH		

Sample Information

Client Sample ID: **Trip Blank** **York Sample ID:** **22C0596-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Water	March 9, 2022 2:45 pm	03/10/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: **Trip Blank** **York Sample ID:** **22C0596-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Water	March 9, 2022 2:45 pm	03/10/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-93-3	**2-Butanone**	**2.45**	Cal-E	ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
591-78-6	**2-Hexanone**	**0.570**	Cal-E	ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	**Acetone**	**3.45**	B	ug/L	1.00	2.00	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	**Chloromethane**	**0.270**	CCV-E, J, B	ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: Trip Blank **York Sample ID:** 22C0596-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Water	March 9, 2022 2:45 pm	03/10/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
105-05-5	* p-Diethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:			
622-96-8	* p-Ethyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:			
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	1.00	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: Trip Blank **York Sample ID:** 22C0596-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0596	FAY2101 434 Riverdale Ave, Yonkers	Water	March 9, 2022 2:45 pm	03/10/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C	03/15/2022 06:15	03/15/2022 17:01	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*107 %*	*69-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*105 %*	*81-117*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*117 %*	*79-122*

Analytical Batch Summary

Batch ID: BC22274 **Preparation Method:** EPA 5030B **Prepared By:** JTG

YORK Sample ID	Client Sample ID	Preparation Date
22C0596-01	Equipment Blank	03/15/22
22C0596-07	Trip Blank	03/15/22
BC22274-BLK1	Blank	03/15/22
BC22274-BS1	LCS	03/15/22
BC22274-BSD1	LCS Dup	03/15/22

Batch ID: BC22411 **Preparation Method:** EPA 5035A **Prepared By:** BMC

YORK Sample ID	Client Sample ID	Preparation Date
22C0596-02	SB-004 (0-2)	03/16/22
22C0596-03	SB-003 (0-2)	03/16/22
22C0596-04	DUP001	03/16/22
22C0596-05	SB-002 (0-2)	03/16/22
22C0596-06	SB-001 (0-2)	03/16/22
BC22411-BLK1	Blank	03/16/22
BC22411-BLK2	Blank	03/16/22
BC22411-BS1	LCS	03/16/22
BC22411-BSD1	LCS Dup	03/16/22
BC22411-MS1	Matrix Spike	03/16/22
BC22411-MSD1	Matrix Spike Dup	03/16/22

Batch ID: BC22435 **Preparation Method:** % Solids Prep **Prepared By:** JTG

YORK Sample ID	Client Sample ID	Preparation Date
22C0596-02	SB-004 (0-2)	03/17/22
22C0596-03	SB-003 (0-2)	03/17/22
22C0596-04	DUP001	03/17/22
22C0596-05	SB-002 (0-2)	03/17/22
22C0596-06	SB-001 (0-2)	03/17/22
BC22435-DUP1	Duplicate	03/17/22

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22274 - EPA 5030B											
Blank (BC22274-BLK1)											Prepared & Analyzed: 03/15/2022
1,1,1,2-Tetrachloroethane	ND	0.500	ug/L								
1,1,1-Trichloroethane	ND	0.500	"								
1,1,2,2-Tetrachloroethane	ND	0.500	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"								
1,1,2-Trichloroethane	ND	0.500	"								
1,1-Dichloroethane	ND	0.500	"								
1,1-Dichloroethylene	ND	0.500	"								
1,2,3-Trichlorobenzene	ND	0.500	"								
1,2,3-Trichloropropane	ND	0.500	"								
1,2,4-Trichlorobenzene	ND	0.500	"								
1,2,4-Trimethylbenzene	ND	0.500	"								
1,2-Dibromo-3-chloropropane	ND	0.500	"								
1,2-Dibromoethane	ND	0.500	"								
1,2-Dichlorobenzene	ND	0.500	"								
1,2-Dichloroethane	ND	0.500	"								
1,2-Dichloropropane	ND	0.500	"								
1,3,5-Trimethylbenzene	ND	0.500	"								
1,3-Dichlorobenzene	ND	0.500	"								
1,3-Dichloropropane	ND	0.500	"								
1,4-Dichlorobenzene	ND	0.500	"								
1,4-Dioxane	ND	80.0	"								
2-Butanone	ND	0.500	"								
2-Hexanone	ND	0.500	"								
4-Methyl-2-pentanone	ND	0.500	"								
Acetone	1.08	2.00	"								
Acrolein	ND	0.500	"								
Acrylonitrile	ND	0.500	"								
Benzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								
Carbon disulfide	ND	0.500	"								
Carbon tetrachloride	ND	0.500	"								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	0.290	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Cyclohexane	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								
Isopropylbenzene	ND	0.500	"								
Methyl acetate	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylcyclohexane	ND	0.500	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22274 - EPA 5030B											
Blank (BC22274-BLK1)								Prepared & Analyzed: 03/15/2022			
Methylene chloride	1.13	2.00	ug/L								
Naphthalene	ND	2.00	"								
n-Butylbenzene	ND	0.500	"								
n-Propylbenzene	ND	0.500	"								
o-Xylene	ND	0.500	"								
p- & m- Xylenes	ND	1.00	"								
p-Diethylbenzene	ND	0.500	"								
p-Ethyltoluene	ND	0.500	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butyl alcohol (TBA)	ND	1.00	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Xylenes, Total	ND	1.50	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.4*		*"*	*10.0*		*104*	*69-130*				
Surrogate: SURR: Toluene-d8	*10.4*		*"*	*10.0*		*104*	*81-117*				
Surrogate: SURR: p-Bromofluorobenzene	*11.8*		*"*	*10.0*		*118*	*79-122*				
LCS (BC22274-BS1)								Prepared & Analyzed: 03/15/2022			
1,1,1,2-Tetrachloroethane	8.72		ug/L	10.0		87.2	82-126				
1,1,1-Trichloroethane	8.89		"	10.0		88.9	78-136				
1,1,2,2-Tetrachloroethane	9.77		"	10.0		97.7	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.16		"	10.0		91.6	54-165				
1,1,2-Trichloroethane	7.95		"	10.0		79.5	82-123	Low Bias			
1,1-Dichloroethane	9.38		"	10.0		93.8	82-129				
1,1-Dichloroethylene	10.0		"	10.0		100	68-138				
1,2,3-Trichlorobenzene	8.12		"	10.0		81.2	76-136				
1,2,3-Trichloropropane	9.59		"	10.0		95.9	77-128				
1,2,4-Trichlorobenzene	8.33		"	10.0		83.3	76-137				
1,2,4-Trimethylbenzene	10.5		"	10.0		105	82-132				
1,2-Dibromo-3-chloropropane	7.27		"	10.0		72.7	45-147				
1,2-Dibromoethane	7.89		"	10.0		78.9	83-124	Low Bias			
1,2-Dichlorobenzene	9.89		"	10.0		98.9	79-123				
1,2-Dichloroethane	8.88		"	10.0		88.8	73-132				
1,2-Dichloropropane	10.2		"	10.0		102	78-126				
1,3,5-Trimethylbenzene	10.7		"	10.0		107	80-131				
1,3-Dichlorobenzene	9.32		"	10.0		93.2	86-122				
1,3-Dichloropropane	8.41		"	10.0		84.1	81-125				
1,4-Dichlorobenzene	9.48		"	10.0		94.8	85-124				
1,4-Dioxane	212		"	210		101	10-349				
2-Butanone	8.15		"	10.0		81.5	49-152				
2-Hexanone	8.71		"	10.0		87.1	51-146				
4-Methyl-2-pentanone	8.81		"	10.0		88.1	57-145				
Acetone	10.2		"	10.0		102	14-150				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22274 - EPA 5030B											
LCS (BC22274-BS1)								Prepared & Analyzed: 03/15/2022			
Acrolein	5.18		ug/L	10.0		51.8	10-153				
Acrylonitrile	8.44		"	10.0		84.4	51-150				
Benzene	8.89		"	10.0		88.9	85-126				
Bromochloromethane	9.13		"	10.0		91.3	77-128				
Bromodichloromethane	8.74		"	10.0		87.4	79-128				
Bromoform	7.64		"	10.0		76.4	78-133	Low Bias			
Bromomethane	4.41		"	10.0		44.1	43-168				
Carbon disulfide	8.24		"	10.0		82.4	68-146				
Carbon tetrachloride	8.97		"	10.0		89.7	77-141				
Chlorobenzene	9.35		"	10.0		93.5	88-120				
Chloroethane	10.2		"	10.0		102	65-136				
Chloroform	8.97		"	10.0		89.7	82-128				
Chloromethane	12.4		"	10.0		124	43-155				
cis-1,2-Dichloroethylene	9.43		"	10.0		94.3	83-129				
cis-1,3-Dichloropropylene	8.58		"	10.0		85.8	80-131				
Cyclohexane	7.29		"	10.0		72.9	63-149				
Dibromochloromethane	7.46		"	10.0		74.6	80-130	Low Bias			
Dibromomethane	8.18		"	10.0		81.8	72-134				
Dichlorodifluoromethane	13.0		"	10.0		130	44-144				
Ethyl Benzene	10.1		"	10.0		101	80-131				
Hexachlorobutadiene	8.61		"	10.0		86.1	67-146				
Isopropylbenzene	11.4		"	10.0		114	76-140				
Methyl acetate	8.54		"	10.0		85.4	51-139				
Methyl tert-butyl ether (MTBE)	8.03		"	10.0		80.3	76-135				
Methylcyclohexane	9.49		"	10.0		94.9	72-143				
Methylene chloride	11.3		"	10.0		113	55-137				
Naphthalene	8.14		"	10.0		81.4	70-147				
n-Butylbenzene	10.1		"	10.0		101	79-132				
n-Propylbenzene	11.5		"	10.0		115	78-133				
o-Xylene	9.94		"	10.0		99.4	78-130				
p- & m- Xylenes	17.3		"	20.0		86.6	77-133				
p-Diethylbenzene	9.84		"	10.0		98.4	84-134				
p-Ethyltoluene	12.2		"	10.0		122	88-129				
p-Isopropyltoluene	10.5		"	10.0		105	81-136				
sec-Butylbenzene	10.7		"	10.0		107	79-137				
Styrene	8.95		"	10.0		89.5	67-132				
tert-Butyl alcohol (TBA)	42.4		"	50.0		84.8	25-162				
tert-Butylbenzene	8.76		"	10.0		87.6	77-138				
Tetrachloroethylene	8.99		"	10.0		89.9	82-131				
Toluene	9.52		"	10.0		95.2	80-127				
trans-1,2-Dichloroethylene	9.52		"	10.0		95.2	80-132				
trans-1,3-Dichloropropylene	8.14		"	10.0		81.4	78-131				
Trichloroethylene	9.06		"	10.0		90.6	82-128				
Trichlorofluoromethane	10.9		"	10.0		109	67-139				
Vinyl Chloride	11.4		"	10.0		114	58-145				
Surrogate: SURR: 1,2-Dichloroethane-d4	*9.75*		*"*	*10.0*		*97.5*	*69-130*				
Surrogate: SURR: Toluene-d8	*10.2*		*"*	*10.0*		*102*	*81-117*				
Surrogate: SURR: p-Bromofluorobenzene	*11.3*		*"*	*10.0*		*113*	*79-122*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22274 - EPA 5030B											
LCS Dup (BC22274-BSD1)								Prepared & Analyzed: 03/15/2022			
1,1,1,2-Tetrachloroethane	8.54		ug/L	10.0		85.4	82-126		2.09	30	
1,1,1-Trichloroethane	8.46		"	10.0		84.6	78-136		4.96	30	
1,1,2,2-Tetrachloroethane	9.72		"	10.0		97.2	76-129		0.513	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.65		"	10.0		86.5	54-165		5.73	30	
1,1,2-Trichloroethane	8.08		"	10.0		80.8	82-123	Low Bias	1.62	30	
1,1-Dichloroethane	8.99		"	10.0		89.9	82-129		4.25	30	
1,1-Dichloroethylene	9.45		"	10.0		94.5	68-138		6.15	30	
1,2,3-Trichlorobenzene	8.25		"	10.0		82.5	76-136		1.59	30	
1,2,3-Trichloropropane	9.53		"	10.0		95.3	77-128		0.628	30	
1,2,4-Trichlorobenzene	8.40		"	10.0		84.0	76-137		0.837	30	
1,2,4-Trimethylbenzene	9.95		"	10.0		99.5	82-132		5.00	30	
1,2-Dibromo-3-chloropropane	7.43		"	10.0		74.3	45-147		2.18	30	
1,2-Dibromoethane	8.15		"	10.0		81.5	83-124	Low Bias	3.24	30	
1,2-Dichlorobenzene	9.64		"	10.0		96.4	79-123		2.56	30	
1,2-Dichloroethane	9.03		"	10.0		90.3	73-132		1.68	30	
1,2-Dichloropropane	9.99		"	10.0		99.9	78-126		2.18	30	
1,3,5-Trimethylbenzene	10.1		"	10.0		101	80-131		6.15	30	
1,3-Dichlorobenzene	9.01		"	10.0		90.1	86-122		3.38	30	
1,3-Dichloropropane	8.47		"	10.0		84.7	81-125		0.711	30	
1,4-Dichlorobenzene	9.16		"	10.0		91.6	85-124		3.43	30	
1,4-Dioxane	222		"	210		105	10-349		4.37	30	
2-Butanone	8.55		"	10.0		85.5	49-152		4.79	30	
2-Hexanone	9.47		"	10.0		94.7	51-146		8.36	30	
4-Methyl-2-pentanone	9.49		"	10.0		94.9	57-145		7.43	30	
Acetone	10.2		"	10.0		102	14-150		0.196	30	
Acrolein	5.62		"	10.0		56.2	10-153		8.15	30	
Acrylonitrile	8.75		"	10.0		87.5	51-150		3.61	30	
Benzene	8.57		"	10.0		85.7	85-126		3.67	30	
Bromochloromethane	9.23		"	10.0		92.3	77-128		1.09	30	
Bromodichloromethane	8.60		"	10.0		86.0	79-128		1.61	30	
Bromoform	8.00		"	10.0		80.0	78-133		4.60	30	
Bromomethane	3.95		"	10.0		39.5	43-168	Low Bias	11.0	30	
Carbon disulfide	7.83		"	10.0		78.3	68-146		5.10	30	
Carbon tetrachloride	8.60		"	10.0		86.0	77-141		4.21	30	
Chlorobenzene	9.13		"	10.0		91.3	88-120		2.38	30	
Chloroethane	9.45		"	10.0		94.5	65-136		7.44	30	
Chloroform	8.76		"	10.0		87.6	82-128		2.37	30	
Chloromethane	11.5		"	10.0		115	43-155		7.28	30	
cis-1,2-Dichloroethylene	9.07		"	10.0		90.7	83-129		3.89	30	
cis-1,3-Dichloropropylene	8.51		"	10.0		85.1	80-131		0.819	30	
Cyclohexane	6.93		"	10.0		69.3	63-149		5.06	30	
Dibromochloromethane	7.65		"	10.0		76.5	80-130	Low Bias	2.51	30	
Dibromomethane	8.21		"	10.0		82.1	72-134		0.366	30	
Dichlorodifluoromethane	11.9		"	10.0		119	44-144		8.36	30	
Ethyl Benzene	9.70		"	10.0		97.0	80-131		3.94	30	
Hexachlorobutadiene	9.17		"	10.0		91.7	67-146		6.30	30	
Isopropylbenzene	10.4		"	10.0		104	76-140		8.62	30	
Methyl acetate	8.85		"	10.0		88.5	51-139		3.57	30	
Methyl tert-butyl ether (MTBE)	8.29		"	10.0		82.9	76-135		3.19	30	
Methylcyclohexane	9.09		"	10.0		90.9	72-143		4.31	30	
Methylene chloride	12.5		"	10.0		125	55-137		10.6	30	

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22274 - EPA 5030B											
LCS Dup (BC22274-BSD1)									Prepared & Analyzed: 03/15/2022		
Naphthalene	8.39		ug/L	10.0		83.9	70-147		3.02	30	
n-Butylbenzene	9.83		"	10.0		98.3	79-132		2.31	30	
n-Propylbenzene	10.6		"	10.0		106	78-133		7.86	30	
o-Xylene	9.64		"	10.0		96.4	78-130		3.06	30	
p- & m- Xylenes	16.6		"	20.0		83.0	77-133		4.25	30	
p-Diethylbenzene	9.59		"	10.0		95.9	84-134		2.57	30	
p-Ethyltoluene	11.4		"	10.0		114	88-129		6.96	30	
p-Isopropyltoluene	10.1		"	10.0		101	81-136		3.99	30	
sec-Butylbenzene	10.1		"	10.0		101	79-137		5.19	30	
Styrene	8.84		"	10.0		88.4	67-132		1.24	30	
tert-Butyl alcohol (TBA)	51.5		"	50.0		103	25-162		19.4	30	
tert-Butylbenzene	8.23		"	10.0		82.3	77-138		6.24	30	
Tetrachloroethylene	8.61		"	10.0		86.1	82-131		4.32	30	
Toluene	9.13		"	10.0		91.3	80-127		4.18	30	
trans-1,2-Dichloroethylene	9.03		"	10.0		90.3	80-132		5.28	30	
trans-1,3-Dichloropropylene	8.21		"	10.0		82.1	78-131		0.856	30	
Trichloroethylene	8.54		"	10.0		85.4	82-128		5.91	30	
Trichlorofluoromethane	10.2		"	10.0		102	67-139		6.51	30	
Vinyl Chloride	10.0		"	10.0		100	58-145		13.3	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.2*		*"*	*10.0*		*102*	*69-130*				
Surrogate: SURR: Toluene-d8	*10.1*		*"*	*10.0*		*101*	*81-117*				
Surrogate: SURR: p-Bromofluorobenzene	*11.0*		*"*	*10.0*		*110*	*79-122*				
Batch BC22411 - EPA 5035A											
Blank (BC22411-BLK1)									Prepared: 03/16/2022 Analyzed: 03/17/2022		
1,1,1,2-Tetrachloroethane	ND	0.0050	mg/kg wet								
1,1,1-Trichloroethane	ND	0.0050	"								
1,1,2,2-Tetrachloroethane	ND	0.0050	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0050	"								
1,1,2-Trichloroethane	ND	0.0050	"								
1,1-Dichloroethane	ND	0.0050	"								
1,1-Dichloroethylene	ND	0.0050	"								
1,1-Dichloropropylene	ND	0.0050	"								
1,2,3-Trichlorobenzene	ND	0.0050	"								
1,2,3-Trichloropropane	ND	0.0050	"								
1,2,4-Trichlorobenzene	ND	0.0050	"								
1,2,4-Trimethylbenzene	ND	0.0050	"								
1,2-Dibromo-3-chloropropane	ND	0.0050	"								
1,2-Dibromoethane	ND	0.0050	"								
1,2-Dichlorobenzene	ND	0.0050	"								
1,2-Dichloroethane	ND	0.0050	"								
1,2-Dichloropropane	ND	0.0050	"								
1,3,5-Trimethylbenzene	ND	0.0050	"								
1,3-Dichlorobenzene	ND	0.0050	"								
1,3-Dichloropropane	ND	0.0050	"								
1,4-Dichlorobenzene	ND	0.0050	"								
1,4-Dioxane	ND	0.10	"								
2,2-Dichloropropane	ND	0.0050	"								
2-Butanone	ND	0.0050	"								
2-Chlorotoluene	ND	0.0050	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
Blank (BC22411-BLK1)											
Prepared: 03/16/2022 Analyzed: 03/17/2022											
2-Hexanone	ND	0.0050	mg/kg wet								
4-Chlorotoluene	ND	0.0050	"								
4-Methyl-2-pentanone	ND	0.0050	"								
Acetone	ND	0.010	"								
Acrolein	ND	0.010	"								
Acrylonitrile	ND	0.0050	"								
Benzene	ND	0.0050	"								
Bromobenzene	ND	0.0050	"								
Bromochloromethane	ND	0.0050	"								
Bromodichloromethane	ND	0.0050	"								
Bromoform	ND	0.0050	"								
Bromomethane	ND	0.0050	"								
Carbon disulfide	ND	0.0050	"								
Carbon tetrachloride	ND	0.0050	"								
Chlorobenzene	ND	0.0050	"								
Chloroethane	ND	0.0050	"								
Chloroform	ND	0.0050	"								
Chloromethane	ND	0.0050	"								
cis-1,2-Dichloroethylene	ND	0.0050	"								
cis-1,3-Dichloropropylene	ND	0.0050	"								
Cyclohexane	ND	0.0050	"								
Dibromochloromethane	ND	0.0050	"								
Dibromomethane	ND	0.0050	"								
Dichlorodifluoromethane	ND	0.0050	"								
Ethyl Benzene	ND	0.0050	"								
Hexachlorobutadiene	ND	0.0050	"								
Isopropylbenzene	ND	0.0050	"								
Methyl acetate	ND	0.0050	"								
Methyl tert-butyl ether (MTBE)	ND	0.0050	"								
Methylcyclohexane	ND	0.0050	"								
Methylene chloride	ND	0.010	"								
n-Butylbenzene	ND	0.0050	"								
n-Propylbenzene	ND	0.0050	"								
o-Xylene	ND	0.0050	"								
p- & m- Xylenes	ND	0.010	"								
p-Isopropyltoluene	ND	0.0050	"								
sec-Butylbenzene	ND	0.0050	"								
Styrene	ND	0.0050	"								
tert-Butyl alcohol (TBA)	ND	0.0050	"								
tert-Butylbenzene	ND	0.0050	"								
Tetrachloroethylene	ND	0.0050	"								
Toluene	ND	0.0050	"								
trans-1,2-Dichloroethylene	ND	0.0050	"								
trans-1,3-Dichloropropylene	ND	0.0050	"								
Trichloroethylene	ND	0.0050	"								
Trichlorofluoromethane	ND	0.0050	"								
Vinyl acetate	ND	0.0050	"								
Vinyl Chloride	ND	0.0050	"								
Xylenes, Total	ND	0.015	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	*49.5*		*ug/L*	*50.0*		*99.0*	*77-125*				
Surrogate: SURR: Toluene-d8	*49.0*		*"*	*50.0*		*98.1*	*85-120*				

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
Blank (BC22411-BLK1)											Prepared: 03/16/2022 Analyzed: 03/17/2022
Surrogate: SURR: p-Bromofluorobenzene	*54.9*		*ug/L*	*50.0*		*110*	*76-130*				
Blank (BC22411-BLK2)											Prepared: 03/16/2022 Analyzed: 03/17/2022
1,1,1,2-Tetrachloroethane	ND	0.0050	mg/kg wet								
1,1,1-Trichloroethane	ND	0.0050	"								
1,1,2,2-Tetrachloroethane	ND	0.0050	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0050	"								
1,1,2-Trichloroethane	ND	0.0050	"								
1,1-Dichloroethane	ND	0.0050	"								
1,1-Dichloroethylene	ND	0.0050	"								
1,1-Dichloropropylene	ND	0.0050	"								
1,2,3-Trichlorobenzene	ND	0.0050	"								
1,2,3-Trichloropropane	ND	0.0050	"								
1,2,4-Trichlorobenzene	ND	0.0050	"								
1,2,4-Trimethylbenzene	ND	0.0050	"								
1,2-Dibromo-3-chloropropane	ND	0.0050	"								
1,2-Dibromoethane	ND	0.0050	"								
1,2-Dichlorobenzene	ND	0.0050	"								
1,2-Dichloroethane	ND	0.0050	"								
1,2-Dichloropropane	ND	0.0050	"								
1,3,5-Trimethylbenzene	ND	0.0050	"								
1,3-Dichlorobenzene	ND	0.0050	"								
1,3-Dichloropropane	ND	0.0050	"								
1,4-Dichlorobenzene	ND	0.0050	"								
1,4-Dioxane	ND	0.10	"								
2,2-Dichloropropane	ND	0.0050	"								
2-Butanone	ND	0.0050	"								
2-Chlorotoluene	ND	0.0050	"								
2-Hexanone	ND	0.0050	"								
4-Chlorotoluene	ND	0.0050	"								
4-Methyl-2-pentanone	ND	0.0050	"								
Acetone	ND	0.010	"								
Acrolein	ND	0.010	"								
Acrylonitrile	ND	0.0050	"								
Benzene	ND	0.0050	"								
Bromobenzene	ND	0.0050	"								
Bromochloromethane	ND	0.0050	"								
Bromodichloromethane	ND	0.0050	"								
Bromoform	ND	0.0050	"								
Bromomethane	ND	0.0050	"								
Carbon disulfide	ND	0.0050	"								
Carbon tetrachloride	ND	0.0050	"								
Chlorobenzene	ND	0.0050	"								
Chloroethane	ND	0.0050	"								
Chloroform	ND	0.0050	"								
Chloromethane	ND	0.0050	"								
cis-1,2-Dichloroethylene	ND	0.0050	"								
cis-1,3-Dichloropropylene	ND	0.0050	"								
Cyclohexane	ND	0.0050	"								
Dibromochloromethane	ND	0.0050	"								
Dibromomethane	ND	0.0050	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
Blank (BC22411-BLK2)											Prepared: 03/16/2022 Analyzed: 03/17/2022
Dichlorodifluoromethane	ND	0.0050	mg/kg wet								
Ethyl Benzene	ND	0.0050	"								
Hexachlorobutadiene	ND	0.0050	"								
Isopropylbenzene	ND	0.0050	"								
Methyl acetate	ND	0.0050	"								
Methyl tert-butyl ether (MTBE)	ND	0.0050	"								
Methylcyclohexane	ND	0.0050	"								
Methylene chloride	ND	0.010	"								
n-Butylbenzene	ND	0.0050	"								
n-Propylbenzene	ND	0.0050	"								
o-Xylene	ND	0.0050	"								
p- & m- Xylenes	ND	0.010	"								
p-Isopropyltoluene	ND	0.0050	"								
sec-Butylbenzene	ND	0.0050	"								
Styrene	ND	0.0050	"								
tert-Butyl alcohol (TBA)	ND	0.0050	"								
tert-Butylbenzene	ND	0.0050	"								
Tetrachloroethylene	ND	0.0050	"								
Toluene	ND	0.0050	"								
trans-1,2-Dichloroethylene	ND	0.0050	"								
trans-1,3-Dichloropropylene	ND	0.0050	"								
Trichloroethylene	ND	0.0050	"								
Trichlorofluoromethane	ND	0.0050	"								
Vinyl acetate	ND	0.0050	"								
Vinyl Chloride	ND	0.0050	"								
Xylenes, Total	ND	0.015	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	*49.7*		*ug/L*	*50.0*		*99.3*	*77-125*				
Surrogate: SURR: Toluene-d8	*49.5*		*"*	*50.0*		*99.0*	*85-120*				
Surrogate: SURR: p-Bromofluorobenzene	*53.2*		*"*	*50.0*		*106*	*76-130*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
LCS (BC22411-BS1)								Prepared: 03/16/2022 Analyzed: 03/17/2022			
1,1,1,2-Tetrachloroethane	45.0		ug/L	50.0		89.9	75-129				
1,1,1-Trichloroethane	43.2		"	50.0		86.4	71-137				
1,1,2,2-Tetrachloroethane	46.9		"	50.0		93.8	79-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	41.3		"	50.0		82.7	58-146				
1,1,2-Trichloroethane	45.2		"	50.0		90.3	83-123				
1,1-Dichloroethane	42.1		"	50.0		84.3	75-130				
1,1-Dichloroethylene	40.5		"	50.0		81.1	64-137				
1,1-Dichloropropylene	39.8		"	50.0		79.5	77-127				
1,2,3-Trichlorobenzene	42.3		"	50.0		84.6	81-140				
1,2,3-Trichloropropane	48.3		"	50.0		96.5	81-126				
1,2,4-Trichlorobenzene	40.4		"	50.0		80.8	80-141				
1,2,4-Trimethylbenzene	44.9		"	50.0		89.8	84-125				
1,2-Dibromo-3-chloropropane	48.1		"	50.0		96.3	74-142				
1,2-Dibromoethane	46.2		"	50.0		92.3	86-123				
1,2-Dichlorobenzene	44.7		"	50.0		89.3	85-122				
1,2-Dichloroethane	43.6		"	50.0		87.1	71-133				
1,2-Dichloropropane	46.5		"	50.0		92.9	81-122				
1,3,5-Trimethylbenzene	44.0		"	50.0		87.9	82-126				
1,3-Dichlorobenzene	43.3		"	50.0		86.6	84-124				
1,3-Dichloropropane	45.3		"	50.0		90.7	83-123				
1,4-Dichlorobenzene	42.8		"	50.0		85.6	84-124				
1,4-Dioxane	1010		"	1050		95.9	10-228				
2,2-Dichloropropane	40.8		"	50.0		81.6	67-136				
2-Butanone	40.9		"	50.0		81.7	58-147				
2-Chlorotoluene	44.8		"	50.0		89.6	78-127				
2-Hexanone	44.2		"	50.0		88.3	70-139				
4-Chlorotoluene	44.5		"	50.0		89.0	79-125				
4-Methyl-2-pentanone	35.3		"	50.0		70.7	72-132	Low Bias			
Acetone	29.4		"	50.0		58.7	36-155				
Acrolein	9.43		"	50.0		18.9	10-238				
Acrylonitrile	42.8		"	50.0		85.7	66-141				
Benzene	43.6		"	50.0		87.2	77-127				
Bromobenzene	45.7		"	50.0		91.5	77-129				
Bromochloromethane	43.4		"	50.0		86.8	74-129				
Bromodichloromethane	45.2		"	50.0		90.4	81-124				
Bromoform	47.9		"	50.0		95.8	80-136				
Bromomethane	35.0		"	50.0		69.9	32-177				
Carbon disulfide	41.5		"	50.0		82.9	10-136				
Carbon tetrachloride	42.4		"	50.0		84.8	66-143				
Chlorobenzene	46.2		"	50.0		92.5	86-120				
Chloroethane	39.0		"	50.0		77.9	51-142				
Chloroform	43.2		"	50.0		86.4	76-131				
Chloromethane	34.2		"	50.0		68.4	49-132				
cis-1,2-Dichloroethylene	41.4		"	50.0		82.9	74-132				
cis-1,3-Dichloropropylene	41.6		"	50.0		83.1	81-129				
Cyclohexane	41.4		"	50.0		82.8	70-130				
Dibromochloromethane	45.7		"	50.0		91.4	10-200				
Dibromomethane	44.6		"	50.0		89.3	83-124				
Dichlorodifluoromethane	24.4		"	50.0		48.8	28-158				
Ethyl Benzene	44.6		"	50.0		89.2	84-125				
Hexachlorobutadiene	42.8		"	50.0		85.7	83-133				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
LCS (BC22411-BS1)								Prepared: 03/16/2022 Analyzed: 03/17/2022			
Isopropylbenzene	46.6		ug/L	50.0		93.1	81-127				
Methyl acetate	44.0		"	50.0		88.0	41-143				
Methyl tert-butyl ether (MTBE)	46.2		"	50.0		92.4	74-131				
Methylcyclohexane	42.7		"	50.0		85.4	70-130				
Methylene chloride	42.2		"	50.0		84.5	57-141				
n-Butylbenzene	40.6		"	50.0		81.2	80-130				
n-Propylbenzene	44.0		"	50.0		87.9	74-136				
o-Xylene	45.2		"	50.0		90.5	83-123				
p- & m- Xylenes	88.9		"	100		88.9	82-128				
p-Isopropyltoluene	43.9		"	50.0		87.8	85-125				
sec-Butylbenzene	44.4		"	50.0		88.9	83-125				
Styrene	43.6		"	50.0		87.1	86-126				
tert-Butyl alcohol (TBA)	290		"	250		116	70-130				
tert-Butylbenzene	39.7		"	50.0		79.4	80-127	Low Bias			
Tetrachloroethylene	39.2		"	50.0		78.4	80-129	Low Bias			
Toluene	44.0		"	50.0		88.0	85-121				
trans-1,2-Dichloroethylene	41.9		"	50.0		83.7	72-132				
trans-1,3-Dichloropropylene	42.8		"	50.0		85.7	78-132				
Trichloroethylene	44.9		"	50.0		89.9	84-123				
Trichlorofluoromethane	36.5		"	50.0		73.0	62-140				
Vinyl acetate	38.6		"	50.0		77.1	67-136				
Vinyl Chloride	35.2		"	50.0		70.5	52-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	*48.8*		*"*	*50.0*		*97.6*	*77-125*				
Surrogate: SURR: Toluene-d8	*49.4*		*"*	*50.0*		*98.7*	*85-120*				
Surrogate: SURR: p-Bromofluorobenzene	*52.3*		*"*	*50.0*		*105*	*76-130*				
LCS Dup (BC22411-BSD1)								Prepared: 03/16/2022 Analyzed: 03/17/2022			
1,1,1,2-Tetrachloroethane	47.5		ug/L	50.0		95.1	75-129		5.56	30	
1,1,1-Trichloroethane	45.4		"	50.0		90.8	71-137		5.01	30	
1,1,2,2-Tetrachloroethane	48.4		"	50.0		96.9	79-129		3.25	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	43.3		"	50.0		86.7	58-146		4.70	30	
1,1,2-Trichloroethane	47.8		"	50.0		95.7	83-123		5.74	30	
1,1-Dichloroethane	45.4		"	50.0		90.8	75-130		7.49	30	
1,1-Dichloroethylene	42.2		"	50.0		84.3	64-137		3.89	30	
1,1-Dichloropropylene	42.7		"	50.0		85.3	77-127		7.01	30	
1,2,3-Trichlorobenzene	46.6		"	50.0		93.2	81-140		9.61	30	
1,2,3-Trichloropropane	49.0		"	50.0		98.0	81-126		1.52	30	
1,2,4-Trichlorobenzene	45.2		"	50.0		90.5	80-141		11.4	30	
1,2,4-Trimethylbenzene	48.2		"	50.0		96.4	84-125		7.13	30	
1,2-Dibromo-3-chloropropane	50.2		"	50.0		100	74-142		4.15	30	
1,2-Dibromoethane	48.5		"	50.0		97.0	86-123		4.95	30	
1,2-Dichlorobenzene	47.7		"	50.0		95.4	85-122		6.56	30	
1,2-Dichloroethane	45.8		"	50.0		91.6	71-133		4.97	30	
1,2-Dichloropropane	49.0		"	50.0		98.0	81-122		5.32	30	
1,3,5-Trimethylbenzene	46.9		"	50.0		93.9	82-126		6.58	30	
1,3-Dichlorobenzene	47.5		"	50.0		95.0	84-124		9.27	30	
1,3-Dichloropropane	46.8		"	50.0		93.6	83-123		3.17	30	
1,4-Dichlorobenzene	46.8		"	50.0		93.6	84-124		8.97	30	
1,4-Dioxane	1010		"	1050		96.6	10-228		0.733	30	
2,2-Dichloropropane	44.3		"	50.0		88.5	67-136		8.11	30	
2-Butanone	42.9		"	50.0		85.8	58-147		4.89	30	

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
LCS Dup (BC22411-BSD1)								Prepared: 03/16/2022 Analyzed: 03/17/2022			
2-Chlorotoluene	47.9		ug/L	50.0		95.7	78-127		6.58	30	
2-Hexanone	45.8		"	50.0		91.5	70-139		3.51	30	
4-Chlorotoluene	47.8		"	50.0		95.6	79-125		7.09	30	
4-Methyl-2-pentanone	36.2		"	50.0		72.4	72-132		2.43	30	
Acetone	31.3		"	50.0		62.6	36-155		6.36	30	
Acrolein	10.3		"	50.0		20.7	10-238		9.11	30	
Acrylonitrile	45.5		"	50.0		91.0	66-141		6.07	30	
Benzene	46.2		"	50.0		92.4	77-127		5.81	30	
Bromobenzene	48.2		"	50.0		96.5	77-129		5.32	30	
Bromochloromethane	45.5		"	50.0		91.1	74-129		4.81	30	
Bromodichloromethane	47.3		"	50.0		94.6	81-124		4.48	30	
Bromoform	49.3		"	50.0		98.7	80-136		2.92	30	
Bromomethane	37.2		"	50.0		74.5	32-177		6.34	30	
Carbon disulfide	44.2		"	50.0		88.3	10-136		6.28	30	
Carbon tetrachloride	45.5		"	50.0		91.1	66-143		7.09	30	
Chlorobenzene	48.4		"	50.0		96.7	86-120		4.46	30	
Chloroethane	40.4		"	50.0		80.9	51-142		3.68	30	
Chloroform	46.5		"	50.0		92.9	76-131		7.29	30	
Chloromethane	36.3		"	50.0		72.6	49-132		5.93	30	
cis-1,2-Dichloroethylene	44.8		"	50.0		89.6	74-132		7.77	30	
cis-1,3-Dichloropropylene	44.6		"	50.0		89.1	81-129		6.99	30	
Cyclohexane	43.4		"	50.0		86.8	70-130		4.67	30	
Dibromochloromethane	47.8		"	50.0		95.5	10-200		4.41	30	
Dibromomethane	46.8		"	50.0		93.7	83-124		4.83	30	
Dichlorodifluoromethane	25.6		"	50.0		51.1	28-158		4.60	30	
Ethyl Benzene	47.3		"	50.0		94.6	84-125		5.83	30	
Hexachlorobutadiene	46.4		"	50.0		92.7	83-133		7.92	30	
Isopropylbenzene	49.0		"	50.0		98.1	81-127		5.19	30	
Methyl acetate	45.3		"	50.0		90.7	41-143		2.95	30	
Methyl tert-butyl ether (MTBE)	48.3		"	50.0		96.6	74-131		4.49	30	
Methylcyclohexane	44.9		"	50.0		89.8	70-130		5.09	30	
Methylene chloride	45.7		"	50.0		91.4	57-141		7.89	30	
n-Butylbenzene	44.4		"	50.0		88.7	80-130		8.87	30	
n-Propylbenzene	46.7		"	50.0		93.4	74-136		6.02	30	
o-Xylene	48.3		"	50.0		96.6	83-123		6.54	30	
p- & m- Xylenes	95.1		"	100		95.1	82-128		6.69	30	
p-Isopropyltoluene	47.2		"	50.0		94.4	85-125		7.22	30	
sec-Butylbenzene	47.3		"	50.0		94.7	83-125		6.28	30	
Styrene	46.3		"	50.0		92.6	86-126		6.08	30	
tert-Butyl alcohol (TBA)	292		"	250		117	70-130		0.591	30	
tert-Butylbenzene	42.0		"	50.0		83.9	80-127		5.61	30	
Tetrachloroethylene	41.7		"	50.0		83.5	80-129		6.28	30	
Toluene	46.7		"	50.0		93.4	85-121		5.95	30	
trans-1,2-Dichloroethylene	44.8		"	50.0		89.6	72-132		6.74	30	
trans-1,3-Dichloropropylene	45.4		"	50.0		90.8	78-132		5.80	30	
Trichloroethylene	47.9		"	50.0		95.8	84-123		6.36	30	
Trichlorofluoromethane	38.9		"	50.0		77.8	62-140		6.31	30	
Vinyl acetate	41.4		"	50.0		82.9	67-136		7.15	30	
Vinyl Chloride	36.8		"	50.0		73.6	52-130		4.25	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	*48.0*		*"*	*50.0*		*96.0*	*77-125*				
Surrogate: SURR: Toluene-d8	*49.5*		*"*	*50.0*		*99.0*	*85-120*				

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
LCS Dup (BC22411-BSD1)								Prepared: 03/16/2022 Analyzed: 03/17/2022			
Surrogate: SURR: p-Bromofluorobenzene	*51.4*		*ug/L*	*50.0*		*103*	*76-130*				
Matrix Spike (BC22411-MS1)	*Source sample: 22C0658-01 (Matrix Spike)							Prepared: 03/16/2022 Analyzed: 03/17/2022			
1,1,1,2-Tetrachloroethane	19.8		ug/L	50.0	0.00	39.6	15-161				
1,1,1-Trichloroethane	27.8		"	50.0	0.00	55.6	42-145				
1,1,2,2-Tetrachloroethane	20.7		"	50.0	0.00	41.4	16-167				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	28.8		"	50.0	0.00	57.6	11-160				
1,1,2-Trichloroethane	24.2		"	50.0	0.00	48.5	44-145				
1,1-Dichloroethane	29.2		"	50.0	0.00	58.5	46-142				
1,1-Dichloroethylene	28.0		"	50.0	0.00	56.1	30-153				
1,1-Dichloropropylene	25.2		"	50.0	0.00	50.4	40-133				
1,2,3-Trichlorobenzene	6.57		"	50.0	0.00	13.1	10-157				
1,2,3-Trichloropropane	23.3		"	50.0	0.00	46.6	38-155				
1,2,4-Trichlorobenzene	7.00		"	50.0	0.00	14.0	10-151				
1,2,4-Trimethylbenzene	18.6		"	50.0	0.00	37.2	10-170				
1,2-Dibromo-3-chloropropane	15.2		"	50.0	0.00	30.3	36-138	Low Bias			
1,2-Dibromoethane	19.7		"	50.0	0.00	39.3	40-142	Low Bias			
1,2-Dichlorobenzene	11.9		"	50.0	0.00	23.8	10-147				
1,2-Dichloroethane	25.2		"	50.0	0.00	50.4	48-133				
1,2-Dichloropropane	28.1		"	50.0	0.00	56.2	47-141				
1,3,5-Trimethylbenzene	19.0		"	50.0	0.00	38.0	10-150				
1,3-Dichlorobenzene	12.9		"	50.0	0.00	25.8	10-144				
1,3-Dichloropropane	23.1		"	50.0	0.00	46.2	43-142				
1,4-Dichlorobenzene	11.8		"	50.0	0.00	23.6	10-160				
1,4-Dioxane	771		"	1050	0.00	73.4	10-191				
2,2-Dichloropropane	24.1		"	50.0	0.00	48.3	38-130				
2-Butanone	7.59		"	50.0	0.00	15.2	10-189				
2-Chlorotoluene	18.1		"	50.0	0.00	36.1	14-144				
2-Hexanone	0.00		"	50.0	0.00		10-181	Low Bias			
4-Chlorotoluene	16.1		"	50.0	0.00	32.2	15-138				
4-Methyl-2-pentanone	8.60		"	50.0	0.00	17.2	10-166				
Acetone	12.2		"	50.0	0.00	24.3	10-196				
Acrolein	3.82		"	50.0	0.00	7.64	10-192	Low Bias			
Acrylonitrile	8.82		"	50.0	0.00	17.6	13-161				
Benzene	26.4		"	50.0	0.00	52.9	43-139				
Bromobenzene	16.0		"	50.0	0.00	32.1	23-142				
Bromochloromethane	24.5		"	50.0	0.00	49.0	38-145				
Bromodichloromethane	23.1		"	50.0	0.00	46.2	38-147				
Bromoform	14.1		"	50.0	0.00	28.2	29-156	Low Bias			
Bromomethane	12.5		"	50.0	0.00	24.9	10-166				
Carbon disulfide	23.1		"	50.0	0.00	46.2	10-131				
Carbon tetrachloride	24.4		"	50.0	0.00	48.8	35-145				
Chlorobenzene	19.5		"	50.0	0.00	38.9	21-154				
Chloroethane	26.3		"	50.0	0.00	52.6	15-160				
Chloroform	27.7		"	50.0	0.00	55.4	47-142				
Chloromethane	22.2		"	50.0	0.00	44.5	10-159				
cis-1,2-Dichloroethylene	23.7		"	50.0	0.00	47.3	42-144				
cis-1,3-Dichloropropylene	15.1		"	50.0	0.00	30.2	18-159				
Cyclohexane	25.8		"	50.0	0.00	51.7	70-130	Low Bias			
Dibromochloromethane	18.2		"	50.0	0.00	36.3	10-179				
Dibromomethane	23.7		"	50.0	0.00	47.4	47-143				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
Matrix Spike (BC22411-MS1)	*Source sample: 22C0658-01 (Matrix Spike)							Prepared: 03/16/2022 Analyzed: 03/17/2022			
Dichlorodifluoromethane	19.2		ug/L	50.0	0.00	38.4	10-145				
Ethyl Benzene	21.9		"	50.0	0.00	43.7	11-158				
Hexachlorobutadiene	7.64		"	50.0	0.00	15.3	10-158				
Isopropylbenzene	22.5		"	50.0	0.00	45.0	10-162				
Methyl acetate	4.73		"	50.0	0.00	9.46	10-149	Low Bias			
Methyl tert-butyl ether (MTBE)	32.9		"	50.0	0.00	65.9	42-152				
Methylcyclohexane	22.4		"	50.0	0.00	44.9	70-130	Low Bias			
Methylene chloride	35.6		"	50.0	0.00	71.3	28-151				
n-Butylbenzene	12.3		"	50.0	0.00	24.5	10-162				
n-Propylbenzene	19.1		"	50.0	0.00	38.2	10-155				
o-Xylene	21.2		"	50.0	0.00	42.4	10-158				
p- & m- Xylenes	42.9		"	100	0.00	42.9	10-156				
p-Isopropyltoluene	15.8		"	50.0	0.00	31.7	10-147				
sec-Butylbenzene	17.5		"	50.0	0.00	35.0	10-157				
Styrene	13.9		"	50.0	0.00	27.9	13-171				
tert-Butyl alcohol (TBA)	175		"	250	0.00	69.9	34-179				
tert-Butylbenzene	17.4		"	50.0	0.00	34.9	10-160				
Tetrachloroethylene	22.2		"	50.0	0.00	44.3	30-167				
Toluene	24.3		"	50.0	0.00	48.6	21-160				
trans-1,2-Dichloroethylene	25.2		"	50.0	0.00	50.3	29-153				
trans-1,3-Dichloropropylene	12.8		"	50.0	0.00	25.7	18-155				
Trichloroethylene	26.2		"	50.0	0.00	52.4	24-169				
Trichlorofluoromethane	24.2		"	50.0	0.00	48.4	35-142				
Vinyl acetate	14.0		"	50.0	0.00	28.1	10-119				
Vinyl Chloride	24.5		"	50.0	0.00	49.0	12-160				
Surrogate: SURR: 1,2-Dichloroethane-d4	*51.0*		*"*	*50.0*		*102*	*77-125*				
Surrogate: SURR: Toluene-d8	*49.8*		*"*	*50.0*		*99.7*	*85-120*				
Surrogate: SURR: p-Bromofluorobenzene	*54.4*		*"*	*50.0*		*109*	*76-130*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
Matrix Spike Dup (BC22411-MSD1)	*Source sample: 22C0658-01 (Matrix Spike Dup)								Prepared: 03/16/2022 Analyzed: 03/17/2022		
1,1,1,2-Tetrachloroethane	21.2		ug/L	50.0	0.00	42.4	15-161		6.68	33	
1,1,1-Trichloroethane	30.6		"	50.0	0.00	61.3	42-145		9.79	30	
1,1,2,2-Tetrachloroethane	22.2		"	50.0	0.00	44.3	16-167		6.82	56	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	29.7		"	50.0	0.00	59.4	11-160		2.97	31	
1,1,2-Trichloroethane	25.6		"	50.0	0.00	51.2	44-145		5.46	40	
1,1-Dichloroethane	31.5		"	50.0	0.00	63.0	46-142		7.44	36	
1,1-Dichloroethylene	28.5		"	50.0	0.00	57.0	30-153		1.66	31	
1,1-Dichloropropylene	25.2		"	50.0	0.00	50.3	40-133		0.159	28	
1,2,3-Trichlorobenzene	4.58		"	50.0	0.00	9.16	10-157	Low Bias	35.7	47	
1,2,3-Trichloropropane	23.8		"	50.0	0.00	47.7	38-155		2.21	48	
1,2,4-Trichlorobenzene	4.71		"	50.0	0.00	9.42	10-151	Low Bias	39.1	52	
1,2,4-Trimethylbenzene	15.0		"	50.0	0.00	29.9	10-170		21.8	242	
1,2-Dibromo-3-chloropropane	15.0		"	50.0	0.00	29.9	36-138	Low Bias	1.33	54	
1,2-Dibromoethane	19.0		"	50.0	0.00	38.0	40-142	Low Bias	3.41	39	
1,2-Dichlorobenzene	9.33		"	50.0	0.00	18.7	10-147		24.1	52	
1,2-Dichloroethane	26.3		"	50.0	0.00	52.6	48-133		4.12	32	
1,2-Dichloropropane	30.1		"	50.0	0.00	60.2	47-141		6.87	37	
1,3,5-Trimethylbenzene	15.4		"	50.0	0.00	30.9	10-150		20.7	62	
1,3-Dichlorobenzene	9.57		"	50.0	0.00	19.1	10-144		29.5	51	
1,3-Dichloropropane	23.5		"	50.0	0.00	47.0	43-142		1.80	36	
1,4-Dichlorobenzene	8.43		"	50.0	0.00	16.9	10-160		33.2	52	
1,4-Dioxane	863		"	1050	0.00	82.2	10-191		11.3	196	
2,2-Dichloropropane	26.2		"	50.0	0.00	52.3	38-130		8.11	31	
2-Butanone	3.44		"	50.0	0.00	6.88	10-189	Low Bias	75.2	67	Non-dir.
2-Chlorotoluene	15.3		"	50.0	0.00	30.5	14-144		16.8	49	
2-Hexanone	0.00		"	50.0	0.00		10-181	Low Bias		60	
4-Chlorotoluene	12.6		"	50.0	0.00	25.2	15-138		24.5	39	
4-Methyl-2-pentanone	6.11		"	50.0	0.00	12.2	10-166		33.9	47	
Acetone	7.02		"	50.0	0.00	14.0	10-196		53.5	150	
Acrolein	3.66		"	50.0	0.00	7.32	10-192	Low Bias	4.28	128	
Acrylonitrile	6.50		"	50.0	0.00	13.0	13-161		30.3	48	
Benzene	27.2		"	50.0	0.00	54.3	43-139		2.69	64	
Bromobenzene	13.4		"	50.0	0.00	26.7	23-142		18.3	44	
Bromochloromethane	26.2		"	50.0	0.00	52.5	38-145		6.94	30	
Bromodichloromethane	24.8		"	50.0	0.00	49.6	38-147		6.97	37	
Bromoform	15.0		"	50.0	0.00	30.0	29-156		6.19	51	
Bromomethane	9.41		"	50.0	0.00	18.8	10-166		28.0	42	
Carbon disulfide	21.4		"	50.0	0.00	42.8	10-131		7.55	36	
Carbon tetrachloride	27.8		"	50.0	0.00	55.6	35-145		12.9	31	
Chlorobenzene	16.9		"	50.0	0.00	33.8	21-154		14.2	32	
Chloroethane	30.6		"	50.0	0.00	61.1	15-160		15.0	40	
Chloroform	29.4		"	50.0	0.00	58.7	47-142		5.85	29	
Chloromethane	24.3		"	50.0	0.00	48.6	10-159		8.98	31	
cis-1,2-Dichloroethylene	24.2		"	50.0	0.00	48.4	42-144		2.30	30	
cis-1,3-Dichloropropylene	13.0		"	50.0	0.00	26.0	18-159		14.7	39	
Cyclohexane	26.6		"	50.0	0.00	53.1	70-130	Low Bias	2.75	30	
Dibromochloromethane	20.0		"	50.0	0.00	40.1	10-179		9.95	41	
Dibromomethane	24.4		"	50.0	0.00	48.8	47-143		2.87	41	
Dichlorodifluoromethane	19.7		"	50.0	0.00	39.5	10-145		2.83	34	
Ethyl Benzene	20.7		"	50.0	0.00	41.4	11-158		5.45	42	
Hexachlorobutadiene	5.44		"	50.0	0.00	10.9	10-158		33.6	45	

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
Matrix Spike Dup (BC22411-MSD1)	*Source sample: 22C0658-01 (Matrix Spike Dup)								Prepared: 03/16/2022 Analyzed: 03/17/2022		
Isopropylbenzene	21.6		ug/L	50.0	0.00	43.2	10-162		3.94	57	
Methyl acetate	0.00		"	50.0	0.00		10-149	Low Bias	200	64	Non-dir.
Methyl tert-butyl ether (MTBE)	35.2		"	50.0	0.00	70.4	42-152		6.69	47	
Methylcyclohexane	21.6		"	50.0	0.00	43.1	70-130	Low Bias	4.00	30	
Methylene chloride	32.0		"	50.0	0.00	64.1	28-151		10.7	49	
n-Butylbenzene	8.80		"	50.0	0.00	17.6	10-162		32.9	96	
n-Propylbenzene	16.9		"	50.0	0.00	33.7	10-155		12.6	56	
o-Xylene	19.6		"	50.0	0.00	39.3	10-158		7.69	51	
p- & m- Xylenes	38.7		"	100	0.00	38.7	10-156		10.2	47	
p-Isopropyltoluene	11.9		"	50.0	0.00	23.9	10-147		28.1	60	
sec-Butylbenzene	15.3		"	50.0	0.00	30.6	10-157		13.3	56	
Styrene	10.2		"	50.0	0.00	20.4	13-171		30.9	39	
tert-Butyl alcohol (TBA)	204		"	250	0.00	81.5	34-179		15.3	35	
tert-Butylbenzene	16.0		"	50.0	0.00	32.0	10-160		8.43	79	
Tetrachloroethylene	22.4		"	50.0	0.00	44.9	30-167		1.30	33	
Toluene	23.5		"	50.0	0.00	47.0	21-160		3.39	50	
trans-1,2-Dichloroethylene	24.2		"	50.0	0.00	48.3	29-153		4.06	30	
trans-1,3-Dichloropropylene	11.4		"	50.0	0.00	22.8	18-155		12.1	30	
Trichloroethylene	24.7		"	50.0	0.00	49.3	24-169		6.09	30	
Trichlorofluoromethane	27.8		"	50.0	0.00	55.6	35-142		14.0	30	
Vinyl acetate	15.2		"	50.0	0.00	30.4	10-119		7.80	82	
Vinyl Chloride	26.8		"	50.0	0.00	53.7	12-160		9.03	35	
Surrogate: SURR: 1,2-Dichloroethane-d4	*50.7*		*"*	*50.0*		*101*	*77-125*				
Surrogate: SURR: Toluene-d8	*49.3*		*"*	*50.0*		*98.7*	*85-120*				
Surrogate: SURR: p-Bromofluorobenzene	*54.9*		*"*	*50.0*		*110*	*76-130*				

Miscellaneous Physical Parameters - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22435 - % Solids Prep											
Duplicate (BC22435-DUP1)	*Source sample: 22C0596-06 (SB-001 (0-2))								Prepared & Analyzed: 03/17/2022		
% Solids	76.7	0.100	%		75.5				1.52	20	

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
22C0596-01	Equipment Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
22C0596-02	SB-004 (0-2)	40mL Vial with Stir Bar-Cool 4° C
22C0596-03	SB-003 (0-2)	40mL Vial with Stir Bar-Cool 4° C
22C0596-04	DUP001	40mL Vial with Stir Bar-Cool 4° C
22C0596-05	SB-002 (0-2)	40mL Vial with Stir Bar-Cool 4° C
22C0596-06	SB-001 (0-2)	40mL Vial with Stir Bar-Cool 4° C
22C0596-07	Trip Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C

Sample and Data Qualifiers Relating to This Work Order

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
Cal-E	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration (average Rf>20%)
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

Field Chain-of-Custody Record

YORK ANALYTICAL LABORATORIES INC

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization for YORK to proceed with the analyses requested below.
Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No. 22C0596

120 Research Drive Stratford, CT 06615 | 132-02 89th Ave Queens, NY 11418 | clientservices@yorklab.com | www.yorklab.com | 800-306-YORK | 800-306-9675

YOUR Information	Report To:	Invoice To:
Company: PWGE	Company: " Same "	Company: " Same "
Address: 630 Johnson Ave., St. 7 Bohemia, NY, 11716	Address: " Same "	Address: " Same "
Phone: (631) 585-6353	Phone: " Same "	Phone: " Same "
Contact: Michael Geli	Contact: " Same "	Contact: " Same "
E-mail: MGeli@pwgrosser.com	E-mail: " Same "	E-mail: " Same "

YOUR Project Number: FA42101

YOUR Project Name: 434 Riverdale Ave, Yonkers

YOUR PO#: 1099549

Turn-Around Time

RUSH - Next Day	
RUSH - Two Day	
RUSH - Three Day	
RUSH - Four Day	
Standard (5-7 Day)	X

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

Samples Collected by: (print AND sign your name)

Matrix Codes

S - soil / solid
GW - groundwater
DW - drinking water
WW - wastewater
O - Oil | Other

Samples From

New York X
New Jersey
Connecticut
Pennsylvania
Other:

Report / EDD Type (circle selections)

Summary Report | CT RCP | Standard Excel EDD
QA Report | CT RCP DQA/DUE | EQuIS (Standard)
NY ASP A Package | NJDEP Reduced | NYSDEC EQuIS
NY ASP B Package | Deliverables | NJDEP SRP HazSite
NJDKQP | Other:

YORK Reg. Comp.

Compared to the following Regulation(s): (please fill in)

Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
Equipment Blank	GW	03/09/22 14:10	TCL Volatiles (8260)	
SB-004 (0-2)	S	03/09/22 13:55	TCL Volatiles (8260)	
SB-003 (0-2)	S	03/09/22 13:40	TCL Volatiles (8260)	
DUP001	S	03/09/22	TCL Volatiles (8260)	
SB-2 (0-2)	S	03/09/22 11:45	TCL Volatiles (8260)	
SB-1 (0-2)	S	03/09/22 11:25	TCL Volatiles (8260)	
Trip Blank	GW			

Comments: Please use SB-003/001 for SB-1/SB-2 Collection Consistent w/ SB003/SB004 nomenclature.

Samples iced/chilled at time of lab pickup? circle Yes or No

Preservation: (check all that apply)

HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH ___
ZnAc ___ Ascorbic Acid ___ Other: ___

Special Instruction

Field Filtered
Lab to Filter

Samples Relinquished by / Company	Date/Time	1. Samples Received by / Company	Date/Time	2. Samples Relinquished by / Company	Date/Time
[signature]	03/09/22 14:45	Ivan B	3/9/22 14:45	Ivan B	3/9/22 1945
Samples Received by / Company	Date/Time	3. Samples Relinquished by / Company	Date/Time	3. Samples Received by / Company	Date/Time
[signature]	3/9/22 1945	[signature]			
Samples Relinquished by / Company	Date/Time	4. Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time / Temperature
[signature]		[signature]			3/9/22 1945 1.0 Degrees C

Field Chain-of-Custody Record

YORK ANALYTICAL LABORATORIES INC

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization for YORK to proceed with the analyses requested below.
Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No. 22C0596

120 Research Drive Stratford, CT 06615 | 132-02 89th Ave Queens, NY 11418 | clientservices@yorklab.com | www.yorklab.com | 800-306-YORK | 800-306-9675

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: PWGE	Company: " same "	Company: " same "	~~FA~~ 2101	RUSH - Next Day
Address: 630 Johnson Ave., Ste 7 Bohemia, NY, 11716	Address: " same "	Address: " same "	YOUR Project Name: 434 Riverdale Ave, Yonkers	RUSH - Two Day
Phone: (631) 589-6353	Phone: " same "	Phone: " same "		RUSH - Three Day
Contact: Michael Geli	Contact: " same "	Contact: " same "		RUSH - Four Day
E-mail: MGeli@pwgrosser.com	E-mail: " same "	E-mail: " same "	YOUR PO#: 1099549	Standard (5-7 Day) X

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

Samples Collected by: (print AND sign your name)

Matrix Codes
S - soil / solid
GW - groundwater
DW - drinking water
WW - wastewater
O - Oil | Other

Samples From
New York X
New Jersey
Connecticut
Pennsylvania
Other:

Report / EDD Type (circle selections)
Summary Report | QA Report | NY ASP A Package | NY ASP B Package
CT RCP | CT RCP DQA/DUE | NJDEP Reduced Deliverables | NJDKQP
Standard Excel EDD | EQuIS (Standard) | NYSDEC EQuIS | NJDEP SRP HazSite | Other:

YORK Reg. Comp.
Compared to the following Regulation(s): (please fill in)

Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
Equipment Blank	GW	03/09/22 14:10	TCL VOC Tiles (8260)	
SB-004 (0-2)	S	03/09/22 13:55	TCL VOC Tiles (8260)	
SB-003 (0-2)	S	03/09/22 13:40	TCL VOC Tiles (8260)	
DUP001	S	03/09/22	TCL VOC Tiles (8260)	
SB-2 (0-2)	S	03/09/22 11:45	TCL VOC Tiles (8260)	
SB-1 (0-2)	S	03/09/22 11:25	TCL VOC Tiles (8260)	
TTIP Blank	GW			

Comments: Please use SB-002/001 for SB-1/SB-2 Utilities (consistent w/ SB003/SB004 ~~SB003~~ nomenclature.

Samples iced/chilled at time of lab pickup? circle Yes or No

Preservation: (check all that apply)
HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH ___
ZnAc ___ Ascorbic Acid ___ Other: ___

Special Instruction
Field Filtered
Lab to Filter

1. Samples Relinquished by / Company	Date/Time	1. Samples Received by / Company	Date/Time	2. Samples Relinquished by / Company	Date/Time
[signature]	03/09/22 14:45	Ivan B	3/9/22 14:45	Ivan B	3/9/22 1945
2. Samples Received by / Company	Date/Time	3. Samples Relinquished by / Company	Date/Time	3. Samples Received by / Company	Date/Time
[signature]	3/9/22 1945	[signature]	3/10/22 12:55		
4. Samples Relinquished by / Company	Date/Time	4. Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time TP Temperature
[signature]		[signature]			3/9/22 1945 1.1c Degrees C

Technical Report

prepared for:

P.W. Grosser Consulting
630 Johnson Avenue, Suite 7
Bohemia NY, 11716
Attention: Michael Gaul

Report Date: 03/18/2022
Client Project ID: FAY2101 434 Riverdale Ave., Yonkers
York Project (SDG) No.: 22C0658

Report Date: 03/18/2022
Client Project ID: FAY2101 434 Riverdale Ave., Yonkers
York Project (SDG) No.: 22C0658

P.W. Grosser Consulting
630 Johnson Avenue, Suite 7
Bohemia NY, 11716
Attention: Michael Gaul

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on March 10, 2022 and listed below. The project was identified as your project: **FAY2101 434 Riverdale Ave., Yonkers**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
22C0658-01	SB-005 (0-2)	Soil	03/10/2022	03/10/2022
22C0658-02	SB-006 (0-2)	Soil	03/10/2022	03/10/2022
22C0658-03	SB-007 (0-2)	Soil	03/10/2022	03/10/2022
22C0658-04	Equipment Blank	Water	03/10/2022	03/10/2022
22C0658-05	Trip Blank	Water	03/10/2022	03/10/2022

General Notes for York Project (SDG) No.: 22C0658

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By:

Date: 03/18/2022

Cassie L. Mosher
Laboratory Manager

Sample Information

Client Sample ID: SB-005 (0-2) **York Sample ID:** 22C0658-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Soil	March 10, 2022 8:55 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP		
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-005 (0-2) **York Sample ID:** 22C0658-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Soil	March 10, 2022 8:55 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		mg/kg dry	0.062	0.12	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP		
78-93-3	2-Butanone	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
591-78-6	2-Hexanone	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	Acetone	ND		mg/kg dry	0.0062	0.012	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		mg/kg dry	0.0062	0.012	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-86-1	Bromobenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	Chloroform	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-005 (0-2) **York Sample ID:** 22C0658-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Soil	March 10, 2022 8:55 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		mg/kg dry	0.0062	0.012	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.0062	0.012	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-005 (0-2) **York Sample ID:** 22C0658-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Soil	March 10, 2022 8:55 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-05-4	Vinyl acetate	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.0031	0.0062	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		mg/kg dry	0.0094	0.019	1	EPA 8260C	03/16/2022 13:19	03/17/2022 11:58	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*106 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*98.7 %*	*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*108 %*	*76-130*

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**81.7**		%	0.100	1	SM 2540G	03/17/2022 16:30	03/17/2022 16:31	JTG
							Certifications:	CTDOH		

Sample Information

Client Sample ID: SB-006 (0-2) **York Sample ID:** 22C0658-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Soil	March 10, 2022 10:25 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP		
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-006 (0-2) **York Sample ID:** 22C0658-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Soil	March 10, 2022 10:25 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		mg/kg dry	0.048	0.096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP		
78-93-3	2-Butanone	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
591-78-6	2-Hexanone	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	Acetone	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-86-1	Bromobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	Chloroform	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-006 (0-2) **York Sample ID:** 22C0658-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Soil	March 10, 2022 10:25 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	**Methylene chloride**	**0.0069**	J	mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-006 (0-2) **York Sample ID:** 22C0658-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Soil	March 10, 2022 10:25 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-05-4	Vinyl acetate	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.0024	0.0048	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		mg/kg dry	0.0072	0.014	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:24	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*104 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*98.2 %*	*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*107 %*	*76-130*

Total Solids

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**85.6**		%	0.100	1	SM 2540G	03/17/2022 16:30	03/17/2022 16:31	JTG
							Certifications:	CTDOH		

Sample Information

Client Sample ID: SB-007 (0-2) **York Sample ID:** 22C0658-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Soil	March 10, 2022 11:35 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP		
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-007 (0-2) **York Sample ID:** 22C0658-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Soil	March 10, 2022 11:35 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		mg/kg dry	0.096	0.19	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP		
78-93-3	2-Butanone	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
591-78-6	2-Hexanone	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	**Acetone**	**0.016**	CCV-E, J	mg/kg dry	0.0096	0.019	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		mg/kg dry	0.0096	0.019	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-86-1	Bromobenzene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	Chloroform	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-007 (0-2) **York Sample ID:** 22C0658-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Soil	March 10, 2022 11:35 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		mg/kg dry	0.0096	0.019	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.0096	0.019	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: SB-007 (0-2) **York Sample ID:** 22C0658-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Soil	March 10, 2022 11:35 am	03/10/2022

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	**Tetrachloroethylene**	**0.014**	QL-02	mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-05-4	Vinyl acetate	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.0048	0.0096	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		mg/kg dry	0.014	0.029	1	EPA 8260C	03/16/2022 13:19	03/17/2022 12:50	BMC
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*104 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*98.1 %*	*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*107 %*	*76-130*

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**84.0**		%	0.100	1	SM 2540G	03/17/2022 16:30	03/17/2022 16:31	JTG
							Certifications:	CTDOH		

Sample Information

Client Sample ID: **Equipment Blank** **York Sample ID:** **22C0658-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Water	March 10, 2022 12:50 pm	03/10/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: **Equipment Blank** **York Sample ID:** **22C0658-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Water	March 10, 2022 12:50 pm	03/10/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: **Equipment Blank** **York Sample ID:** **22C0658-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Water	March 10, 2022 12:50 pm	03/10/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
105-05-5	* p-Diethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:			
622-96-8	* p-Ethyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:			
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	1.00	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: **Equipment Blank** **York Sample ID:** **22C0658-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Water	March 10, 2022 12:50 pm	03/10/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C	03/16/2022 12:00	03/17/2022 08:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result		Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*110 %*		*69-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*106 %*		*81-117*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*123 %*	S-01	*79-122*

Sample Information

Client Sample ID: **Trip Blank** **York Sample ID:** **22C0658-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Water	March 10, 2022 2:25 pm	03/10/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-93-3	**2-Butanone**	**2.72**	Cal-E	ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: **Trip Blank** **York Sample ID:** **22C0658-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Water	March 10, 2022 2:25 pm	03/10/2022

Volatile Organics, 8260 Low Comprehensive **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	**2-Hexanone**	**0.610**		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	**Acetone**	**3.44**		ug/L	1.00	2.00	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: Trip Blank

York Sample ID: 22C0658-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Water	March 10, 2022 2:25 pm	03/10/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
105-05-5	* p-Diethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:			
622-96-8	* p-Ethyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:			
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	1.00	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: **Trip Blank** **York Sample ID:** **22C0658-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C0658	FAY2101 434 Riverdale Ave., Yonkers	Water	March 10, 2022 2:25 pm	03/10/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C	03/16/2022 12:00	03/17/2022 06:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*108 %*	*69-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*104 %*	*81-117*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*105 %*	*79-122*

Analytical Batch Summary

Batch ID: BC22411 **Preparation Method:** EPA 5035A **Prepared By:** BMC

YORK Sample ID	Client Sample ID	Preparation Date
22C0658-01	SB-005 (0-2)	03/16/22
22C0658-02	SB-006 (0-2)	03/16/22
22C0658-03	SB-007 (0-2)	03/16/22
BC22411-BLK1	Blank	03/16/22
BC22411-BLK2	Blank	03/16/22
BC22411-BS1	LCS	03/16/22
BC22411-BSD1	LCS Dup	03/16/22
BC22411-MS1	Matrix Spike	03/16/22
BC22411-MSD1	Matrix Spike Dup	03/16/22

Batch ID: BC22435 **Preparation Method:** % Solids Prep **Prepared By:** JTG

YORK Sample ID	Client Sample ID	Preparation Date
22C0658-01	SB-005 (0-2)	03/17/22
22C0658-02	SB-006 (0-2)	03/17/22
22C0658-03	SB-007 (0-2)	03/17/22
BC22435-DUP1	Duplicate	03/17/22

Batch ID: BC22449 **Preparation Method:** EPA 5030B **Prepared By:** JTG

YORK Sample ID	Client Sample ID	Preparation Date
22C0658-04	Equipment Blank	03/16/22
22C0658-05	Trip Blank	03/16/22
BC22449-BLK1	Blank	03/16/22
BC22449-BS1	LCS	03/16/22
BC22449-BSD1	LCS Dup	03/16/22

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
Blank (BC22411-BLK1)											
Prepared: 03/16/2022 Analyzed: 03/17/2022											
1,1,1,2-Tetrachloroethane	ND	0.0050	mg/kg wet								
1,1,1-Trichloroethane	ND	0.0050	"								
1,1,2,2-Tetrachloroethane	ND	0.0050	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0050	"								
1,1,2-Trichloroethane	ND	0.0050	"								
1,1-Dichloroethane	ND	0.0050	"								
1,1-Dichloroethylene	ND	0.0050	"								
1,1-Dichloropropylene	ND	0.0050	"								
1,2,3-Trichlorobenzene	ND	0.0050	"								
1,2,3-Trichloropropane	ND	0.0050	"								
1,2,4-Trichlorobenzene	ND	0.0050	"								
1,2,4-Trimethylbenzene	ND	0.0050	"								
1,2-Dibromo-3-chloropropane	ND	0.0050	"								
1,2-Dibromoethane	ND	0.0050	"								
1,2-Dichlorobenzene	ND	0.0050	"								
1,2-Dichloroethane	ND	0.0050	"								
1,2-Dichloropropane	ND	0.0050	"								
1,3,5-Trimethylbenzene	ND	0.0050	"								
1,3-Dichlorobenzene	ND	0.0050	"								
1,3-Dichloropropane	ND	0.0050	"								
1,4-Dichlorobenzene	ND	0.0050	"								
1,4-Dioxane	ND	0.10	"								
2,2-Dichloropropane	ND	0.0050	"								
2-Butanone	ND	0.0050	"								
2-Chlorotoluene	ND	0.0050	"								
2-Hexanone	ND	0.0050	"								
4-Chlorotoluene	ND	0.0050	"								
4-Methyl-2-pentanone	ND	0.0050	"								
Acetone	ND	0.010	"								
Acrolein	ND	0.010	"								
Acrylonitrile	ND	0.0050	"								
Benzene	ND	0.0050	"								
Bromobenzene	ND	0.0050	"								
Bromochloromethane	ND	0.0050	"								
Bromodichloromethane	ND	0.0050	"								
Bromoform	ND	0.0050	"								
Bromomethane	ND	0.0050	"								
Carbon disulfide	ND	0.0050	"								
Carbon tetrachloride	ND	0.0050	"								
Chlorobenzene	ND	0.0050	"								
Chloroethane	ND	0.0050	"								
Chloroform	ND	0.0050	"								
Chloromethane	ND	0.0050	"								
cis-1,2-Dichloroethylene	ND	0.0050	"								
cis-1,3-Dichloropropylene	ND	0.0050	"								
Cyclohexane	ND	0.0050	"								
Dibromochloromethane	ND	0.0050	"								
Dibromomethane	ND	0.0050	"								
Dichlorodifluoromethane	ND	0.0050	"								
Ethyl Benzene	ND	0.0050	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
Blank (BC22411-BLK1)											
Prepared: 03/16/2022 Analyzed: 03/17/2022											
Hexachlorobutadiene	ND	0.0050	mg/kg wet								
Isopropylbenzene	ND	0.0050	"								
Methyl acetate	ND	0.0050	"								
Methyl tert-butyl ether (MTBE)	ND	0.0050	"								
Methylcyclohexane	ND	0.0050	"								
Methylene chloride	ND	0.010	"								
n-Butylbenzene	ND	0.0050	"								
n-Propylbenzene	ND	0.0050	"								
o-Xylene	ND	0.0050	"								
p- & m- Xylenes	ND	0.010	"								
p-Isopropyltoluene	ND	0.0050	"								
sec-Butylbenzene	ND	0.0050	"								
Styrene	ND	0.0050	"								
tert-Butyl alcohol (TBA)	ND	0.0050	"								
tert-Butylbenzene	ND	0.0050	"								
Tetrachloroethylene	ND	0.0050	"								
Toluene	ND	0.0050	"								
trans-1,2-Dichloroethylene	ND	0.0050	"								
trans-1,3-Dichloropropylene	ND	0.0050	"								
Trichloroethylene	ND	0.0050	"								
Trichlorofluoromethane	ND	0.0050	"								
Vinyl acetate	ND	0.0050	"								
Vinyl Chloride	ND	0.0050	"								
Xylenes, Total	ND	0.015	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	*49.5*		*ug/L*	*50.0*		*99.0*	*77-125*				
Surrogate: SURR: Toluene-d8	*49.0*		*"*	*50.0*		*98.1*	*85-120*				
Surrogate: SURR: p-Bromofluorobenzene	*54.9*		*"*	*50.0*		*110*	*76-130*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
Blank (BC22411-BLK2)											
Prepared: 03/16/2022 Analyzed: 03/17/2022											
1,1,1,2-Tetrachloroethane	ND	0.0050	mg/kg wet								
1,1,1-Trichloroethane	ND	0.0050	"								
1,1,2,2-Tetrachloroethane	ND	0.0050	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0050	"								
1,1,2-Trichloroethane	ND	0.0050	"								
1,1-Dichloroethane	ND	0.0050	"								
1,1-Dichloroethylene	ND	0.0050	"								
1,1-Dichloropropylene	ND	0.0050	"								
1,2,3-Trichlorobenzene	ND	0.0050	"								
1,2,3-Trichloropropane	ND	0.0050	"								
1,2,4-Trichlorobenzene	ND	0.0050	"								
1,2,4-Trimethylbenzene	ND	0.0050	"								
1,2-Dibromo-3-chloropropane	ND	0.0050	"								
1,2-Dibromoethane	ND	0.0050	"								
1,2-Dichlorobenzene	ND	0.0050	"								
1,2-Dichloroethane	ND	0.0050	"								
1,2-Dichloropropane	ND	0.0050	"								
1,3,5-Trimethylbenzene	ND	0.0050	"								
1,3-Dichlorobenzene	ND	0.0050	"								
1,3-Dichloropropane	ND	0.0050	"								
1,4-Dichlorobenzene	ND	0.0050	"								
1,4-Dioxane	ND	0.10	"								
2,2-Dichloropropane	ND	0.0050	"								
2-Butanone	ND	0.0050	"								
2-Chlorotoluene	ND	0.0050	"								
2-Hexanone	ND	0.0050	"								
4-Chlorotoluene	ND	0.0050	"								
4-Methyl-2-pentanone	ND	0.0050	"								
Acetone	ND	0.010	"								
Acrolein	ND	0.010	"								
Acrylonitrile	ND	0.0050	"								
Benzene	ND	0.0050	"								
Bromobenzene	ND	0.0050	"								
Bromochloromethane	ND	0.0050	"								
Bromodichloromethane	ND	0.0050	"								
Bromoform	ND	0.0050	"								
Bromomethane	ND	0.0050	"								
Carbon disulfide	ND	0.0050	"								
Carbon tetrachloride	ND	0.0050	"								
Chlorobenzene	ND	0.0050	"								
Chloroethane	ND	0.0050	"								
Chloroform	ND	0.0050	"								
Chloromethane	ND	0.0050	"								
cis-1,2-Dichloroethylene	ND	0.0050	"								
cis-1,3-Dichloropropylene	ND	0.0050	"								
Cyclohexane	ND	0.0050	"								
Dibromochloromethane	ND	0.0050	"								
Dibromomethane	ND	0.0050	"								
Dichlorodifluoromethane	ND	0.0050	"								
Ethyl Benzene	ND	0.0050	"								
Hexachlorobutadiene	ND	0.0050	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
Blank (BC22411-BLK2)											Prepared: 03/16/2022 Analyzed: 03/17/2022
Isopropylbenzene	ND	0.0050	mg/kg wet								
Methyl acetate	ND	0.0050	"								
Methyl tert-butyl ether (MTBE)	ND	0.0050	"								
Methylcyclohexane	ND	0.0050	"								
Methylene chloride	ND	0.010	"								
n-Butylbenzene	ND	0.0050	"								
n-Propylbenzene	ND	0.0050	"								
o-Xylene	ND	0.0050	"								
p- & m- Xylenes	ND	0.010	"								
p-Isopropyltoluene	ND	0.0050	"								
sec-Butylbenzene	ND	0.0050	"								
Styrene	ND	0.0050	"								
tert-Butyl alcohol (TBA)	ND	0.0050	"								
tert-Butylbenzene	ND	0.0050	"								
Tetrachloroethylene	ND	0.0050	"								
Toluene	ND	0.0050	"								
trans-1,2-Dichloroethylene	ND	0.0050	"								
trans-1,3-Dichloropropylene	ND	0.0050	"								
Trichloroethylene	ND	0.0050	"								
Trichlorofluoromethane	ND	0.0050	"								
Vinyl acetate	ND	0.0050	"								
Vinyl Chloride	ND	0.0050	"								
Xylenes, Total	ND	0.015	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	*49.7*		*ug/L*	*50.0*		*99.3*	*77-125*				
Surrogate: SURR: Toluene-d8	*49.5*		*"*	*50.0*		*99.0*	*85-120*				
Surrogate: SURR: p-Bromofluorobenzene	*53.2*		*"*	*50.0*		*106*	*76-130*				
LCS (BC22411-BS1)											Prepared: 03/16/2022 Analyzed: 03/17/2022
1,1,1,2-Tetrachloroethane	45.0		ug/L	50.0		89.9	75-129				
1,1,1-Trichloroethane	43.2		"	50.0		86.4	71-137				
1,1,2,2-Tetrachloroethane	46.9		"	50.0		93.8	79-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	41.3		"	50.0		82.7	58-146				
1,1,2-Trichloroethane	45.2		"	50.0		90.3	83-123				
1,1-Dichloroethane	42.1		"	50.0		84.3	75-130				
1,1-Dichloroethylene	40.5		"	50.0		81.1	64-137				
1,1-Dichloropropylene	39.8		"	50.0		79.5	77-127				
1,2,3-Trichlorobenzene	42.3		"	50.0		84.6	81-140				
1,2,3-Trichloropropane	48.3		"	50.0		96.5	81-126				
1,2,4-Trichlorobenzene	40.4		"	50.0		80.8	80-141				
1,2,4-Trimethylbenzene	44.9		"	50.0		89.8	84-125				
1,2-Dibromo-3-chloropropane	48.1		"	50.0		96.3	74-142				
1,2-Dibromoethane	46.2		"	50.0		92.3	86-123				
1,2-Dichlorobenzene	44.7		"	50.0		89.3	85-122				
1,2-Dichloroethane	43.6		"	50.0		87.1	71-133				
1,2-Dichloropropane	46.5		"	50.0		92.9	81-122				
1,3,5-Trimethylbenzene	44.0		"	50.0		87.9	82-126				
1,3-Dichlorobenzene	43.3		"	50.0		86.6	84-124				
1,3-Dichloropropane	45.3		"	50.0		90.7	83-123				
1,4-Dichlorobenzene	42.8		"	50.0		85.6	84-124				
1,4-Dioxane	1010		"	1050		95.9	10-228				
2,2-Dichloropropane	40.8		"	50.0		81.6	67-136				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
LCS (BC22411-BS1)								Prepared: 03/16/2022 Analyzed: 03/17/2022			
2-Butanone	40.9		ug/L	50.0		81.7	58-147				
2-Chlorotoluene	44.8		"	50.0		89.6	78-127				
2-Hexanone	44.2		"	50.0		88.3	70-139				
4-Chlorotoluene	44.5		"	50.0		89.0	79-125				
4-Methyl-2-pentanone	35.3		"	50.0		70.7	72-132	Low Bias			
Acetone	29.4		"	50.0		58.7	36-155				
Acrolein	9.43		"	50.0		18.9	10-238				
Acrylonitrile	42.8		"	50.0		85.7	66-141				
Benzene	43.6		"	50.0		87.2	77-127				
Bromobenzene	45.7		"	50.0		91.5	77-129				
Bromochloromethane	43.4		"	50.0		86.8	74-129				
Bromodichloromethane	45.2		"	50.0		90.4	81-124				
Bromoform	47.9		"	50.0		95.8	80-136				
Bromomethane	35.0		"	50.0		69.9	32-177				
Carbon disulfide	41.5		"	50.0		82.9	10-136				
Carbon tetrachloride	42.4		"	50.0		84.8	66-143				
Chlorobenzene	46.2		"	50.0		92.5	86-120				
Chloroethane	39.0		"	50.0		77.9	51-142				
Chloroform	43.2		"	50.0		86.4	76-131				
Chloromethane	34.2		"	50.0		68.4	49-132				
cis-1,2-Dichloroethylene	41.4		"	50.0		82.9	74-132				
cis-1,3-Dichloropropylene	41.6		"	50.0		83.1	81-129				
Cyclohexane	41.4		"	50.0		82.8	70-130				
Dibromochloromethane	45.7		"	50.0		91.4	10-200				
Dibromomethane	44.6		"	50.0		89.3	83-124				
Dichlorodifluoromethane	24.4		"	50.0		48.8	28-158				
Ethyl Benzene	44.6		"	50.0		89.2	84-125				
Hexachlorobutadiene	42.8		"	50.0		85.7	83-133				
Isopropylbenzene	46.6		"	50.0		93.1	81-127				
Methyl acetate	44.0		"	50.0		88.0	41-143				
Methyl tert-butyl ether (MTBE)	46.2		"	50.0		92.4	74-131				
Methylcyclohexane	42.7		"	50.0		85.4	70-130				
Methylene chloride	42.2		"	50.0		84.5	57-141				
n-Butylbenzene	40.6		"	50.0		81.2	80-130				
n-Propylbenzene	44.0		"	50.0		87.9	74-136				
o-Xylene	45.2		"	50.0		90.5	83-123				
p- & m- Xylenes	88.9		"	100		88.9	82-128				
p-Isopropyltoluene	43.9		"	50.0		87.8	85-125				
sec-Butylbenzene	44.4		"	50.0		88.9	83-125				
Styrene	43.6		"	50.0		87.1	86-126				
tert-Butyl alcohol (TBA)	290		"	250		116	70-130				
tert-Butylbenzene	39.7		"	50.0		79.4	80-127	Low Bias			
Tetrachloroethylene	39.2		"	50.0		78.4	80-129	Low Bias			
Toluene	44.0		"	50.0		88.0	85-121				
trans-1,2-Dichloroethylene	41.9		"	50.0		83.7	72-132				
trans-1,3-Dichloropropylene	42.8		"	50.0		85.7	78-132				
Trichloroethylene	44.9		"	50.0		89.9	84-123				
Trichlorofluoromethane	36.5		"	50.0		73.0	62-140				
Vinyl acetate	38.6		"	50.0		77.1	67-136				
Vinyl Chloride	35.2		"	50.0		70.5	52-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	*48.8*		*"*	*50.0*		*97.6*	*77-125*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
LCS (BC22411-BS1)									Prepared: 03/16/2022 Analyzed: 03/17/2022		
Surrogate: SURR: Toluene-d8	*49.4*		*ug/L*	*50.0*		*98.7*	*85-120*				
Surrogate: SURR: p-Bromofluorobenzene	*52.3*		*"*	*50.0*		*105*	*76-130*				
LCS Dup (BC22411-BSD1)									Prepared: 03/16/2022 Analyzed: 03/17/2022		
1,1,1,2-Tetrachloroethane	47.5		ug/L	50.0		95.1	75-129		5.56	30	
1,1,1-Trichloroethane	45.4		"	50.0		90.8	71-137		5.01	30	
1,1,2,2-Tetrachloroethane	48.4		"	50.0		96.9	79-129		3.25	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	43.3		"	50.0		86.7	58-146		4.70	30	
1,1,2-Trichloroethane	47.8		"	50.0		95.7	83-123		5.74	30	
1,1-Dichloroethane	45.4		"	50.0		90.8	75-130		7.49	30	
1,1-Dichloroethylene	42.2		"	50.0		84.3	64-137		3.89	30	
1,1-Dichloropropylene	42.7		"	50.0		85.3	77-127		7.01	30	
1,2,3-Trichlorobenzene	46.6		"	50.0		93.2	81-140		9.61	30	
1,2,3-Trichloropropane	49.0		"	50.0		98.0	81-126		1.52	30	
1,2,4-Trichlorobenzene	45.2		"	50.0		90.5	80-141		11.4	30	
1,2,4-Trimethylbenzene	48.2		"	50.0		96.4	84-125		7.13	30	
1,2-Dibromo-3-chloropropane	50.2		"	50.0		100	74-142		4.15	30	
1,2-Dibromoethane	48.5		"	50.0		97.0	86-123		4.95	30	
1,2-Dichlorobenzene	47.7		"	50.0		95.4	85-122		6.56	30	
1,2-Dichloroethane	45.8		"	50.0		91.6	71-133		4.97	30	
1,2-Dichloropropane	49.0		"	50.0		98.0	81-122		5.32	30	
1,3,5-Trimethylbenzene	46.9		"	50.0		93.9	82-126		6.58	30	
1,3-Dichlorobenzene	47.5		"	50.0		95.0	84-124		9.27	30	
1,3-Dichloropropane	46.8		"	50.0		93.6	83-123		3.17	30	
1,4-Dichlorobenzene	46.8		"	50.0		93.6	84-124		8.97	30	
1,4-Dioxane	1010		"	1050		96.6	10-228		0.733	30	
2,2-Dichloropropane	44.3		"	50.0		88.5	67-136		8.11	30	
2-Butanone	42.9		"	50.0		85.8	58-147		4.89	30	
2-Chlorotoluene	47.9		"	50.0		95.7	78-127		6.58	30	
2-Hexanone	45.8		"	50.0		91.5	70-139		3.51	30	
4-Chlorotoluene	47.8		"	50.0		95.6	79-125		7.09	30	
4-Methyl-2-pentanone	36.2		"	50.0		72.4	72-132		2.43	30	
Acetone	31.3		"	50.0		62.6	36-155		6.36	30	
Acrolein	10.3		"	50.0		20.7	10-238		9.11	30	
Acrylonitrile	45.5		"	50.0		91.0	66-141		6.07	30	
Benzene	46.2		"	50.0		92.4	77-127		5.81	30	
Bromobenzene	48.2		"	50.0		96.5	77-129		5.32	30	
Bromochloromethane	45.5		"	50.0		91.1	74-129		4.81	30	
Bromodichloromethane	47.3		"	50.0		94.6	81-124		4.48	30	
Bromoform	49.3		"	50.0		98.7	80-136		2.92	30	
Bromomethane	37.2		"	50.0		74.5	32-177		6.34	30	
Carbon disulfide	44.2		"	50.0		88.3	10-136		6.28	30	
Carbon tetrachloride	45.5		"	50.0		91.1	66-143		7.09	30	
Chlorobenzene	48.4		"	50.0		96.7	86-120		4.46	30	
Chloroethane	40.4		"	50.0		80.9	51-142		3.68	30	
Chloroform	46.5		"	50.0		92.9	76-131		7.29	30	
Chloromethane	36.3		"	50.0		72.6	49-132		5.93	30	
cis-1,2-Dichloroethylene	44.8		"	50.0		89.6	74-132		7.77	30	
cis-1,3-Dichloropropylene	44.6		"	50.0		89.1	81-129		6.99	30	
Cyclohexane	43.4		"	50.0		86.8	70-130		4.67	30	
Dibromochloromethane	47.8		"	50.0		95.5	10-200		4.41	30	

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
LCS Dup (BC22411-BSD1)									Prepared: 03/16/2022 Analyzed: 03/17/2022		
Dibromomethane	46.8		ug/L	50.0		93.7	83-124		4.83	30	
Dichlorodifluoromethane	25.6		"	50.0		51.1	28-158		4.60	30	
Ethyl Benzene	47.3		"	50.0		94.6	84-125		5.83	30	
Hexachlorobutadiene	46.4		"	50.0		92.7	83-133		7.92	30	
Isopropylbenzene	49.0		"	50.0		98.1	81-127		5.19	30	
Methyl acetate	45.3		"	50.0		90.7	41-143		2.95	30	
Methyl tert-butyl ether (MTBE)	48.3		"	50.0		96.6	74-131		4.49	30	
Methylcyclohexane	44.9		"	50.0		89.8	70-130		5.09	30	
Methylene chloride	45.7		"	50.0		91.4	57-141		7.89	30	
n-Butylbenzene	44.4		"	50.0		88.7	80-130		8.87	30	
n-Propylbenzene	46.7		"	50.0		93.4	74-136		6.02	30	
o-Xylene	48.3		"	50.0		96.6	83-123		6.54	30	
p- & m- Xylenes	95.1		"	100		95.1	82-128		6.69	30	
p-Isopropyltoluene	47.2		"	50.0		94.4	85-125		7.22	30	
sec-Butylbenzene	47.3		"	50.0		94.7	83-125		6.28	30	
Styrene	46.3		"	50.0		92.6	86-126		6.08	30	
tert-Butyl alcohol (TBA)	292		"	250		117	70-130		0.591	30	
tert-Butylbenzene	42.0		"	50.0		83.9	80-127		5.61	30	
Tetrachloroethylene	41.7		"	50.0		83.5	80-129		6.28	30	
Toluene	46.7		"	50.0		93.4	85-121		5.95	30	
trans-1,2-Dichloroethylene	44.8		"	50.0		89.6	72-132		6.74	30	
trans-1,3-Dichloropropylene	45.4		"	50.0		90.8	78-132		5.80	30	
Trichloroethylene	47.9		"	50.0		95.8	84-123		6.36	30	
Trichlorofluoromethane	38.9		"	50.0		77.8	62-140		6.31	30	
Vinyl acetate	41.4		"	50.0		82.9	67-136		7.15	30	
Vinyl Chloride	36.8		"	50.0		73.6	52-130		4.25	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	*48.0*		*"*	*50.0*		*96.0*	*77-125*				
Surrogate: SURR: Toluene-d8	*49.5*		*"*	*50.0*		*99.0*	*85-120*				
Surrogate: SURR: p-Bromofluorobenzene	*51.4*		*"*	*50.0*		*103*	*76-130*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
Matrix Spike (BC22411-MS1)	*Source sample: 22C0658-01 (SB-005 (0-2))							Prepared: 03/16/2022 Analyzed: 03/17/2022			
1,1,1,2-Tetrachloroethane	19.8		ug/L	50.0	0.00	39.6	15-161				
1,1,1-Trichloroethane	27.8		"	50.0	0.00	55.6	42-145				
1,1,2,2-Tetrachloroethane	20.7		"	50.0	0.00	41.4	16-167				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	28.8		"	50.0	0.00	57.6	11-160				
1,1,2-Trichloroethane	24.2		"	50.0	0.00	48.5	44-145				
1,1-Dichloroethane	29.2		"	50.0	0.00	58.5	46-142				
1,1-Dichloroethylene	28.0		"	50.0	0.00	56.1	30-153				
1,1-Dichloropropylene	25.2		"	50.0	0.00	50.4	40-133				
1,2,3-Trichlorobenzene	6.57		"	50.0	0.00	13.1	10-157				
1,2,3-Trichloropropane	23.3		"	50.0	0.00	46.6	38-155				
1,2,4-Trichlorobenzene	7.00		"	50.0	0.00	14.0	10-151				
1,2,4-Trimethylbenzene	18.6		"	50.0	0.00	37.2	10-170				
1,2-Dibromo-3-chloropropane	15.2		"	50.0	0.00	30.3	36-138	Low Bias			
1,2-Dibromoethane	19.7		"	50.0	0.00	39.3	40-142	Low Bias			
1,2-Dichlorobenzene	11.9		"	50.0	0.00	23.8	10-147				
1,2-Dichloroethane	25.2		"	50.0	0.00	50.4	48-133				
1,2-Dichloropropane	28.1		"	50.0	0.00	56.2	47-141				
1,3,5-Trimethylbenzene	19.0		"	50.0	0.00	38.0	10-150				
1,3-Dichlorobenzene	12.9		"	50.0	0.00	25.8	10-144				
1,3-Dichloropropane	23.1		"	50.0	0.00	46.2	43-142				
1,4-Dichlorobenzene	11.8		"	50.0	0.00	23.6	10-160				
1,4-Dioxane	771		"	1050	0.00	73.4	10-191				
2,2-Dichloropropane	24.1		"	50.0	0.00	48.3	38-130				
2-Butanone	7.59		"	50.0	0.00	15.2	10-189				
2-Chlorotoluene	18.1		"	50.0	0.00	36.1	14-144				
2-Hexanone	0.00		"	50.0	0.00		10-181	Low Bias			
4-Chlorotoluene	16.1		"	50.0	0.00	32.2	15-138				
4-Methyl-2-pentanone	8.60		"	50.0	0.00	17.2	10-166				
Acetone	12.2		"	50.0	0.00	24.3	10-196				
Acrolein	3.82		"	50.0	0.00	7.64	10-192	Low Bias			
Acrylonitrile	8.82		"	50.0	0.00	17.6	13-161				
Benzene	26.4		"	50.0	0.00	52.9	43-139				
Bromobenzene	16.0		"	50.0	0.00	32.1	23-142				
Bromochloromethane	24.5		"	50.0	0.00	49.0	38-145				
Bromodichloromethane	23.1		"	50.0	0.00	46.2	38-147				
Bromoform	14.1		"	50.0	0.00	28.2	29-156	Low Bias			
Bromomethane	12.5		"	50.0	0.00	24.9	10-166				
Carbon disulfide	23.1		"	50.0	0.00	46.2	10-131				
Carbon tetrachloride	24.4		"	50.0	0.00	48.8	35-145				
Chlorobenzene	19.5		"	50.0	0.00	38.9	21-154				
Chloroethane	26.3		"	50.0	0.00	52.6	15-160				
Chloroform	27.7		"	50.0	0.00	55.4	47-142				
Chloromethane	22.2		"	50.0	0.00	44.5	10-159				
cis-1,2-Dichloroethylene	23.7		"	50.0	0.00	47.3	42-144				
cis-1,3-Dichloropropylene	15.1		"	50.0	0.00	30.2	18-159				
Cyclohexane	25.8		"	50.0	0.00	51.7	70-130	Low Bias			
Dibromochloromethane	18.2		"	50.0	0.00	36.3	10-179				
Dibromomethane	23.7		"	50.0	0.00	47.4	47-143				
Dichlorodifluoromethane	19.2		"	50.0	0.00	38.4	10-145				
Ethyl Benzene	21.9		"	50.0	0.00	43.7	11-158				
Hexachlorobutadiene	7.64		"	50.0	0.00	15.3	10-158				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
Matrix Spike (BC22411-MS1)	*Source sample: 22C0658-01 (SB-005 (0-2))								Prepared: 03/16/2022 Analyzed: 03/17/2022		
Isopropylbenzene	22.5		ug/L	50.0	0.00	45.0	10-162				
Methyl acetate	4.73		"	50.0	0.00	9.46	10-149	Low Bias			
Methyl tert-butyl ether (MTBE)	32.9		"	50.0	0.00	65.9	42-152				
Methylcyclohexane	22.4		"	50.0	0.00	44.9	70-130	Low Bias			
Methylene chloride	35.6		"	50.0	0.00	71.3	28-151				
n-Butylbenzene	12.3		"	50.0	0.00	24.5	10-162				
n-Propylbenzene	19.1		"	50.0	0.00	38.2	10-155				
o-Xylene	21.2		"	50.0	0.00	42.4	10-158				
p- & m- Xylenes	42.9		"	100	0.00	42.9	10-156				
p-Isopropyltoluene	15.8		"	50.0	0.00	31.7	10-147				
sec-Butylbenzene	17.5		"	50.0	0.00	35.0	10-157				
Styrene	13.9		"	50.0	0.00	27.9	13-171				
tert-Butyl alcohol (TBA)	175		"	250	0.00	69.9	34-179				
tert-Butylbenzene	17.4		"	50.0	0.00	34.9	10-160				
Tetrachloroethylene	22.2		"	50.0	0.00	44.3	30-167				
Toluene	24.3		"	50.0	0.00	48.6	21-160				
trans-1,2-Dichloroethylene	25.2		"	50.0	0.00	50.3	29-153				
trans-1,3-Dichloropropylene	12.8		"	50.0	0.00	25.7	18-155				
Trichloroethylene	26.2		"	50.0	0.00	52.4	24-169				
Trichlorofluoromethane	24.2		"	50.0	0.00	48.4	35-142				
Vinyl acetate	14.0		"	50.0	0.00	28.1	10-119				
Vinyl Chloride	24.5		"	50.0	0.00	49.0	12-160				
Surrogate: SURR: 1,2-Dichloroethane-d4	*51.0*		*"*	*50.0*		*102*	*77-125*				
Surrogate: SURR: Toluene-d8	*49.8*		*"*	*50.0*		*99.7*	*85-120*				
Surrogate: SURR: p-Bromofluorobenzene	*54.4*		*"*	*50.0*		*109*	*76-130*				
Matrix Spike Dup (BC22411-MSD1)	*Source sample: 22C0658-01 (SB-005 (0-2))								Prepared: 03/16/2022 Analyzed: 03/17/2022		
1,1,1,2-Tetrachloroethane	21.2		ug/L	50.0	0.00	42.4	15-161		6.68	33	
1,1,1-Trichloroethane	30.6		"	50.0	0.00	61.3	42-145		9.79	30	
1,1,2,2-Tetrachloroethane	22.2		"	50.0	0.00	44.3	16-167		6.82	56	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	29.7		"	50.0	0.00	59.4	11-160		2.97	31	
1,1,2-Trichloroethane	25.6		"	50.0	0.00	51.2	44-145		5.46	40	
1,1-Dichloroethane	31.5		"	50.0	0.00	63.0	46-142		7.44	36	
1,1-Dichloroethylene	28.5		"	50.0	0.00	57.0	30-153		1.66	31	
1,1-Dichloropropylene	25.2		"	50.0	0.00	50.3	40-133		0.159	28	
1,2,3-Trichlorobenzene	4.58		"	50.0	0.00	9.16	10-157	Low Bias	35.7	47	
1,2,3-Trichloropropane	23.8		"	50.0	0.00	47.7	38-155		2.21	48	
1,2,4-Trichlorobenzene	4.71		"	50.0	0.00	9.42	10-151	Low Bias	39.1	52	
1,2,4-Trimethylbenzene	15.0		"	50.0	0.00	29.9	10-170		21.8	242	
1,2-Dibromo-3-chloropropane	15.0		"	50.0	0.00	29.9	36-138	Low Bias	1.33	54	
1,2-Dibromoethane	19.0		"	50.0	0.00	38.0	40-142	Low Bias	3.41	39	
1,2-Dichlorobenzene	9.33		"	50.0	0.00	18.7	10-147		24.1	52	
1,2-Dichloroethane	26.3		"	50.0	0.00	52.6	48-133		4.12	32	
1,2-Dichloropropane	30.1		"	50.0	0.00	60.2	47-141		6.87	37	
1,3,5-Trimethylbenzene	15.4		"	50.0	0.00	30.9	10-150		20.7	62	
1,3-Dichlorobenzene	9.57		"	50.0	0.00	19.1	10-144		29.5	51	
1,3-Dichloropropane	23.5		"	50.0	0.00	47.0	43-142		1.80	36	
1,4-Dichlorobenzene	8.43		"	50.0	0.00	16.9	10-160		33.2	52	
1,4-Dioxane	863		"	1050	0.00	82.2	10-191		11.3	196	
2,2-Dichloropropane	26.2		"	50.0	0.00	52.3	38-130		8.11	31	
2-Butanone	3.44		"	50.0	0.00	6.88	10-189	Low Bias	75.2	67	Non-dir.

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
Matrix Spike Dup (BC22411-MSD1)	*Source sample: 22C0658-01 (SB-005 (0-2))								Prepared: 03/16/2022 Analyzed: 03/17/2022		
2-Chlorotoluene	15.3		ug/L	50.0	0.00	30.5	14-144		16.8	49	
2-Hexanone	0.00		"	50.0	0.00		10-181	Low Bias		60	
4-Chlorotoluene	12.6		"	50.0	0.00	25.2	15-138		24.5	39	
4-Methyl-2-pentanone	6.11		"	50.0	0.00	12.2	10-166		33.9	47	
Acetone	7.02		"	50.0	0.00	14.0	10-196		53.5	150	
Acrolein	3.66		"	50.0	0.00	7.32	10-192	Low Bias	4.28	128	
Acrylonitrile	6.50		"	50.0	0.00	13.0	13-161		30.3	48	
Benzene	27.2		"	50.0	0.00	54.3	43-139		2.69	64	
Bromobenzene	13.4		"	50.0	0.00	26.7	23-142		18.3	44	
Bromochloromethane	26.2		"	50.0	0.00	52.5	38-145		6.94	30	
Bromodichloromethane	24.8		"	50.0	0.00	49.6	38-147		6.97	37	
Bromoform	15.0		"	50.0	0.00	30.0	29-156		6.19	51	
Bromomethane	9.41		"	50.0	0.00	18.8	10-166		28.0	42	
Carbon disulfide	21.4		"	50.0	0.00	42.8	10-131		7.55	36	
Carbon tetrachloride	27.8		"	50.0	0.00	55.6	35-145		12.9	31	
Chlorobenzene	16.9		"	50.0	0.00	33.8	21-154		14.2	32	
Chloroethane	30.6		"	50.0	0.00	61.1	15-160		15.0	40	
Chloroform	29.4		"	50.0	0.00	58.7	47-142		5.85	29	
Chloromethane	24.3		"	50.0	0.00	48.6	10-159		8.98	31	
cis-1,2-Dichloroethylene	24.2		"	50.0	0.00	48.4	42-144		2.30	30	
cis-1,3-Dichloropropylene	13.0		"	50.0	0.00	26.0	18-159		14.7	39	
Cyclohexane	26.6		"	50.0	0.00	53.1	70-130	Low Bias	2.75	30	
Dibromochloromethane	20.0		"	50.0	0.00	40.1	10-179		9.95	41	
Dibromomethane	24.4		"	50.0	0.00	48.8	47-143		2.87	41	
Dichlorodifluoromethane	19.7		"	50.0	0.00	39.5	10-145		2.83	34	
Ethyl Benzene	20.7		"	50.0	0.00	41.4	11-158		5.45	42	
Hexachlorobutadiene	5.44		"	50.0	0.00	10.9	10-158		33.6	45	
Isopropylbenzene	21.6		"	50.0	0.00	43.2	10-162		3.94	57	
Methyl acetate	0.00		"	50.0	0.00		10-149	Low Bias	200	64	Non-dir.
Methyl tert-butyl ether (MTBE)	35.2		"	50.0	0.00	70.4	42-152		6.69	47	
Methylcyclohexane	21.6		"	50.0	0.00	43.1	70-130	Low Bias	4.00	30	
Methylene chloride	32.0		"	50.0	0.00	64.1	28-151		10.7	49	
n-Butylbenzene	8.80		"	50.0	0.00	17.6	10-162		32.9	96	
n-Propylbenzene	16.9		"	50.0	0.00	33.7	10-155		12.6	56	
o-Xylene	19.6		"	50.0	0.00	39.3	10-158		7.69	51	
p- & m- Xylenes	38.7		"	100	0.00	38.7	10-156		10.2	47	
p-Isopropyltoluene	11.9		"	50.0	0.00	23.9	10-147		28.1	60	
sec-Butylbenzene	15.3		"	50.0	0.00	30.6	10-157		13.3	56	
Styrene	10.2		"	50.0	0.00	20.4	13-171		30.9	39	
tert-Butyl alcohol (TBA)	204		"	250	0.00	81.5	34-179		15.3	35	
tert-Butylbenzene	16.0		"	50.0	0.00	32.0	10-160		8.43	79	
Tetrachloroethylene	22.4		"	50.0	0.00	44.9	30-167		1.30	33	
Toluene	23.5		"	50.0	0.00	47.0	21-160		3.39	50	
trans-1,2-Dichloroethylene	24.2		"	50.0	0.00	48.3	29-153		4.06	30	
trans-1,3-Dichloropropylene	11.4		"	50.0	0.00	22.8	18-155		12.1	30	
Trichloroethylene	24.7		"	50.0	0.00	49.3	24-169		6.09	30	
Trichlorofluoromethane	27.8		"	50.0	0.00	55.6	35-142		14.0	30	
Vinyl acetate	15.2		"	50.0	0.00	30.4	10-119		7.80	82	
Vinyl Chloride	26.8		"	50.0	0.00	53.7	12-160		9.03	35	
Surrogate: SURR: 1,2-Dichloroethane-d4	*50.7*		*"*	*50.0*		*101*	*77-125*				
Surrogate: SURR: Toluene-d8	*49.3*		*"*	*50.0*		*98.7*	*85-120*				

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22411 - EPA 5035A											
Matrix Spike Dup (BC22411-MSD1)	*Source sample: 22C0658-01 (SB-005 (0-2))										Prepared: 03/16/2022 Analyzed: 03/17/2022
Surrogate: SURR: p-Bromofluorobenzene	*54.9*		*ug/L*	*50.0*		*110*	*76-130*				
Batch BC22449 - EPA 5030B											
Blank (BC22449-BLK1)											Prepared: 03/16/2022 Analyzed: 03/17/2022
1,1,1,2-Tetrachloroethane	ND	0.500	ug/L								
1,1,1-Trichloroethane	ND	0.500	"								
1,1,2,2-Tetrachloroethane	ND	0.500	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"								
1,1,2-Trichloroethane	ND	0.500	"								
1,1-Dichloroethane	ND	0.500	"								
1,1-Dichloroethylene	ND	0.500	"								
1,2,3-Trichlorobenzene	ND	0.500	"								
1,2,3-Trichloropropane	ND	0.500	"								
1,2,4-Trichlorobenzene	ND	0.500	"								
1,2,4-Trimethylbenzene	ND	0.500	"								
1,2-Dibromo-3-chloropropane	ND	0.500	"								
1,2-Dibromoethane	ND	0.500	"								
1,2-Dichlorobenzene	ND	0.500	"								
1,2-Dichloroethane	ND	0.500	"								
1,2-Dichloropropane	ND	0.500	"								
1,3,5-Trimethylbenzene	ND	0.500	"								
1,3-Dichlorobenzene	ND	0.500	"								
1,3-Dichloropropane	ND	0.500	"								
1,4-Dichlorobenzene	ND	0.500	"								
1,4-Dioxane	ND	80.0	"								
2-Butanone	ND	0.500	"								
2-Hexanone	ND	0.500	"								
4-Methyl-2-pentanone	ND	0.500	"								
Acetone	ND	2.00	"								
Acrolein	ND	0.500	"								
Acrylonitrile	ND	0.500	"								
Benzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								
Carbon disulfide	ND	0.500	"								
Carbon tetrachloride	ND	0.500	"								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Cyclohexane	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22449 - EPA 5030B											
Blank (BC22449-BLK1)											
Prepared: 03/16/2022 Analyzed: 03/17/2022											
Isopropylbenzene	ND	0.500	ug/L								
Methyl acetate	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylcyclohexane	ND	0.500	"								
Methylene chloride	ND	2.00	"								
Naphthalene	ND	2.00	"								
n-Butylbenzene	ND	0.500	"								
n-Propylbenzene	ND	0.500	"								
o-Xylene	ND	0.500	"								
p- & m- Xylenes	ND	1.00	"								
p-Diethylbenzene	ND	0.500	"								
p-Ethyltoluene	ND	0.500	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butyl alcohol (TBA)	ND	1.00	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Xylenes, Total	ND	1.50	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.6*		*"*	*10.0*		*106*	*69-130*				
Surrogate: SURR: Toluene-d8	*10.4*		*"*	*10.0*		*104*	*81-117*				
Surrogate: SURR: p-Bromofluorobenzene	*10.6*		*"*	*10.0*		*106*	*79-122*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22449 - EPA 5030B											
LCS (BC22449-BS1)								Prepared: 03/16/2022 Analyzed: 03/17/2022			
1,1,1,2-Tetrachloroethane	9.25		ug/L	10.0		92.5	82-126				
1,1,1-Trichloroethane	8.47		"	10.0		84.7	78-136				
1,1,2,2-Tetrachloroethane	9.08		"	10.0		90.8	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.24		"	10.0		82.4	54-165				
1,1,2-Trichloroethane	8.74		"	10.0		87.4	82-123				
1,1-Dichloroethane	8.91		"	10.0		89.1	82-129				
1,1-Dichloroethylene	9.01		"	10.0		90.1	68-138				
1,2,3-Trichlorobenzene	8.46		"	10.0		84.6	76-136				
1,2,3-Trichloropropane	8.97		"	10.0		89.7	77-128				
1,2,4-Trichlorobenzene	8.52		"	10.0		85.2	76-137				
1,2,4-Trimethylbenzene	9.30		"	10.0		93.0	82-132				
1,2-Dibromo-3-chloropropane	7.07		"	10.0		70.7	45-147				
1,2-Dibromoethane	8.88		"	10.0		88.8	83-124				
1,2-Dichlorobenzene	9.38		"	10.0		93.8	79-123				
1,2-Dichloroethane	9.26		"	10.0		92.6	73-132				
1,2-Dichloropropane	10.4		"	10.0		104	78-126				
1,3,5-Trimethylbenzene	9.29		"	10.0		92.9	80-131				
1,3-Dichlorobenzene	8.77		"	10.0		87.7	86-122				
1,3-Dichloropropane	9.29		"	10.0		92.9	81-125				
1,4-Dichlorobenzene	8.93		"	10.0		89.3	85-124				
1,4-Dioxane	228		"	210		108	10-349				
2-Butanone	8.53		"	10.0		85.3	49-152				
2-Hexanone	10.4		"	10.0		104	51-146				
4-Methyl-2-pentanone	10.4		"	10.0		104	57-145				
Acetone	10.3		"	10.0		103	14-150				
Acrolein	5.72		"	10.0		57.2	10-153				
Acrylonitrile	8.98		"	10.0		89.8	51-150				
Benzene	8.51		"	10.0		85.1	85-126				
Bromochloromethane	9.45		"	10.0		94.5	77-128				
Bromodichloromethane	9.10		"	10.0		91.0	79-128				
Bromoform	9.00		"	10.0		90.0	78-133				
Bromomethane	5.88		"	10.0		58.8	43-168				
Carbon disulfide	7.42		"	10.0		74.2	68-146				
Carbon tetrachloride	8.46		"	10.0		84.6	77-141				
Chlorobenzene	9.57		"	10.0		95.7	88-120				
Chloroethane	8.72		"	10.0		87.2	65-136				
Chloroform	8.78		"	10.0		87.8	82-128				
Chloromethane	10.4		"	10.0		104	43-155				
cis-1,2-Dichloroethylene	8.60		"	10.0		86.0	83-129				
cis-1,3-Dichloropropylene	8.81		"	10.0		88.1	80-131				
Cyclohexane	6.82		"	10.0		68.2	63-149				
Dibromochloromethane	8.40		"	10.0		84.0	80-130				
Dibromomethane	8.93		"	10.0		89.3	72-134				
Dichlorodifluoromethane	7.26		"	10.0		72.6	44-144				
Ethyl Benzene	10.2		"	10.0		102	80-131				
Hexachlorobutadiene	11.4		"	10.0		114	67-146				
Isopropylbenzene	9.48		"	10.0		94.8	76-140				
Methyl acetate	8.10		"	10.0		81.0	51-139				
Methyl tert-butyl ether (MTBE)	8.03		"	10.0		80.3	76-135				
Methylcyclohexane	9.26		"	10.0		92.6	72-143				
Methylene chloride	9.03		"	10.0		90.3	55-137				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22449 - EPA 5030B											
LCS (BC22449-BS1)								Prepared: 03/16/2022 Analyzed: 03/17/2022			
Naphthalene	8.09		ug/L	10.0		80.9	70-147				
n-Butylbenzene	9.96		"	10.0		99.6	79-132				
n-Propylbenzene	9.72		"	10.0		97.2	78-133				
o-Xylene	10.2		"	10.0		102	78-130				
p- & m- Xylenes	17.4		"	20.0		87.1	77-133				
p-Diethylbenzene	9.47		"	10.0		94.7	84-134				
p-Ethyltoluene	10.4		"	10.0		104	88-129				
p-Isopropyltoluene	9.46		"	10.0		94.6	81-136				
sec-Butylbenzene	9.54		"	10.0		95.4	79-137				
Styrene	9.36		"	10.0		93.6	67-132				
tert-Butyl alcohol (TBA)	46.2		"	50.0		92.4	25-162				
tert-Butylbenzene	7.59		"	10.0		75.9	77-138	Low Bias			
Tetrachloroethylene	8.82		"	10.0		88.2	82-131				
Toluene	9.45		"	10.0		94.5	80-127				
trans-1,2-Dichloroethylene	8.82		"	10.0		88.2	80-132				
trans-1,3-Dichloropropylene	8.63		"	10.0		86.3	78-131				
Trichloroethylene	8.79		"	10.0		87.9	82-128				
Trichlorofluoromethane	9.59		"	10.0		95.9	67-139				
Vinyl Chloride	9.86		"	10.0		98.6	58-145				
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.7*		*"*	*10.0*		*107*	*69-130*				
Surrogate: SURR: Toluene-d8	*10.3*		*"*	*10.0*		*103*	*81-117*				
Surrogate: SURR: p-Bromofluorobenzene	*9.76*		*"*	*10.0*		*97.6*	*79-122*				
LCS Dup (BC22449-BSD1)								Prepared: 03/16/2022 Analyzed: 03/17/2022			
1,1,1,2-Tetrachloroethane	8.91		ug/L	10.0		89.1	82-126		3.74	30	
1,1,1-Trichloroethane	8.13		"	10.0		81.3	78-136		4.10	30	
1,1,2,2-Tetrachloroethane	8.88		"	10.0		88.8	76-129		2.23	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	7.86		"	10.0		78.6	54-165		4.72	30	
1,1,2-Trichloroethane	8.55		"	10.0		85.5	82-123		2.20	30	
1,1-Dichloroethane	8.54		"	10.0		85.4	82-129		4.24	30	
1,1-Dichloroethylene	8.57		"	10.0		85.7	68-138		5.01	30	
1,2,3-Trichlorobenzene	8.30		"	10.0		83.0	76-136		1.91	30	
1,2,3-Trichloropropane	8.70		"	10.0		87.0	77-128		3.06	30	
1,2,4-Trichlorobenzene	8.28		"	10.0		82.8	76-137		2.86	30	
1,2,4-Trimethylbenzene	8.93		"	10.0		89.3	82-132		4.06	30	
1,2-Dibromo-3-chloropropane	8.50		"	10.0		85.0	45-147		18.4	30	
1,2-Dibromoethane	8.62		"	10.0		86.2	83-124		2.97	30	
1,2-Dichlorobenzene	9.13		"	10.0		91.3	79-123		2.70	30	
1,2-Dichloroethane	9.02		"	10.0		90.2	73-132		2.63	30	
1,2-Dichloropropane	9.92		"	10.0		99.2	78-126		4.53	30	
1,3,5-Trimethylbenzene	8.98		"	10.0		89.8	80-131		3.39	30	
1,3-Dichlorobenzene	8.49		"	10.0		84.9	86-122	Low Bias	3.24	30	
1,3-Dichloropropane	8.93		"	10.0		89.3	81-125		3.95	30	
1,4-Dichlorobenzene	8.62		"	10.0		86.2	85-124		3.53	30	
1,4-Dioxane	228		"	210		108	10-349		0.0176	30	
2-Butanone	8.46		"	10.0		84.6	49-152		0.824	30	
2-Hexanone	10.2		"	10.0		102	51-146		1.85	30	
4-Methyl-2-pentanone	10.1		"	10.0		101	57-145		2.82	30	
Acetone	9.97		"	10.0		99.7	14-150		2.87	30	
Acrolein	5.64		"	10.0		56.4	10-153		1.41	30	
Acrylonitrile	8.76		"	10.0		87.6	51-150		2.48	30	

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22449 - EPA 5030B											
LCS Dup (BC22449-BSD1)								Prepared: 03/16/2022 Analyzed: 03/17/2022			
Benzene	8.18		ug/L	10.0		81.8	85-126	Low Bias	3.95	30	
Bromochloromethane	9.00		"	10.0		90.0	77-128		4.88	30	
Bromodichloromethane	8.73		"	10.0		87.3	79-128		4.15	30	
Bromoform	8.79		"	10.0		87.9	78-133		2.36	30	
Bromomethane	5.66		"	10.0		56.6	43-168		3.81	30	
Carbon disulfide	7.08		"	10.0		70.8	68-146		4.69	30	
Carbon tetrachloride	8.09		"	10.0		80.9	77-141		4.47	30	
Chlorobenzene	9.21		"	10.0		92.1	88-120		3.83	30	
Chloroethane	8.30		"	10.0		83.0	65-136		4.94	30	
Chloroform	8.38		"	10.0		83.8	82-128		4.66	30	
Chloromethane	9.99		"	10.0		99.9	43-155		3.64	30	
cis-1,2-Dichloroethylene	8.28		"	10.0		82.8	83-129	Low Bias	3.79	30	
cis-1,3-Dichloropropylene	8.46		"	10.0		84.6	80-131		4.05	30	
Cyclohexane	6.49		"	10.0		64.9	63-149		4.96	30	
Dibromochloromethane	8.16		"	10.0		81.6	80-130		2.90	30	
Dibromomethane	8.68		"	10.0		86.8	72-134		2.84	30	
Dichlorodifluoromethane	6.85		"	10.0		68.5	44-144		5.81	30	
Ethyl Benzene	9.68		"	10.0		96.8	80-131		4.74	30	
Hexachlorobutadiene	11.1		"	10.0		111	67-146		2.76	30	
Isopropylbenzene	9.08		"	10.0		90.8	76-140		4.31	30	
Methyl acetate	7.96		"	10.0		79.6	51-139		1.74	30	
Methyl tert-butyl ether (MTBE)	7.85		"	10.0		78.5	76-135		2.27	30	
Methylcyclohexane	8.80		"	10.0		88.0	72-143		5.09	30	
Methylene chloride	8.66		"	10.0		86.6	55-137		4.18	30	
Naphthalene	7.89		"	10.0		78.9	70-147		2.50	30	
n-Butylbenzene	9.54		"	10.0		95.4	79-132		4.31	30	
n-Propylbenzene	9.34		"	10.0		93.4	78-133		3.99	30	
o-Xylene	9.67		"	10.0		96.7	78-130		4.94	30	
p- & m- Xylenes	16.6		"	20.0		83.0	77-133		4.76	30	
p-Diethylbenzene	9.14		"	10.0		91.4	84-134		3.55	30	
p-Ethyltoluene	9.95		"	10.0		99.5	88-129		3.94	30	
p-Isopropyltoluene	9.05		"	10.0		90.5	81-136		4.43	30	
sec-Butylbenzene	9.15		"	10.0		91.5	79-137		4.17	30	
Styrene	8.96		"	10.0		89.6	67-132		4.37	30	
tert-Butyl alcohol (TBA)	46.0		"	50.0		92.0	25-162		0.477	30	
tert-Butylbenzene	7.30		"	10.0		73.0	77-138	Low Bias	3.90	30	
Tetrachloroethylene	8.47		"	10.0		84.7	82-131		4.05	30	
Toluene	9.04		"	10.0		90.4	80-127		4.43	30	
trans-1,2-Dichloroethylene	8.42		"	10.0		84.2	80-132		4.64	30	
trans-1,3-Dichloropropylene	8.37		"	10.0		83.7	78-131		3.06	30	
Trichloroethylene	8.43		"	10.0		84.3	82-128		4.18	30	
Trichlorofluoromethane	9.11		"	10.0		91.1	67-139		5.13	30	
Vinyl Chloride	9.31		"	10.0		93.1	58-145		5.74	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.7*		*"*	*10.0*		*107*	*69-130*				
Surrogate: SURR: Toluene-d8	*10.3*		*"*	*10.0*		*103*	*81-117*				
Surrogate: SURR: p-Bromofluorobenzene	*9.73*		*"*	*10.0*		*97.3*	*79-122*				

Miscellaneous Physical Parameters - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22435 - % Solids Prep											
Duplicate (BC22435-DUP1)	*Source sample: 22C0596-06 (Duplicate)							Prepared & Analyzed: 03/17/2022			
% Solids	76.7	0.100	%		75.5				1.52	20	

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
22C0658-01	SB-005 (0-2)	40mL Vial with Stir Bar-Cool 4° C
22C0658-02	SB-006 (0-2)	40mL Vial with Stir Bar-Cool 4° C
22C0658-03	SB-007 (0-2)	40mL Vial with Stir Bar-Cool 4° C
22C0658-04	Equipment Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
22C0658-05	Trip Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C

Sample and Data Qualifiers Relating to This Work Order

S-01	The surrogate recovery for this sample may not be available due to sample dilution required from high analyte concentration and/or matrix interferences.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
Cal-E	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration (average Rf>20%)

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

Field Chain-of-Custody Record

YORK ANALYTICAL LABORATORIES INC

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization for YORK to proceed with the analyses requested below.
Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No. 22C0658

120 Research Drive Stratford, CT 06615 | 132-02 89th Ave Queens, NY 11418 | clientservices@yorklab.com | www.yorklab.com | 800-306-YORK | 800-306-9675 | Page ____ of ____

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: P.W Grosser Consulting	Company: Same	Company: Same	FA42101	RUSH - Next Day
Address: 630 Johnson Ave, St. 7 Bohemia, NY 11716	Address:	Address:	YOUR Project Name: 434 Rubicky Ave, Yonkers	RUSH - Two Day
Phone: (631)589-6353	Phone:	Phone:		RUSH - Three Day
Contact: Michael Geun	Contact:	Contact:		RUSH - Four Day
E-mail: MGeun@pwgrosser.com	E-mail:	E-mail:	YOUR PO#:	Standard (5-7 Day) X

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

Samples Collected by: (print AND sign your name)

Matrix Codes	Samples From	Report / EDD Type (circle selections)			YORK Reg. Comp.
S - soil / solid	New York X	Summary Report	CT RCP	Standard Excel EDD	Compared to the following Regulation(s): (please fill in)
GW - groundwater	New Jersey	QA Report	CT RCP DQA/DUE	EQuIS (Standard)	
DW - drinking water	Connecticut	NY ASP A Package	NJDEP Reduced	NYSDEC EQuIS	
WW - wastewater	Pennsylvania	NY ASP B Package	Deliverables	NJDEP SRP HazSite	
O - Oil / Other	Other:		NJDKQP	Other:	

Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
SB-005 (0-2)	S	03/10/22 08:55	TCL VOA Tiles	Terracores
SB-005 (0-2) MS/MSD	S	03/10/22 08:55	TCL VOA Tiles	↓
SB-006 (0-2)	S	03/10/22 10:25	TCL VOA Tiles	↓
SB-007 (0-2)	S	03/10/22 11:35	TCL VOA Tiles	↓
Equipment Blank	GW	03/10/22 12:30	TCL VOA Tiles	40 mL vials
Trip Blank	GW	03/10/22	TCL VOA Tiles	

Comments:

Preservation: (check all that apply)
HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH ___
ZnAc ___ Ascorbic Acid ___ Other: ___

Special Instruction
Field Filtered
Lab to Filter

Samples iced/chilled at time of lab pickup? circle Yes or No

1. Samples Relinquished by / Company	Date/Time	1. Samples Received by / Company	Date/Time	2. Samples Relinquished by / Company	Date/Time
PWG/PWGC	03/10/22 14:25	Arlen A Schulz/YORK	3/10/22 14:25 1.5°C		
2. Samples Received by / Company	Date/Time	3. Samples Relinquished by / Company	Date/Time	3. Samples Received by / Company	Date/Time
4. Samples Relinquished by / Company	Date/Time	4. Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time / Temperature
					Degrees C

Technical Report

prepared for:

P.W. Grosser Consulting
630 Johnson Avenue, Suite 7
Bohemia NY, 11716
Attention: Michael Gaul

Report Date: 03/29/2022
Client Project ID: FAY2101 434 Riverdale Ave Yonkers
York Project (SDG) No.: 22C1239

CT Cert. No. PH-0723 New Jersey Cert. No. CT005 and NY037 New York Cert. Nos. 10854 and 12058 PA Cert. No. 68-04440

120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418
www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@yorklab.com

Report Date: 03/29/2022
Client Project ID: FAY2101 434 Riverdale Ave Yonkers
York Project (SDG) No.: 22C1239

P.W. Grosser Consulting
630 Johnson Avenue, Suite 7
Bohemia NY, 11716
Attention: Michael Gaul

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on March 22, 2022 and listed below. The project was identified as your project: **FAY2101 434 Riverdale Ave Yonkers**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
22C1239-01	SV-El Valle	Soil Vapor	03/22/2022	03/22/2022
22C1239-02	AA-El Valle	Indoor Ambient Air	03/22/2022	03/22/2022
22C1239-03	SV-Deli	Soil Vapor	03/22/2022	03/22/2022
22C1239-04	AA-Deli	Indoor Ambient Air	03/22/2022	03/22/2022
22C1239-05	SV-Supermarket	Soil Vapor	03/22/2022	03/22/2022
22C1239-06	AA-Supermarket	Indoor Ambient Air	03/22/2022	03/22/2022
22C1239-07	SV-Laundromat East	Soil Vapor	03/22/2022	03/22/2022
22C1239-08	AA-Laundromat East	Indoor Ambient Air	03/22/2022	03/22/2022
22C1239-09	SV-Laundromat West	Soil Vapor	03/22/2022	03/22/2022
22C1239-10	AA-Laundromat West	Indoor Ambient Air	03/22/2022	03/22/2022
22C1239-11	OA-001	Outdoor Ambient Ai	03/22/2022	03/22/2022

General Notes for York Project (SDG) No.: 22C1239

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By:

Date: 03/29/2022

Cassie L. Mosher
Laboratory Manager

Sample Information

Client Sample ID: **SV-El Valle** **York Sample ID:** **22C1239-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:06 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	4.89	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	3.89	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	4.89	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	5.46	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	3.89	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	2.89	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	1.41	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	5.29	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	3.50	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	5.48	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	4.29	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	2.88	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	3.29	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	4.98	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	3.50	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	4.73	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	4.29	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	3.29	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	4.29	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	5.14	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**7.36**		ug/m³	2.10	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **SV-El Valle** **York Sample ID:** **22C1239-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:06 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	* 2-Hexanone	ND	TO-CCV, TO-LCS-L	ug/m³	5.84	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:			
107-05-1	3-Chloropropene	ND		ug/m³	11.2	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	2.92	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**1100**		ug/m³	8.47	17.82	EPA TO-15	03/26/2022 08:00	03/26/2022 16:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	**Acrylonitrile**	**5.72**		ug/m³	1.55	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	Benzene	ND		ug/m³	2.28	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	3.69	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	**Bromodichloromethane**	**14.8**		ug/m³	4.78	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	7.37	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	2.77	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	Carbon disulfide	ND		ug/m³	2.22	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	Carbon tetrachloride	ND		ug/m³	1.12	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	3.28	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	1.88	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	**Chloroform**	**467**		ug/m³	3.48	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	Chloromethane	ND		ug/m³	1.47	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	1.41	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	3.24	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	Cyclohexane	ND		ug/m³	2.45	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	6.07	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	Dichlorodifluoromethane	ND		ug/m³	3.52	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: SV-El Valle

York Sample ID: 22C1239-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:06 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
141-78-6	* Ethyl acetate	ND		ug/m³	5.14	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:			
100-41-4	Ethyl Benzene	ND		ug/m³	3.10	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
87-68-3	Hexachlorobutadiene	ND		ug/m³	7.60	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**2120**		ug/m³	8.76	17.82	EPA TO-15	03/26/2022 08:00	03/26/2022 16:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	Methyl Methacrylate	ND		ug/m³	2.92	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	2.57	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	Methylene chloride	ND		ug/m³	4.95	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	n-Heptane	ND		ug/m³	2.92	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	n-Hexane	ND		ug/m³	2.51	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	o-Xylene	ND		ug/m³	3.09	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	p- & m- Xylenes	ND		ug/m³	6.19	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	* p-Ethyltoluene	ND		ug/m³	3.50	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	1.23	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:			
100-42-5	Styrene	ND		ug/m³	3.04	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**27.6**		ug/m³	4.83	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	4.20	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:			
108-88-3	Toluene	ND		ug/m³	2.69	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	2.83	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	3.24	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	Trichloroethylene	ND		ug/m³	0.958	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	4.01	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	2.51	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: SV-El Valle

York Sample ID: 22C1239-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:06 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
593-60-2	Vinyl bromide	ND		ug/m³	3.12	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.911	7.128	EPA TO-15	03/28/2022 12:00	03/29/2022 12:48	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: AA-El Valle

York Sample ID: 22C1239-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:10 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.603	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.480	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.603	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	**1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)**	**0.674**		ug/m³	0.674	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.480	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.356	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.174	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.652	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	**1,2,4-Trimethylbenzene**	**1.08**		ug/m³	0.432	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.675	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.528	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.356	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.406	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.614	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.432	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	0.583	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.528	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.406	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:			
106-46-7	**1,4-Dichlorobenzene**	**4.60**		ug/m³	0.528	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	0.633	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**3.11**		ug/m³	0.259	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	0.720	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:			

Sample Information

Client Sample ID: AA-El Valle

York Sample ID: 22C1239-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:10 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	1.38	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.360	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**712**		ug/m³	15.8	33.17	EPA TO-15	03/28/2022 12:00	03/29/2022 02:28	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	0.191	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	**Benzene**	**0.702**		ug/m³	0.281	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	0.455	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	0.589	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	0.909	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	0.341	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	Carbon disulfide	ND		ug/m³	0.274	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	**Carbon tetrachloride**	**0.387**		ug/m³	0.138	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	0.405	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	0.232	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	**Chloroform**	**5.92**		ug/m³	0.429	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	**Chloromethane**	**1.47**	TO-CCV, TO-LCS-H	ug/m³	0.182	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	**cis-1,2-Dichloroethylene**	**0.418**		ug/m³	0.174	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.399	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	Cyclohexane	ND		ug/m³	0.303	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	0.749	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	**Dichlorodifluoromethane**	**2.48**	TO-CCV	ug/m³	0.435	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
141-78-6	*** Ethyl acetate**	**10.2**		ug/m³	0.633	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:			

Sample Information

Client Sample ID: AA-El Valle

York Sample ID: 22C1239-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:10 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	**Ethyl Benzene**	**0.496**		ug/m³	0.382	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.937	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-63-0	**Isopropanol**	**32.0**		ug/m³	0.432	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
80-62-6	**Methyl Methacrylate**	**5.11**		ug/m³	0.360	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.317	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-09-2	**Methylene chloride**	**2.29**		ug/m³	0.611	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
142-82-5	**n-Heptane**	**0.396**		ug/m³	0.360	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-54-3	**n-Hexane**	**0.341**		ug/m³	0.310	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-47-6	**o-Xylene**	**0.649**		ug/m³	0.382	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
179601-23-1	**p- & m- Xylenes**	**2.25**		ug/m³	0.763	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
622-96-8	*** p-Ethyltoluene**	**0.907**		ug/m³	0.432	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.151	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.374	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
127-18-4	**Tetrachloroethylene**	**1.37**		ug/m³	0.596	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
109-99-9	*** Tetrahydrofuran**	**1.19**		ug/m³	0.518	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:			
108-88-3	**Toluene**	**1.09**		ug/m³	0.331	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.349	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.399	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-01-6	**Trichloroethylene**	**0.142**		ug/m³	0.118	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.48**		ug/m³	0.494	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	0.310	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	0.384	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: AA-El Valle

York Sample ID: 22C1239-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:10 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	0.112	0.879	EPA TO-15	03/26/2022 08:00	03/26/2022 17:16	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **SV-Deli** **York Sample ID:** **22C1239-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:19 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	1.10	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.874	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.10	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.23	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.874	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.648	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.318	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.19	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	**1,2,4-Trimethylbenzene**	**8.35**		ug/m³	0.788	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.23	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.963	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.648	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.740	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.12	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	**1,3,5-Trimethylbenzene**	**2.21**		ug/m³	0.788	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	1.06	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.963	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.740	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.963	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	1.15	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**9.17**		ug/m³	0.472	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **SV-Deli** **York Sample ID:** **22C1239-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:19 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	*** 2-Hexanone**	**9.25**	TO-CCV, TO-LCS-L	ug/m³	1.31	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:			
107-05-1	3-Chloropropene	ND		ug/m³	2.51	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.656	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**5.63**		ug/m³	0.761	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	0.348	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	**Benzene**	**0.512**		ug/m³	0.512	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	0.829	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	1.07	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	1.66	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	0.622	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	**Carbon disulfide**	**0.748**		ug/m³	0.499	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	**Carbon tetrachloride**	**0.403**		ug/m³	0.252	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	0.738	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	0.423	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	Chloroform	ND		ug/m³	0.782	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	Chloromethane	ND		ug/m³	0.331	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.318	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.727	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	Cyclohexane	ND		ug/m³	0.551	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	1.36	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	**Dichlorodifluoromethane**	**2.77**		ug/m³	0.792	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: SV-Deli

York Sample ID: 22C1239-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:19 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
141-78-6	* Ethyl acetate	ND		ug/m³	1.15	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:			
100-41-4	**Ethyl Benzene**	**2.43**		ug/m³	0.696	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.71	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**4.84**		ug/m³	0.788	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	Methyl Methacrylate	ND		ug/m³	0.656	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.578	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	**Methylene chloride**	**3.17**		ug/m³	1.11	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	**n-Heptane**	**2.36**		ug/m³	0.657	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	**n-Hexane**	**0.734**		ug/m³	0.565	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	**o-Xylene**	**4.87**		ug/m³	0.696	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	**p- & m- Xylenes**	**10.7**		ug/m³	1.39	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	*** p-Ethyltoluene**	**7.56**		ug/m³	0.788	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.276	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.682	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**9.45**		ug/m³	1.09	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.945	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:			
108-88-3	**Toluene**	**6.70**		ug/m³	0.604	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.635	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.727	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	Trichloroethylene	ND		ug/m³	0.215	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.62**		ug/m³	0.900	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.564	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **SV-Deli** **York Sample ID:** **22C1239-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:19 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
593-60-2	Vinyl bromide	ND		ug/m³	0.701	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.205	1.602	EPA TO-15	03/28/2022 12:00	03/29/2022 03:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **AA-Deli** **York Sample ID:** **22C1239-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:30 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.581	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.462	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.581	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.648	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.462	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.342	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.168	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.628	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.416	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.650	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.509	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.342	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.391	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.591	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.416	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	0.561	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.509	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.391	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.509	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	0.610	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**0.923**		ug/m³	0.250	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	0.693	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:			

Sample Information

Client Sample ID: AA-Deli

York Sample ID: 22C1239-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:30 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	1.32	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.347	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**39.7**		ug/m³	0.402	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	0.184	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	**Benzene**	**0.514**		ug/m³	0.270	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	0.438	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	0.567	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	0.874	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	0.329	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	Carbon disulfide	ND		ug/m³	0.263	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	**Carbon tetrachloride**	**0.426**		ug/m³	0.133	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	0.389	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	0.223	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	**Chloroform**	**0.537**		ug/m³	0.413	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	**Chloromethane**	**1.36**	TO-CCV, TO-LCS-H	ug/m³	0.175	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.168	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.384	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	Cyclohexane	ND		ug/m³	0.291	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	0.721	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	**Dichlorodifluoromethane**	**2.76**	TO-CCV	ug/m³	0.418	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
141-78-6	*** Ethyl acetate**	**1.43**		ug/m³	0.610	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:			

Sample Information

Client Sample ID: AA-Deli

York Sample ID: 22C1239-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:30 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/m³	0.367	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.902	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**2.37**		ug/m³	0.416	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	Methyl Methacrylate	ND		ug/m³	0.346	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.305	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	**Methylene chloride**	**0.852**		ug/m³	0.588	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	n-Heptane	ND		ug/m³	0.347	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	n-Hexane	ND		ug/m³	0.298	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	o-Xylene	ND		ug/m³	0.367	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	p- & m- Xylenes	ND		ug/m³	0.735	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.416	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.146	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.360	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	Tetrachloroethylene	ND		ug/m³	0.574	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.499	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:			
108-88-3	**Toluene**	**0.446**		ug/m³	0.319	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.335	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.384	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	Trichloroethylene	ND		ug/m³	0.114	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**2.76**		ug/m³	0.475	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.298	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	0.370	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: AA-Deli

York Sample ID: 22C1239-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:30 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	0.108	0.846	EPA TO-15	03/26/2022 08:00	03/26/2022 19:22	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **SV-Supermarket** **York Sample ID:** **22C1239-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:30 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	2.59	3.771	EPA TO-15 Certifications:	03/28/2022 12:00	03/29/2022 07:31	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	2.06	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	2.59	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	2.89	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	2.06	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	1.53	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.748	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	2.80	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	1.85	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	2.90	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	2.27	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	1.53	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	1.74	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	2.64	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	1.85	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	2.50	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	2.27	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	1.74	3.771	EPA TO-15 Certifications:	03/28/2022 12:00	03/29/2022 07:31	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	2.27	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	2.72	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
78-93-3	**2-Butanone**	**12.1**		ug/m³	1.11	3.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 07:31	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	3.09	3.771	EPA TO-15 Certifications:	03/28/2022 12:00	03/29/2022 07:31	LLJ

Sample Information

Client Sample ID: SV-Supermarket

York Sample ID: 22C1239-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:30 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	5.90	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	1.54	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**18.5**		ug/m³	1.79	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	0.818	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	Benzene	ND		ug/m³	1.20	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	1.95	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	2.53	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	3.90	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	1.46	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	**Carbon disulfide**	**1.29**		ug/m³	1.17	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	Carbon tetrachloride	ND		ug/m³	0.593	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	1.74	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	0.995	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	Chloroform	ND		ug/m³	1.84	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	**Chloromethane**	**1.56**	TO-CCV	ug/m³	0.779	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	**cis-1,2-Dichloroethylene**	**2.09**		ug/m³	0.748	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	1.71	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	Cyclohexane	ND		ug/m³	1.30	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	3.21	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	**Dichlorodifluoromethane**	**2.98**		ug/m³	1.86	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
141-78-6	* Ethyl acetate	ND		ug/m³	2.72	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:			
100-41-4	Ethyl Benzene	ND		ug/m³	1.64	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **SV-Supermarket** **York Sample ID:** **22C1239-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:30 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/m³	4.02	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**3.24**		ug/m³	1.85	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	Methyl Methacrylate	ND		ug/m³	1.54	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	1.36	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	Methylene chloride	ND		ug/m³	2.62	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	n-Heptane	ND		ug/m³	1.55	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	n-Hexane	ND		ug/m³	1.33	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	o-Xylene	ND		ug/m³	1.64	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	p- & m- Xylenes	ND		ug/m³	3.27	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	* p-Ethyltoluene	ND		ug/m³	1.85	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.649	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:			
100-42-5	Styrene	ND		ug/m³	1.61	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**3.58**		ug/m³	2.56	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	*** Tetrahydrofuran**	**3.34**		ug/m³	2.22	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:			
108-88-3	Toluene	ND		ug/m³	1.42	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	1.50	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	1.71	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	Trichloroethylene	ND		ug/m³	0.507	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	2.12	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	1.33	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	1.65	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.482	3.771	EPA TO-15	03/28/2022 12:00	03/29/2022 07:31	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **SV-Supermarket** **York Sample ID:** **22C1239-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:30 pm	03/22/2022

Sample Information

Client Sample ID: **AA-Supermarket** **York Sample ID:** **22C1239-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:31 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.571	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.454	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.571	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.638	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.454	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.337	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.165	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.617	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	**1,2,4-Trimethylbenzene**	**0.532**		ug/m³	0.409	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.639	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.500	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.337	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.384	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.582	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.409	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	0.552	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.500	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.384	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.500	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	0.600	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**4.76**		ug/m³	0.245	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	0.682	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:			

Sample Information

Client Sample ID: **AA-Supermarket** **York Sample ID:** **22C1239-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:31 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	1.30	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.341	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**6.11**		ug/m³	0.395	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	0.181	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	**Benzene**	**0.319**		ug/m³	0.266	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	0.431	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	0.557	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	0.860	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	0.323	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	**Carbon disulfide**	**0.492**		ug/m³	0.259	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	**Carbon tetrachloride**	**0.209**		ug/m³	0.131	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	0.383	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	0.220	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	Chloroform	ND		ug/m³	0.406	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	Chloromethane	ND		ug/m³	0.172	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	**cis-1,2-Dichloroethylene**	**0.693**		ug/m³	0.165	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.378	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	Cyclohexane	ND		ug/m³	0.286	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	0.709	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	**Dichlorodifluoromethane**	**1.32**	TO-CCV	ug/m³	0.411	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
141-78-6	* Ethyl acetate	ND		ug/m³	0.600	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:			
100-41-4	Ethyl Benzene	ND		ug/m³	0.361	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: AA-Supermarket

York Sample ID: 22C1239-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:31 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.887	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**0.675**		ug/m³	0.409	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	Methyl Methacrylate	ND		ug/m³	0.341	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.300	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	**Methylene chloride**	**0.751**		ug/m³	0.578	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	n-Heptane	ND		ug/m³	0.341	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	n-Hexane	ND		ug/m³	0.293	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	o-Xylene	ND		ug/m³	0.361	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	p- & m- Xylenes	ND		ug/m³	0.722	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	*** p-Ethyltoluene**	**0.491**		ug/m³	0.409	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.143	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.354	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**1.35**		ug/m³	0.564	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	*** Tetrahydrofuran**	**1.37**		ug/m³	0.491	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:			
108-88-3	**Toluene**	**0.408**		ug/m³	0.314	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.330	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.378	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	**Trichloroethylene**	**0.134**		ug/m³	0.112	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**0.608**		ug/m³	0.467	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.293	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	0.364	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.106	0.832	EPA TO-15	03/26/2022 08:00	03/26/2022 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **AA-Supermarket** **York Sample ID:** **22C1239-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:31 pm	03/22/2022

Sample Information

Client Sample ID: **SV-Laundromat East** **York Sample ID:** **22C1239-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:40 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	1.30	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	1.04	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.30	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.45	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	1.04	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.768	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.376	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.41	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	**1,2,4-Trimethylbenzene**	**9.33**		ug/m³	0.933	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.46	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	1.14	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.768	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.877	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.33	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	**1,3,5-Trimethylbenzene**	**2.33**		ug/m³	0.933	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	1.26	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	1.14	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.877	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	1.14	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	1.37	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**10.8**		ug/m³	0.559	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **SV-Laundromat East** **York Sample ID:** **22C1239-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:40 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	*** 2-Hexanone**	**6.29**	TO-CCV, TO-LCS-L	ug/m³	1.55	1.897	EPA TO-15 Certifications:	03/28/2022 12:00	03/29/2022 08:36	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	2.97	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.777	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
67-64-1	**Acetone**	**5.27**		ug/m³	0.901	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.412	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
71-43-2	Benzene	ND		ug/m³	0.606	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.982	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	1.27	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
75-25-2	Bromoform	ND		ug/m³	1.96	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.737	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
75-15-0	**Carbon disulfide**	**2.60**		ug/m³	0.591	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
56-23-5	Carbon tetrachloride	ND		ug/m³	0.298	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.873	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.501	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
67-66-3	**Chloroform**	**4.91**		ug/m³	0.926	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
74-87-3	Chloromethane	ND		ug/m³	0.392	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.376	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.861	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.653	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	1.62	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ
75-71-8	**Dichlorodifluoromethane**	**2.91**		ug/m³	0.938	1.897	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2022 12:00	03/29/2022 08:36	LLJ

Sample Information

Client Sample ID: **SV-Laundromat East** **York Sample ID:** **22C1239-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:40 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
141-78-6	* Ethyl acetate	ND		ug/m³	1.37	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:			
100-41-4	**Ethyl Benzene**	**1.98**		ug/m³	0.824	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
87-68-3	Hexachlorobutadiene	ND		ug/m³	2.02	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**12.8**		ug/m³	0.933	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	Methyl Methacrylate	ND		ug/m³	0.777	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.684	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	**Methylene chloride**	**1.52**		ug/m³	1.32	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	**n-Heptane**	**1.40**		ug/m³	0.777	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	n-Hexane	ND		ug/m³	0.669	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	**o-Xylene**	**4.37**		ug/m³	0.824	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	**p- & m- Xylenes**	**9.39**		ug/m³	1.65	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	*** p-Ethyltoluene**	**7.83**		ug/m³	0.933	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.326	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.808	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**6.18**		ug/m³	1.29	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	1.12	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:			
108-88-3	**Toluene**	**4.86**		ug/m³	0.715	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.752	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.861	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	Trichloroethylene	ND		ug/m³	0.255	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.60**		ug/m³	1.07	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.668	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **SV-Laundromat East** **York Sample ID:** **22C1239-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:40 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
593-60-2	Vinyl bromide	ND		ug/m³	0.830	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.242	1.897	EPA TO-15	03/28/2022 12:00	03/29/2022 08:36	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: AA-Laundromat East

York Sample ID: 22C1239-08

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:41 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.620	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.493	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.620	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.692	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.493	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.365	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.179	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.670	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	**1,2,4-Trimethylbenzene**	**0.932**		ug/m³	0.444	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.694	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.543	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.365	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.417	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.631	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.444	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	0.599	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.543	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.417	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:			
106-46-7	**1,4-Dichlorobenzene**	**4.29**		ug/m³	0.543	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	0.651	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**0.639**		ug/m³	0.266	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	0.740	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:			

Sample Information

Client Sample ID: **AA-Laundromat East** **York Sample ID:** **22C1239-08**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:41 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	1.41	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.370	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**19.9**		ug/m³	0.429	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	0.196	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	**Benzene**	**0.462**		ug/m³	0.288	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	0.467	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	0.605	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	0.933	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	0.351	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	Carbon disulfide	ND		ug/m³	0.281	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	**Carbon tetrachloride**	**0.454**		ug/m³	0.142	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	0.416	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	0.238	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	**Chloroform**	**5.56**		ug/m³	0.441	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	**Chloromethane**	**1.68**	TO-CCV, TO-LCS-H	ug/m³	0.186	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.179	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.410	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	Cyclohexane	ND		ug/m³	0.311	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	0.769	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	**Dichlorodifluoromethane**	**2.55**	TO-CCV	ug/m³	0.447	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
141-78-6	* Ethyl acetate	ND		ug/m³	0.651	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:			

Sample Information

Client Sample ID: AA-Laundromat East

York Sample ID: 22C1239-08

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:41 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/m³	0.392	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.963	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**53.6**		ug/m³	0.444	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	Methyl Methacrylate	ND		ug/m³	0.370	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.326	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	**Methylene chloride**	**2.29**		ug/m³	0.627	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	n-Heptane	ND		ug/m³	0.370	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	n-Hexane	ND		ug/m³	0.318	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	o-Xylene	ND		ug/m³	0.392	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	p- & m- Xylenes	ND		ug/m³	0.784	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	*** p-Ethyltoluene**	**0.577**		ug/m³	0.444	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.155	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.385	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**0.612**		ug/m³	0.612	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.533	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:			
108-88-3	**Toluene**	**1.16**		ug/m³	0.340	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.358	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.410	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	Trichloroethylene	ND		ug/m³	0.121	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.42**		ug/m³	0.507	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.318	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	0.395	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **AA-Laundromat East** **York Sample ID:** **22C1239-08**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:41 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	0.115	0.903	EPA TO-15	03/26/2022 08:00	03/26/2022 23:35	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: SV-Laundromat West

York Sample ID: 22C1239-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:44 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.963	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.766	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.963	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.08	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.766	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.568	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.278	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.04	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	**1,2,4-Trimethylbenzene**	**12.0**		ug/m³	0.690	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.08	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.844	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.568	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.648	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.981	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	**1,3,5-Trimethylbenzene**	**3.24**		ug/m³	0.690	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	0.931	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.844	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.648	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.844	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	1.01	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**15.0**		ug/m³	0.414	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **SV-Laundromat West** **York Sample ID:** **22C1239-09**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:44 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes: **TO-VAC**

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	*** 2-Hexanone**	**7.93**	TO-CCV, TO-LCS-L	ug/m³	1.15	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:			
107-05-1	3-Chloropropene	ND		ug/m³	2.20	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.575	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-64-1	**Acetone**	**11.7**		ug/m³	0.667	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-13-1	Acrylonitrile	ND		ug/m³	0.304	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
71-43-2	**Benzene**	**0.807**		ug/m³	0.448	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
100-44-7	Benzyl chloride	ND		ug/m³	0.726	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-27-4	Bromodichloromethane	ND		ug/m³	0.940	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-25-2	Bromoform	ND		ug/m³	1.45	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-83-9	Bromomethane	ND		ug/m³	0.545	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-15-0	**Carbon disulfide**	**1.66**		ug/m³	0.437	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
56-23-5	**Carbon tetrachloride**	**0.353**		ug/m³	0.221	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-90-7	Chlorobenzene	ND		ug/m³	0.646	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-00-3	Chloroethane	ND		ug/m³	0.370	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-66-3	**Chloroform**	**5.62**		ug/m³	0.685	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-87-3	Chloromethane	ND		ug/m³	0.290	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.278	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.637	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-82-7	**Cyclohexane**	**0.580**		ug/m³	0.483	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	1.20	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-71-8	**Dichlorodifluoromethane**	**3.47**		ug/m³	0.694	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: SV-Laundromat West

York Sample ID: 22C1239-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:44 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
141-78-6	* Ethyl acetate	ND		ug/m³	1.01	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:			
100-41-4	**Ethyl Benzene**	**3.05**		ug/m³	0.609	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.50	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**6.10**		ug/m³	0.690	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	Methyl Methacrylate	ND		ug/m³	0.574	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.506	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	Methylene chloride	ND		ug/m³	0.975	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	**n-Heptane**	**3.05**		ug/m³	0.575	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	**n-Hexane**	**1.09**		ug/m³	0.495	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	**o-Xylene**	**6.03**		ug/m³	0.609	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	**p- & m- Xylenes**	**13.3**		ug/m³	1.22	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	*** p-Ethyltoluene**	**10.4**		ug/m³	0.690	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.241	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.598	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**58.8**		ug/m³	0.952	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.828	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:			
108-88-3	**Toluene**	**7.19**		ug/m³	0.529	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.556	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.637	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	Trichloroethylene	ND		ug/m³	0.188	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.66**		ug/m³	0.788	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.494	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: SV-Laundromat West

York Sample ID: 22C1239-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Soil Vapor	March 22, 2022 1:44 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
593-60-2	Vinyl bromide	ND		ug/m³	0.614	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.179	1.403	EPA TO-15	03/28/2022 12:00	03/29/2022 09:40	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: AA-Laundromat West

York Sample ID: 22C1239-10

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:45 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.697	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.554	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.697	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.779	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.554	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.411	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.201	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.754	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	**1,2,4-Trimethylbenzene**	**0.649**		ug/m³	0.499	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.781	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.611	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.411	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.469	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.710	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.499	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	0.674	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.611	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.470	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:			
106-46-7	**1,4-Dichlorobenzene**	**9.83**		ug/m³	0.611	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	0.732	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**0.869**		ug/m³	0.300	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	0.832	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:			

Sample Information

Client Sample ID: **AA-Laundromat West** **York Sample ID:** **22C1239-10**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:45 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	1.59	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.416	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**74.4**		ug/m³	0.483	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	0.220	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	**Benzene**	**0.519**		ug/m³	0.325	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	0.526	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	0.681	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	1.05	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	0.395	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	Carbon disulfide	ND		ug/m³	0.316	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	**Carbon tetrachloride**	**0.447**		ug/m³	0.160	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	0.468	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	0.268	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	**Chloroform**	**6.99**		ug/m³	0.496	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	**Chloromethane**	**1.68**	TO-CCV, TO-LCS-H	ug/m³	0.210	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.201	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.461	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	Cyclohexane	ND		ug/m³	0.350	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	0.865	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	**Dichlorodifluoromethane**	**2.61**	TO-CCV	ug/m³	0.502	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
141-78-6	*** Ethyl acetate**	**0.952**		ug/m³	0.732	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:			

Sample Information

Client Sample ID: AA-Laundromat West

York Sample ID: 22C1239-10

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:45 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/m³	0.441	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.08	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**41.8**		ug/m³	0.499	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	**Methyl Methacrylate**	**1.08**		ug/m³	0.416	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.366	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	**Methylene chloride**	**4.69**		ug/m³	0.706	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	n-Heptane	ND		ug/m³	0.416	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	n-Hexane	ND		ug/m³	0.358	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	o-Xylene	ND		ug/m³	0.441	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	p- & m- Xylenes	ND		ug/m³	0.882	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	*** p-Ethyltoluene**	**0.499**		ug/m³	0.499	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.175	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.433	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**5.93**		ug/m³	0.689	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.599	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:			
108-88-3	**Toluene**	**1.34**		ug/m³	0.383	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.403	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.461	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	Trichloroethylene	ND		ug/m³	0.136	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.54**		ug/m³	0.571	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.358	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	0.444	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **AA-Laundromat West** **York Sample ID:** **22C1239-10**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Indoor Ambient Air	March 22, 2022 1:45 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	0.130	1.016	EPA TO-15	03/26/2022 08:00	03/27/2022 01:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: OA-001 **York Sample ID:** 22C1239-11

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Outdoor Ambient Air	March 22, 2022 2:00 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.607	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.482	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.607	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	**1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)**	**0.677**		ug/m³	0.677	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.482	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.358	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.175	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.656	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.435	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.679	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.531	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.358	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.408	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.618	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.435	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	0.587	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.531	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.409	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.531	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	0.637	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**1.15**		ug/m³	0.261	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	0.724	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:			

Sample Information

Client Sample ID: OA-001 **York Sample ID:** 22C1239-11

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Outdoor Ambient Air	March 22, 2022 2:00 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	1.38	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.362	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**14.8**		ug/m³	0.420	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	0.192	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	**Benzene**	**0.593**		ug/m³	0.282	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	0.458	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	0.592	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	0.914	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	0.343	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	Carbon disulfide	ND		ug/m³	0.275	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	**Carbon tetrachloride**	**0.445**		ug/m³	0.139	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	0.407	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	0.233	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	Chloroform	ND		ug/m³	0.432	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	**Chloromethane**	**2.03**	TO-CCV, TO-LCS-H	ug/m³	0.183	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.175	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.401	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	Cyclohexane	ND		ug/m³	0.304	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	0.753	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	**Dichlorodifluoromethane**	**3.63**	TO-CCV	ug/m³	0.437	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
141-78-6	* Ethyl acetate	ND		ug/m³	0.637	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:			

Sample Information

Client Sample ID: OA-001 **York Sample ID:** 22C1239-11

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Outdoor Ambient Air	March 22, 2022 2:00 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/m³	0.384	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.943	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**0.739**		ug/m³	0.435	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	Methyl Methacrylate	ND		ug/m³	0.362	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.319	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	**Methylene chloride**	**2.09**		ug/m³	0.614	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	n-Heptane	ND		ug/m³	0.362	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	n-Hexane	ND		ug/m³	0.312	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	o-Xylene	ND		ug/m³	0.384	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	p- & m- Xylenes	ND		ug/m³	0.768	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.435	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:			
115-07-1	*** Propylene**	**0.715**		ug/m³	0.152	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.377	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	Tetrachloroethylene	ND		ug/m³	0.600	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.521	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:			
108-88-3	**Toluene**	**0.466**		ug/m³	0.333	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.350	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.401	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	Trichloroethylene	ND		ug/m³	0.119	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.59**		ug/m³	0.497	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.311	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	0.387	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: OA-001 **York Sample ID:** 22C1239-11

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1239	FAY2101 434 Riverdale Ave Yonkers	Outdoor Ambient Air	March 22, 2022 2:00 pm	03/22/2022

Volatile Organics, TO15 Full

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	0.113	0.884	EPA TO-15	03/26/2022 08:00	03/27/2022 02:52	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Analytical Batch Summary

Batch ID: BC22980 **Preparation Method:** EPA TO15 PREP **Prepared By:** AS

YORK Sample ID	Client Sample ID	Preparation Date
22C1239-01RE1	SV-El Valle	03/26/22
22C1239-02	AA-El Valle	03/26/22
22C1239-04	AA-Deli	03/26/22
22C1239-06	AA-Supermarket	03/26/22
22C1239-08	AA-Laundromat East	03/26/22
22C1239-10	AA-Laundromat West	03/26/22
22C1239-11	OA-001	03/26/22
BC22980-BLK1	Blank	03/26/22
BC22980-BS1	LCS	03/26/22
BC22980-DUP1	Duplicate	03/26/22

Batch ID: BC22981 **Preparation Method:** EPA TO15 PREP **Prepared By:** AS

YORK Sample ID	Client Sample ID	Preparation Date
22C1239-01	SV-El Valle	03/28/22
22C1239-02RE1	AA-El Valle	03/28/22
22C1239-03	SV-Deli	03/28/22
22C1239-05	SV-Supermarket	03/28/22
22C1239-07	SV-Laundromat East	03/28/22
22C1239-09	SV-Laundromat West	03/28/22
BC22981-BLK1	Blank	03/28/22
BC22981-BS1	LCS	03/28/22
BC22981-DUP1	Duplicate	03/28/22

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22980 - EPA TO15 PREP											
Blank (BC22980-BLK1)											Prepared & Analyzed: 03/26/2022
1,1,1,2-Tetrachloroethane	ND	0.687	ug/m³								
1,1,1-Trichloroethane	ND	0.546	"								
1,1,2,2-Tetrachloroethane	ND	0.687	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.766	"								
1,1,2-Trichloroethane	ND	0.546	"								
1,1-Dichloroethane	ND	0.405	"								
1,1-Dichloroethylene	ND	0.198	"								
1,2,4-Trichlorobenzene	ND	0.742	"								
1,2,4-Trimethylbenzene	ND	0.492	"								
1,2-Dibromoethane	ND	0.768	"								
1,2-Dichlorobenzene	ND	0.601	"								
1,2-Dichloroethane	ND	0.405	"								
1,2-Dichloropropane	ND	0.462	"								
1,2-Dichlorotetrafluoroethane	ND	0.699	"								
1,3,5-Trimethylbenzene	ND	0.492	"								
1,3-Butadiene	ND	0.664	"								
1,3-Dichlorobenzene	ND	0.601	"								
1,3-Dichloropropane	ND	0.462	"								
1,4-Dichlorobenzene	ND	0.601	"								
1,4-Dioxane	ND	0.721	"								
2-Butanone	ND	0.295	"								
2-Hexanone	ND	0.819	"								
3-Chloropropene	ND	1.57	"								
4-Methyl-2-pentanone	ND	0.410	"								
Acetone	ND	0.475	"								
Acrylonitrile	ND	0.217	"								
Benzene	ND	0.319	"								
Benzyl chloride	ND	0.518	"								
Bromodichloromethane	ND	0.670	"								
Bromoform	ND	1.03	"								
Bromomethane	ND	0.388	"								
Carbon disulfide	ND	0.311	"								
Carbon tetrachloride	ND	0.157	"								
Chlorobenzene	ND	0.460	"								
Chloroethane	ND	0.264	"								
Chloroform	ND	0.488	"								
Chloromethane	ND	0.207	"								
cis-1,2-Dichloroethylene	ND	0.198	"								
cis-1,3-Dichloropropylene	ND	0.454	"								
Cyclohexane	ND	0.344	"								
Dibromochloromethane	ND	0.852	"								
Dichlorodifluoromethane	ND	0.495	"								
Ethyl acetate	ND	0.721	"								
Ethyl Benzene	ND	0.434	"								
Hexachlorobutadiene	ND	1.07	"								
Isopropanol	ND	0.492	"								
Methyl Methacrylate	ND	0.409	"								
Methyl tert-butyl ether (MTBE)	ND	0.361	"								
Methylene chloride	ND	0.695	"								
n-Heptane	ND	0.410	"								

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22980 - EPA TO15 PREP											
Blank (BC22980-BLK1)								Prepared & Analyzed: 03/26/2022			
n-Hexane	ND	0.352	ug/m³								
o-Xylene	ND	0.434	"								
p- & m- Xylenes	ND	0.868	"								
p-Ethyltoluene	ND	0.492	"								
Propylene	ND	0.172	"								
Styrene	ND	0.426	"								
Tetrachloroethylene	ND	0.678	"								
Tetrahydrofuran	ND	0.590	"								
Toluene	ND	0.377	"								
trans-1,2-Dichloroethylene	ND	0.396	"								
trans-1,3-Dichloropropylene	ND	0.454	"								
Trichloroethylene	ND	0.134	"								
Trichlorofluoromethane (Freon 11)	ND	0.562	"								
Vinyl acetate	ND	0.352	"								
Vinyl bromide	ND	0.437	"								
Vinyl Chloride	ND	0.128	"								
LCS (BC22980-BS1)								Prepared & Analyzed: 03/26/2022			
1,1,1,2-Tetrachloroethane	9.89		ppbv	10.0		98.9	70-130				
1,1,1-Trichloroethane	10.9		"	10.0		109	70-130				
1,1,2,2-Tetrachloroethane	9.86		"	10.0		98.6	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.1		"	10.0		121	70-130				
1,1,2-Trichloroethane	10.3		"	10.0		103	70-130				
1,1-Dichloroethane	11.3		"	10.0		113	70-130				
1,1-Dichloroethylene	10.2		"	10.0		102	70-130				
1,2,4-Trichlorobenzene	8.93		"	10.0		89.3	70-130				
1,2,4-Trimethylbenzene	8.95		"	10.0		89.5	70-130				
1,2-Dibromoethane	10.3		"	10.0		103	70-130				
1,2-Dichlorobenzene	8.96		"	10.0		89.6	70-130				
1,2-Dichloroethane	9.57		"	10.0		95.7	70-130				
1,2-Dichloropropane	9.56		"	10.0		95.6	70-130				
1,2-Dichlorotetrafluoroethane	13.1		"	10.0		131	70-130	High Bias			
1,3,5-Trimethylbenzene	8.92		"	10.0		89.2	70-130				
1,3-Butadiene	11.0		"	10.0		110	70-130				
1,3-Dichlorobenzene	9.16		"	10.0		91.6	70-130				
1,3-Dichloropropane	10.2		"	10.0		102	70-130				
1,4-Dichlorobenzene	9.26		"	10.0		92.6	70-130				
1,4-Dioxane	9.96		"	10.0		99.6	70-130				
2-Butanone	10.1		"	10.0		101	70-130				
2-Hexanone	7.40		"	10.0		74.0	70-130				
3-Chloropropene	10.5		"	10.0		105	70-130				
4-Methyl-2-pentanone	7.70		"	10.0		77.0	70-130				
Acetone	10.6		"	10.0		106	70-130				
Acrylonitrile	9.22		"	10.0		92.2	70-130				
Benzene	11.2		"	10.0		112	70-130				
Benzyl chloride	9.96		"	10.0		99.6	70-130				
Bromodichloromethane	9.67		"	10.0		96.7	70-130				
Bromoform	10.3		"	10.0		103	70-130				
Bromomethane	15.0		"	10.0		150	70-130	High Bias			
Carbon disulfide	12.4		"	10.0		124	70-130				
Carbon tetrachloride	10.2		"	10.0		102	70-130				

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22980 - EPA TO15 PREP											
LCS (BC22980-BS1)								Prepared & Analyzed: 03/26/2022			
Chlorobenzene	8.78		ppbv	10.0		87.8	70-130				
Chloroethane	15.1		"	10.0		151	70-130	High Bias			
Chloroform	11.0		"	10.0		110	70-130				
Chloromethane	12.1		"	10.0		121	70-130				
cis-1,2-Dichloroethylene	11.2		"	10.0		112	70-130				
cis-1,3-Dichloropropylene	10.2		"	10.0		102	70-130				
Cyclohexane	11.5		"	10.0		115	70-130				
Dibromochloromethane	9.93		"	10.0		99.3	70-130				
Dichlorodifluoromethane	11.5		"	10.0		115	70-130				
Ethyl acetate	9.91		"	10.0		99.1	70-130				
Ethyl Benzene	8.63		"	10.0		86.3	70-130				
Hexachlorobutadiene	9.89		"	10.0		98.9	70-130				
Isopropanol	10.4		"	10.0		104	70-130				
Methyl Methacrylate	10.4		"	10.0		104	70-130				
Methyl tert-butyl ether (MTBE)	9.39		"	10.0		93.9	70-130				
Methylene chloride	10.2		"	10.0		102	70-130				
n-Heptane	10.6		"	10.0		106	70-130				
n-Hexane	11.8		"	10.0		118	70-130				
o-Xylene	8.52		"	10.0		85.2	70-130				
p- & m- Xylenes	17.2		"	20.0		85.8	70-130				
p-Ethyltoluene	9.33		"	10.0		93.3	70-130				
Propylene	11.6		"	10.0		116	70-130				
Styrene	9.30		"	10.0		93.0	70-130				
Tetrachloroethylene	10.5		"	10.0		105	70-130				
Tetrahydrofuran	10.5		"	10.0		105	70-130				
Toluene	9.25		"	10.0		92.5	70-130				
trans-1,2-Dichloroethylene	11.3		"	10.0		113	70-130				
trans-1,3-Dichloropropylene	9.89		"	10.0		98.9	70-130				
Trichloroethylene	8.84		"	10.0		88.4	70-130				
Trichlorofluoromethane (Freon 11)	12.0		"	10.0		120	70-130				
Vinyl acetate	9.84		"	10.0		98.4	70-130				
Vinyl bromide	14.2		"	10.0		142	70-130	High Bias			
Vinyl Chloride	12.0		"	10.0		120	70-130				

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22980 - EPA TO15 PREP											
Duplicate (BC22980-DUP1)	*Source sample: 22C1239-11 (OA-001)								Prepared: 03/26/2022 Analyzed: 03/27/2022		
1,1,1,2-Tetrachloroethane	ND	0.607	ug/m³		ND					25	
1,1,1-Trichloroethane	ND	0.482	"		ND					25	
1,1,2,2-Tetrachloroethane	ND	0.607	"		ND					25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.677	0.677	"		0.677				0.00	25	
1,1,2-Trichloroethane	ND	0.482	"		ND					25	
1,1-Dichloroethane	ND	0.358	"		ND					25	
1,1-Dichloroethylene	ND	0.175	"		ND					25	
1,2,4-Trichlorobenzene	ND	0.656	"		ND					25	
1,2,4-Trimethylbenzene	ND	0.435	"		ND					25	
1,2-Dibromoethane	ND	0.679	"		ND					25	
1,2-Dichlorobenzene	ND	0.531	"		ND					25	
1,2-Dichloroethane	ND	0.358	"		ND					25	
1,2-Dichloropropane	ND	0.408	"		ND					25	
1,2-Dichlorotetrafluoroethane	ND	0.618	"		ND					25	
1,3,5-Trimethylbenzene	ND	0.435	"		ND					25	
1,3-Butadiene	ND	0.587	"		ND					25	
1,3-Dichlorobenzene	ND	0.531	"		ND					25	
1,3-Dichloropropane	ND	0.409	"		ND					25	
1,4-Dichlorobenzene	ND	0.531	"		ND					25	
1,4-Dioxane	ND	0.637	"		ND					25	
2-Butanone	1.07	0.261	"		1.15				7.06	25	
2-Hexanone	ND	0.724	"		ND					25	
3-Chloropropene	ND	1.38	"		ND					25	
4-Methyl-2-pentanone	ND	0.362	"		ND					25	
Acetone	14.5	0.420	"		14.8				1.86	25	
Acrylonitrile	ND	0.192	"		ND					25	
Benzene	0.593	0.282	"		0.593				0.00	25	
Benzyl chloride	ND	0.458	"		ND					25	
Bromodichloromethane	ND	0.592	"		ND					25	
Bromoform	ND	0.914	"		ND					25	
Bromomethane	ND	0.343	"		ND					25	
Carbon disulfide	ND	0.275	"		ND					25	
Carbon tetrachloride	0.389	0.139	"		0.445				13.3	25	
Chlorobenzene	ND	0.407	"		ND					25	
Chloroethane	ND	0.233	"		ND					25	
Chloroform	ND	0.432	"		ND					25	
Chloromethane	1.53	0.183	"		2.03				27.7	25	Non-dir.
cis-1,2-Dichloroethylene	ND	0.175	"		ND					25	
cis-1,3-Dichloropropylene	ND	0.401	"		ND					25	
Cyclohexane	ND	0.304	"		ND					25	
Dibromochloromethane	ND	0.753	"		ND					25	
Dichlorodifluoromethane	2.62	0.437	"		3.63				32.2	25	Non-dir.
Ethyl acetate	ND	0.637	"		ND					25	
Ethyl Benzene	ND	0.384	"		ND					25	
Hexachlorobutadiene	ND	0.943	"		ND					25	
Isopropanol	0.782	0.435	"		0.739				5.71	25	
Methyl Methacrylate	0.398	0.362	"		ND					25	
Methyl tert-butyl ether (MTBE)	ND	0.319	"		ND					25	
Methylene chloride	2.24	0.614	"		2.09				7.09	25	
n-Heptane	ND	0.362	"		ND					25	
n-Hexane	ND	0.312	"		ND					25	

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22980 - EPA TO15 PREP											
Duplicate (BC22980-DUP1)	*Source sample: 22C1239-11 (OA-001)								Prepared: 03/26/2022 Analyzed: 03/27/2022		
o-Xylene	ND	0.384	ug/m³		ND					25	
p- & m- Xylenes	ND	0.768	"		ND					25	
p-Ethyltoluene	ND	0.435	"		ND					25	
Propylene	ND	0.152	"		0.715					25	
Styrene	ND	0.377	"		ND					25	
Tetrachloroethylene	ND	0.600	"		ND					25	
Tetrahydrofuran	ND	0.521	"		ND					25	
Toluene	0.433	0.333	"		0.466				7.41	25	
trans-1,2-Dichloroethylene	ND	0.350	"		ND					25	
trans-1,3-Dichloropropylene	ND	0.401	"		ND					25	
Trichloroethylene	ND	0.119	"		ND					25	
Trichlorofluoromethane (Freon 11)	1.49	0.497	"		1.59				6.45	25	
Vinyl acetate	ND	0.311	"		ND					25	
Vinyl bromide	ND	0.387	"		ND					25	
Vinyl Chloride	ND	0.113	"		ND					25	
Batch BC22981 - EPA TO15 PREP											
Blank (BC22981-BLK1)									Prepared: 03/28/2022 Analyzed: 03/29/2022		
1,1,1,2-Tetrachloroethane	ND	0.687	ug/m³								
1,1,1-Trichloroethane	ND	0.546	"								
1,1,2,2-Tetrachloroethane	ND	0.687	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.766	"								
1,1,2-Trichloroethane	ND	0.546	"								
1,1-Dichloroethane	ND	0.405	"								
1,1-Dichloroethylene	ND	0.198	"								
1,2,4-Trichlorobenzene	ND	0.742	"								
1,2,4-Trimethylbenzene	ND	0.492	"								
1,2-Dibromoethane	ND	0.768	"								
1,2-Dichlorobenzene	ND	0.601	"								
1,2-Dichloroethane	ND	0.405	"								
1,2-Dichloropropane	ND	0.462	"								
1,2-Dichlorotetrafluoroethane	ND	0.699	"								
1,3,5-Trimethylbenzene	ND	0.492	"								
1,3-Butadiene	ND	0.664	"								
1,3-Dichlorobenzene	ND	0.601	"								
1,3-Dichloropropane	ND	0.462	"								
1,4-Dichlorobenzene	ND	0.601	"								
1,4-Dioxane	ND	0.721	"								
2-Butanone	ND	0.295	"								
2-Hexanone	ND	0.819	"								
3-Chloropropene	ND	1.57	"								
4-Methyl-2-pentanone	ND	0.410	"								
Acetone	ND	0.475	"								
Acrylonitrile	ND	0.217	"								
Benzene	ND	0.319	"								
Benzyl chloride	ND	0.518	"								
Bromodichloromethane	ND	0.670	"								
Bromoform	ND	1.03	"								
Bromomethane	ND	0.388	"								
Carbon disulfide	ND	0.311	"								

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22981 - EPA TO15 PREP											
Blank (BC22981-BLK1)											
Prepared: 03/28/2022 Analyzed: 03/29/2022											
Carbon tetrachloride	ND	0.157	ug/m³								
Chlorobenzene	ND	0.460	"								
Chloroethane	ND	0.264	"								
Chloroform	ND	0.488	"								
Chloromethane	ND	0.207	"								
cis-1,2-Dichloroethylene	ND	0.198	"								
cis-1,3-Dichloropropylene	ND	0.454	"								
Cyclohexane	ND	0.344	"								
Dibromochloromethane	ND	0.852	"								
Dichlorodifluoromethane	ND	0.495	"								
Ethyl acetate	ND	0.721	"								
Ethyl Benzene	ND	0.434	"								
Hexachlorobutadiene	ND	1.07	"								
Isopropanol	ND	0.492	"								
Methyl Methacrylate	ND	0.409	"								
Methyl tert-butyl ether (MTBE)	ND	0.361	"								
Methylene chloride	ND	0.695	"								
n-Heptane	ND	0.410	"								
n-Hexane	ND	0.352	"								
o-Xylene	ND	0.434	"								
p- & m- Xylenes	ND	0.868	"								
p-Ethyltoluene	ND	0.492	"								
Propylene	ND	0.172	"								
Styrene	ND	0.426	"								
Tetrachloroethylene	ND	0.678	"								
Tetrahydrofuran	ND	0.590	"								
Toluene	ND	0.377	"								
trans-1,2-Dichloroethylene	ND	0.396	"								
trans-1,3-Dichloropropylene	ND	0.454	"								
Trichloroethylene	ND	0.134	"								
Trichlorofluoromethane (Freon 11)	ND	0.562	"								
Vinyl acetate	ND	0.352	"								
Vinyl bromide	ND	0.437	"								
Vinyl Chloride	ND	0.128	"								

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22981 - EPA TO15 PREP											
LCS (BC22981-BS1)								Prepared & Analyzed: 03/28/2022			
1,1,1,2-Tetrachloroethane	9.57		ppbv	10.0		95.7	70-130				
1,1,1-Trichloroethane	10.7		"	10.0		107	70-130				
1,1,2,2-Tetrachloroethane	9.56		"	10.0		95.6	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.3		"	10.0		123	70-130				
1,1,2-Trichloroethane	10.2		"	10.0		102	70-130				
1,1-Dichloroethane	11.3		"	10.0		113	70-130				
1,1-Dichloroethylene	10.0		"	10.0		100	70-130				
1,2,4-Trichlorobenzene	9.08		"	10.0		90.8	70-130				
1,2,4-Trimethylbenzene	8.50		"	10.0		85.0	70-130				
1,2-Dibromoethane	10.1		"	10.0		101	70-130				
1,2-Dichlorobenzene	8.54		"	10.0		85.4	70-130				
1,2-Dichloroethane	9.32		"	10.0		93.2	70-130				
1,2-Dichloropropane	9.33		"	10.0		93.3	70-130				
1,2-Dichlorotetrafluoroethane	12.2		"	10.0		122	70-130				
1,3,5-Trimethylbenzene	8.51		"	10.0		85.1	70-130				
1,3-Butadiene	12.1		"	10.0		121	70-130				
1,3-Dichlorobenzene	8.82		"	10.0		88.2	70-130				
1,3-Dichloropropane	9.98		"	10.0		99.8	70-130				
1,4-Dichlorobenzene	8.98		"	10.0		89.8	70-130				
1,4-Dioxane	10.1		"	10.0		101	70-130				
2-Butanone	10.2		"	10.0		102	70-130				
2-Hexanone	6.84		"	10.0		68.4	70-130	Low Bias			
3-Chloropropene	10.4		"	10.0		104	70-130				
4-Methyl-2-pentanone	7.33		"	10.0		73.3	70-130				
Acetone	10.1		"	10.0		101	70-130				
Acrylonitrile	9.19		"	10.0		91.9	70-130				
Benzene	11.9		"	10.0		119	70-130				
Benzyl chloride	9.37		"	10.0		93.7	70-130				
Bromodichloromethane	9.05		"	10.0		90.5	70-130				
Bromoform	10.1		"	10.0		101	70-130				
Bromomethane	13.0		"	10.0		130	70-130				
Carbon disulfide	13.0		"	10.0		130	70-130				
Carbon tetrachloride	9.82		"	10.0		98.2	70-130				
Chlorobenzene	8.75		"	10.0		87.5	70-130				
Chloroethane	12.8		"	10.0		128	70-130				
Chloroform	11.1		"	10.0		111	70-130				
Chloromethane	12.8		"	10.0		128	70-130				
cis-1,2-Dichloroethylene	11.0		"	10.0		110	70-130				
cis-1,3-Dichloropropylene	10.2		"	10.0		102	70-130				
Cyclohexane	11.8		"	10.0		118	70-130				
Dibromochloromethane	9.58		"	10.0		95.8	70-130				
Dichlorodifluoromethane	10.8		"	10.0		108	70-130				
Ethyl acetate	9.94		"	10.0		99.4	70-130				
Ethyl Benzene	8.49		"	10.0		84.9	70-130				
Hexachlorobutadiene	9.63		"	10.0		96.3	70-130				
Isopropanol	10.6		"	10.0		106	70-130				
Methyl Methacrylate	10.5		"	10.0		105	70-130				
Methyl tert-butyl ether (MTBE)	9.75		"	10.0		97.5	70-130				
Methylene chloride	9.81		"	10.0		98.1	70-130				
n-Heptane	10.6		"	10.0		106	70-130				
n-Hexane	12.1		"	10.0		121	70-130				

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22981 - EPA TO15 PREP											
LCS (BC22981-BS1)								Prepared & Analyzed: 03/28/2022			
o-Xylene	8.37		ppbv	10.0		83.7	70-130				
p- & m- Xylenes	16.8		"	20.0		84.0	70-130				
p-Ethyltoluene	9.09		"	10.0		90.9	70-130				
Propylene	10.4		"	10.0		104	70-130				
Styrene	9.25		"	10.0		92.5	70-130				
Tetrachloroethylene	10.4		"	10.0		104	70-130				
Tetrahydrofuran	10.9		"	10.0		109	70-130				
Toluene	9.33		"	10.0		93.3	70-130				
trans-1,2-Dichloroethylene	11.3		"	10.0		113	70-130				
trans-1,3-Dichloropropylene	9.60		"	10.0		96.0	70-130				
Trichloroethylene	8.66		"	10.0		86.6	70-130				
Trichlorofluoromethane (Freon 11)	10.9		"	10.0		109	70-130				
Vinyl acetate	9.57		"	10.0		95.7	70-130				
Vinyl bromide	13.0		"	10.0		130	70-130				
Vinyl Chloride	13.3		"	10.0		133	70-130	High Bias			
Duplicate (BC22981-DUP1)	*Source sample: 22C1378-03 (Duplicate)							Prepared: 03/28/2022 Analyzed: 03/29/2022			
1,1,1,2-Tetrachloroethane	ND	1.27	ug/m³		ND					25	
1,1,1-Trichloroethane	ND	1.01	"		ND					25	
1,1,2,2-Tetrachloroethane	ND	1.27	"		ND					25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.42	"		ND					25	
1,1,2-Trichloroethane	ND	1.01	"		ND					25	
1,1-Dichloroethane	ND	0.750	"		ND					25	
1,1-Dichloroethylene	ND	0.368	"		ND					25	
1,2,4-Trichlorobenzene	ND	1.38	"		ND					25	
1,2,4-Trimethylbenzene	ND	0.911	"		ND					25	
1,2-Dibromoethane	ND	1.42	"		ND					25	
1,2-Dichlorobenzene	ND	1.11	"		ND					25	
1,2-Dichloroethane	ND	0.750	"		ND					25	
1,2-Dichloropropane	ND	0.857	"		ND					25	
1,2-Dichlorotetrafluoroethane	ND	1.30	"		ND					25	
1,3,5-Trimethylbenzene	ND	0.911	"		ND					25	
1,3-Butadiene	ND	1.23	"		ND					25	
1,3-Dichlorobenzene	ND	1.11	"		ND					25	
1,3-Dichloropropane	ND	0.857	"		ND					25	
1,4-Dichlorobenzene	ND	1.11	"		ND					25	
1,4-Dioxane	ND	1.34	"		ND					25	
2-Butanone	1.09	0.547	"		1.26				14.0	25	
2-Hexanone	ND	1.52	"		ND					25	
3-Chloropropene	ND	2.90	"		ND					25	
4-Methyl-2-pentanone	ND	0.759	"		ND					25	
Acetone	24.9	0.881	"		28.2				12.3	25	
Acrylonitrile	ND	0.402	"		ND					25	
Benzene	1.01	0.592	"		0.948				6.06	25	
Benzyl chloride	ND	0.960	"		ND					25	
Bromodichloromethane	ND	1.24	"		ND					25	
Bromoform	ND	1.92	"		ND					25	
Bromomethane	ND	0.720	"		ND					25	
Carbon disulfide	ND	0.577	"		ND					25	
Carbon tetrachloride	0.467	0.292	"		0.350				28.6	25	Non-dir.
Chlorobenzene	ND	0.854	"		ND					25	

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22981 - EPA TO15 PREP											
Duplicate (BC22981-DUP1)	*Source sample: 22C1378-03 (Duplicate)								Prepared: 03/28/2022 Analyzed: 03/29/2022		
Chloroethane	ND	0.489	ug/m³		ND					25	
Chloroform	ND	0.905	"		ND					25	
Chloromethane	1.95	0.383	"		1.95				0.00	25	
cis-1,2-Dichloroethylene	ND	0.368	"		ND					25	
cis-1,3-Dichloropropylene	ND	0.841	"		ND					25	
Cyclohexane	ND	0.638	"		ND					25	
Dibromochloromethane	ND	1.58	"		ND					25	
Dichlorodifluoromethane	2.93	0.917	"		2.75				6.45	25	
Ethyl acetate	0.868	1.34	"		0.735				16.7	25	
Ethyl Benzene	ND	0.805	"		ND					25	
Hexachlorobutadiene	ND	1.98	"		ND					25	
Isopropanol	70.1	0.911	"		80.6				14.0	25	
Methyl Methacrylate	0.835	0.759	"		0.531				44.4	25	Non-dir.
Methyl tert-butyl ether (MTBE)	ND	0.668	"		ND					25	
Methylene chloride	5.09	1.29	"		5.60				9.64	25	
n-Heptane	0.456	0.760	"		0.380				18.2	25	
n-Hexane	ND	0.653	"		ND					25	
o-Xylene	0.322	0.805	"		0.322				0.00	25	
p- & m- Xylenes	ND	1.61	"		ND					25	
p-Ethyltoluene	ND	0.911	"		ND					25	
Propylene	ND	0.319	"		2.87					25	
Styrene	ND	0.790	"		ND					25	
Tetrachloroethylene	ND	1.26	"		ND					25	
Tetrahydrofuran	ND	1.09	"		ND					25	
Toluene	1.26	0.699	"		1.26				0.00	25	
trans-1,2-Dichloroethylene	ND	0.735	"		ND					25	
trans-1,3-Dichloropropylene	ND	0.841	"		ND					25	
Trichloroethylene	ND	0.249	"		ND					25	
Trichlorofluoromethane (Freon 11)	1.35	1.04	"		1.46				7.41	25	
Vinyl acetate	ND	0.653	"		ND					25	
Vinyl bromide	ND	0.811	"		ND					25	
Vinyl Chloride	ND	0.237	"		ND					25	

120 RESEARCH DRIVE
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132-02 89th AVENUE
RICHMOND HILL, NY 11418
FAX (203) 357-0166
ClientServices@yorklab.com

Sample and Data Qualifiers Relating to This Work Order

TO-VAC	The final vacuum in the canister was less than -2 inches Hg vacuum. The time integrated sampling may be affected and not reflect proper sampling over the time period. The data user should take note.
TO-LCS-L	The result reported for this compound may be biased low due to its behavior in the analysis batch LCS where it recovered less 70% of the expected value.
TO-LCS-H	The result reported for this compound may be biased high due to its behavior in the analysis batch LCS where it recovered greater than 130% of the expected value.
TO-CCV	The value reported is ESTIMATED for this compound due to its behavior during continuing calibration verification (>30% Difference from initial calibration).
QR-01	Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted based on LCS and/or LCSD QC results.

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

York Analytical Laboratories, Inc.
120 Research Drive, Stratford, CT 06615 | 132-02 89th Ave Queens, NY 11418
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Field Chain-of-Custody Record - AIR

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No. 22C1239

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: Awot	Company: same	Company: same	FAY2101	RUSH - Next Day
Address: 630 Johnson Ave, Ste 7 Bohemia, NY 11716	Address:	Address:	YOUR Project Name: 434 Riverdale Ave, Yonkers	RUSH - Two Day
Phone: (631) 589-6353	Phone:	Phone:		RUSH - Three Day
Contact: Michael Gee	Contact:	Contact:		RUSH - Four Day
E-mail: MGee@awotesa.com	E-mail:	E-mail:	YOUR PO#:	Standard (5-7 Day) X

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

Samples Collected by: (print your name above and sign below)
Danielle Dulligan
Danielle Dulligan

Air Matrix Codes
- AI - Indoor Ambient Air
- AO - Outdoor Amb. Air
- AE - Vapor Extraction Well/ Process Gas/Effluent
- AS - Soil Vapor/Sub-Slab

Samples From
- New York X
- New Jersey
- Connecticut
- Pennsylvania
- Other

Report / EDD Type (circle selections)

Summary Report	CT RCP	Standard Excel EDD
QA Report	CT RCP DQA/DUE	EQuIS (Standard)
NY ASP A Package	NJDEP Reduced Deliv.	NYSDEC EQuIS
NY ASP B Package	NJDKQP	NJDEP SRP HazSite
Other:		

YORK Reg. Comp.
Compared to the following Regulation(s): (please fill in)

Certified Canisters: Batch ___ Individual ___

Please enter the following REQUIRED Field Data

Reporting Units: ug/m³ ___ ppbv ___ ppmv ___

Sample Identification	Date/Time Sampled	Air Matrix	Canister Vacuum Before Sampling (in Hg)	Canister Vacuum After Sampling (in Hg)	Canister ID	Flow Cont. ID	Analysis Requested
SV-Grille	03/22/22 13:06	AS	30.0	~~-5.8~~ -8	20944	13558	TO-15
AA-Grille	13:10	AI	30.0	-4.0	17346	12191	TO-15 SIM
SV-Deli	13:19	AS	30.0	-4.8	15249	13565	TO-15
AA-Deli	13:20	AI	30.0	-4.5	41937	3540	TO-15 SIM
SV-Supermarket	13:30	AS	30.0	-19.0	23945	6851	TO-15
AA-Supermarket	13:30	AI	30.0	-5.0	28845	13560	TO-15 SIM
SV-Laundromat East	13:40	AS	30.0	-9.0	20754	6074	TO-15
AA-Laundromat East	13:41	AI	30.0	-8.0	30859	5611	TO-15 SIM
SV-Laundromat West	13:44	AS	30.0	-1.5	37194	13574	TO-15
AA-Laundromat West	13:45	AI	30.0	-10.0	17349	7609	TO-15 SIM

Comments:

Detection Limits Required
≤ 1 ug/m³ ___ NYSDEC V1 Limits ___
Routine Survey ___ Other ___

Sampling Media
6 Liter Canister X
Tedlar Bag

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
Danielle Dulligan	03/22/22 15:07	Andrew S. York	3/22/22 15:07	Andrew S. York	3/22/22
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time
				Adenny Carmodoo	03/23/22 12:21

York Analytical Laboratories, Inc.
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Field Chain-of-Custody Record - AIR

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No. 22C1239

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: Awge	Company: Same	Company: Same	FAY2101	RUSH - Next Day
Address: 630 Simon Ave., Fl 7 Bohemia, NY 11716	Address:	Address:	YOUR Project Name: 434 Riverdale Ave., Yonkers	RUSH - Two Day
Phone: (631) 585-6353	Phone:	Phone:		RUSH - Three Day
Contact: Mcarl@awgeassoc.com	Contact:	Contact:		RUSH - Four Day
E-mail: Michael Carl	E-mail:	E-mail:	YOUR PO#:	Standard (5-7 Day) X

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

Samples Collected by: (print your name above and sign below)
Danielle Dulligan
Dan Dull

Air Matrix Codes
AI - Indoor Ambient Air
AO - Outdoor Amb. Air
AE - Vapor Extraction Well/ Process Gas/Effluent
AS - Soil Vapor/Sub-Slab

Samples From
New York X
New Jersey
Connecticut
Pennsylvania
Other

Report / EDD Type (circle selections)
Summary Report; QA Report; NY ASP A Package; NY ASP B Package; Other:
CT RCP; CT RCP DQA/DUE; NJDEP Reduced Deliv.; NJDKQP
Standard Excel EDD; EQuIS (Standard); NYSDEC EQuIS; NJDEP SRP HazSite

YORK Reg. Comp.
Compared to the following Regulation(s): (please fill in)

Certified Canisters: Batch ___ Individual ___

Please enter the following REQUIRED Field Data

Reporting Units: ug/m³ ___ ppbv ___ ppmv ___

Sample Identification	Date/Time Sampled	Air Matrix	Canister Vacuum Before Sampling (in Hg)	Canister Vacuum After Sampling (in Hg)	Canister ID	Flow Cont. ID	Analysis Requested
OA-001	03/22/22 14:00	AO	30.0	-7.0	28316	0870	TO-15 SIM

Comments:

Detection Limits Required
≤ 1 ug/m³ ___ NYSDEC V1 Limits ___
Routine Survey ___ Other ___

Sampling Media
6 Liter Canister X
Tedlar Bag

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
Danielle Dulligan	03/22/22 15:07	Andrew S. York	3/22/22 15:07	Andrew S. York	3/22/22
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time
				adamarys Carmado	03/23/22 12:21

Technical Report

prepared for:

P.W. Grosser Consulting
630 Johnson Avenue, Suite 7
Bohemia NY, 11716
Attention: Michael Gaul

Report Date: 03/28/2022
Client Project ID: FAY2101
York Project (SDG) No.: 22C1250

CT Cert. No. PH-0723 New Jersey Cert. No. CT005 and NY037 New York Cert. Nos. 10854 and 12058 PA Cert. No. 68-04440

120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418
www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@yorklab.com

Report Date: 03/28/2022
Client Project ID: FAY2101
York Project (SDG) No.: 22C1250

P.W. Grosser Consulting
630 Johnson Avenue, Suite 7
Bohemia NY, 11716
Attention: Michael Gaul

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on March 22, 2022 and listed below. The project was identified as your project: **FAY2101**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
22C1250-01	EB	Water	03/21/2022	03/22/2022
22C1250-02	TB	Water	03/21/2022	03/22/2022
22C1250-03	MW001	Water	03/21/2022	03/22/2022
22C1250-04	MW002	Water	03/21/2022	03/22/2022
22C1250-05	MW003	Water	03/21/2022	03/22/2022
22C1250-06	MW004	Water	03/21/2022	03/22/2022
22C1250-07	MW005	Water	03/21/2022	03/22/2022
22C1250-08	MW006	Water	03/21/2022	03/22/2022
22C1250-09	DUP	Water	03/21/2022	03/22/2022

General Notes for York Project (SDG) No.: 22C1250

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By:

Date: 03/28/2022

Cassie L. Mosher
Laboratory Manager

Sample Information

Client Sample ID: EB

York Sample ID: 22C1250-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: EB

York Sample ID: 22C1250-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: EB **York Sample ID:** 22C1250-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
105-05-5	* p-Diethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:			
622-96-8	* p-Ethyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:			
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	1.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: EB **York Sample ID:** 22C1250-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:18	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*105 %*	*69-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*101 %*	*81-117*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*103 %*	*79-122*

Sample Information

Client Sample ID: TB **York Sample ID:** 22C1250-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-93-3	**2-Butanone**	**2.76**	Cal-E	ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: TB

York Sample ID: 22C1250-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	**2-Hexanone**	**0.540**	Cal-E	ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	**Acetone**	**3.47**		ug/L	1.00	2.00	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: TB **York Sample ID:** 22C1250-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
105-05-5	* p-Diethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:			
622-96-8	* p-Ethyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:			
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	1.00	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: TB **York Sample ID:** 22C1250-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C	03/25/2022 06:26	03/25/2022 14:03	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*106 %*	*69-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*99.9 %*	*81-117*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*103 %*	*79-122*

Sample Information

Client Sample ID: **MW001** **York Sample ID:** **22C1250-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:30 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-93-3	**2-Butanone**	**0.300**	Cal-E, J	ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: MW001 **York Sample ID:** 22C1250-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:30 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	**Chloroform**	**0.430**	J	ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: MW001 **York Sample ID:** 22C1250-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:30 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
105-05-5	* p-Diethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:			
622-96-8	* p-Ethyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:			
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	1.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: MW001 **York Sample ID:** 22C1250-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:30 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C	03/24/2022 06:34	03/24/2022 16:45	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*106 %*	*69-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*101 %*	*81-117*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*98.9 %*	*79-122*

Sample Information

Client Sample ID: MW002 **York Sample ID:** 22C1250-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: MW002 **York Sample ID:** 22C1250-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	**Chloroform**	**0.490**	J	ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: **MW002** **York Sample ID:** **22C1250-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
105-05-5	* p-Diethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:			
622-96-8	* p-Ethyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:			
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	1.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	**Tetrachloroethylene**	**0.260**	J	ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: MW002 **York Sample ID:** 22C1250-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:12	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*106 %*	*69-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*101 %*	*81-117*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*101 %*	*79-122*

Sample Information

Client Sample ID: MW003 **York Sample ID:** 22C1250-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 12:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: MW003 **York Sample ID:** 22C1250-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 12:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	**Chloroform**	**1.04**		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-59-2	**cis-1,2-Dichloroethylene**	**48.6**		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: **MW003** **York Sample ID:** **22C1250-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 12:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
105-05-5	* p-Diethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:			
622-96-8	* p-Ethyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:			
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	1.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	**Tetrachloroethylene**	**32.1**		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	**trans-1,2-Dichloroethylene**	**0.570**		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: **MW003** **York Sample ID:** **22C1250-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 12:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	**Trichloroethylene**	**7.38**		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C	03/24/2022 06:34	03/24/2022 17:40	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*106 %*	*69-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*101 %*	*81-117*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*102 %*	*79-122*

Sample Information

Client Sample ID: MW004 **York Sample ID:** 22C1250-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 11:00 am	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-93-3	**2-Butanone**	**0.280**	Cal-E, J	ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: MW004 **York Sample ID:** 22C1250-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 11:00 am	03/22/2022

Volatile Organics, 8260 Low Comprehensive **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	**Chloroform**	**1.10**		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-59-2	**cis-1,2-Dichloroethylene**	**3.94**		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: **MW004** **York Sample ID:** **22C1250-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 11:00 am	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
105-05-5	* p-Diethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:			
622-96-8	* p-Ethyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:			
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	1.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	**Tetrachloroethylene**	**0.670**		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	**trans-1,2-Dichloroethylene**	**3.22**		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: **MW004** **York Sample ID:** **22C1250-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 11:00 am	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	**Trichloroethylene**	**1.03**		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:07	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*108 %*	*69-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*101 %*	*81-117*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*102 %*	*79-122*

Sample Information

Client Sample ID: **MW005** **York Sample ID:** **22C1250-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 4:30 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-93-3	**2-Butanone**	**1.38**	Cal-E	ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: MW005 **York Sample ID:** 22C1250-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 4:30 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	**2-Hexanone**	**0.200**	Cal-E, J	ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	**Acetone**	**1.58**	J	ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	**Chloroform**	**0.660**		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: **MW005** **York Sample ID:** **22C1250-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 4:30 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
105-05-5	* p-Diethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:			
622-96-8	* p-Ethyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:			
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	1.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	**Tetrachloroethylene**	**0.400**	J	ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: **MW005** **York Sample ID:** **22C1250-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 4:30 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C	03/24/2022 06:34	03/24/2022 18:35	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*109 %*	*69-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*102 %*	*81-117*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*102 %*	*79-122*

Sample Information

Client Sample ID: MW006 **York Sample ID:** 22C1250-08

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 2:15 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: MW006 **York Sample ID:** 22C1250-08

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 2:15 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	**Acetone**	**1.30**	J	ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	**Chloroform**	**0.320**	J	ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: MW006 **York Sample ID:** 22C1250-08

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 2:15 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
105-05-5	* p-Diethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:			
622-96-8	* p-Ethyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:			
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	1.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	**Tetrachloroethylene**	**0.510**		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: MW006 **York Sample ID:** 22C1250-08

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 2:15 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:02	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*111 %*	*69-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*103 %*	*81-117*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*105 %*	*79-122*

Sample Information

Client Sample ID: DUP

York Sample ID: 22C1250-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-93-3	**2-Butanone**	**1.16**	Cal-E	ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: DUP

York Sample ID: 22C1250-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	**Acetone**	**1.56**	J	ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	**Chloroform**	**0.380**	J	ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: DUP

York Sample ID: 22C1250-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
105-05-5	* p-Diethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:			
622-96-8	* p-Ethyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:			
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	1.00	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		

Sample Information

Client Sample ID: DUP

York Sample ID: 22C1250-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22C1250	FAY2101	Water	March 21, 2022 3:00 pm	03/22/2022

Volatile Organics, 8260 Low Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C	03/24/2022 06:34	03/24/2022 19:30	JTG
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*110 %*	*69-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*103 %*	*81-117*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*102 %*	*79-122*

Analytical Batch Summary

Batch ID: BC22848 **Preparation Method:** EPA 5030B **Prepared By:** JTG

YORK Sample ID	Client Sample ID	Preparation Date
22C1250-01	EB	03/24/22
22C1250-03	MW001	03/24/22
22C1250-04	MW002	03/24/22
22C1250-05	MW003	03/24/22
22C1250-06	MW004	03/24/22
22C1250-07	MW005	03/24/22
22C1250-08	MW006	03/24/22
22C1250-09	DUP	03/24/22
BC22848-BLK1	Blank	03/24/22
BC22848-BS1	LCS	03/24/22
BC22848-BSD1	LCS Dup	03/24/22
BC22848-MS1	Matrix Spike	03/24/22
BC22848-MSD1	Matrix Spike Dup	03/24/22

Batch ID: BC22933 **Preparation Method:** EPA 5030B **Prepared By:** JTG

YORK Sample ID	Client Sample ID	Preparation Date
22C1250-02	TB	03/25/22
BC22933-BLK1	Blank	03/25/22
BC22933-BS1	LCS	03/25/22
BC22933-BSD1	LCS Dup	03/25/22

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22848 - EPA 5030B											
Blank (BC22848-BLK1)											Prepared & Analyzed: 03/24/2022
1,1,1,2-Tetrachloroethane	ND	0.500	ug/L								
1,1,1-Trichloroethane	ND	0.500	"								
1,1,2,2-Tetrachloroethane	ND	0.500	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"								
1,1,2-Trichloroethane	ND	0.500	"								
1,1-Dichloroethane	ND	0.500	"								
1,1-Dichloroethylene	ND	0.500	"								
1,2,3-Trichlorobenzene	ND	0.500	"								
1,2,3-Trichloropropane	ND	0.500	"								
1,2,4-Trichlorobenzene	ND	0.500	"								
1,2,4-Trimethylbenzene	ND	0.500	"								
1,2-Dibromo-3-chloropropane	ND	0.500	"								
1,2-Dibromoethane	ND	0.500	"								
1,2-Dichlorobenzene	ND	0.500	"								
1,2-Dichloroethane	ND	0.500	"								
1,2-Dichloropropane	ND	0.500	"								
1,3,5-Trimethylbenzene	ND	0.500	"								
1,3-Dichlorobenzene	ND	0.500	"								
1,3-Dichloropropane	ND	0.500	"								
1,4-Dichlorobenzene	ND	0.500	"								
1,4-Dioxane	ND	80.0	"								
2-Butanone	ND	0.500	"								
2-Hexanone	ND	0.500	"								
4-Methyl-2-pentanone	ND	0.500	"								
Acetone	ND	2.00	"								
Acrolein	ND	0.500	"								
Acrylonitrile	ND	0.500	"								
Benzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								
Carbon disulfide	ND	0.500	"								
Carbon tetrachloride	ND	0.500	"								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Cyclohexane	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								
Isopropylbenzene	ND	0.500	"								
Methyl acetate	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylcyclohexane	ND	0.500	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22848 - EPA 5030B											
Blank (BC22848-BLK1)								Prepared & Analyzed: 03/24/2022			
Methylene chloride	1.13	2.00	ug/L								
Naphthalene	ND	2.00	"								
n-Butylbenzene	ND	0.500	"								
n-Propylbenzene	ND	0.500	"								
o-Xylene	ND	0.500	"								
p- & m- Xylenes	ND	1.00	"								
p-Diethylbenzene	ND	0.500	"								
p-Ethyltoluene	ND	0.500	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butyl alcohol (TBA)	ND	1.00	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Xylenes, Total	ND	1.50	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.2*		*"*	*10.0*		*102*	*69-130*				
Surrogate: SURR: Toluene-d8	*10.0*		*"*	*10.0*		*100*	*81-117*				
Surrogate: SURR: p-Bromofluorobenzene	*10.4*		*"*	*10.0*		*104*	*79-122*				
LCS (BC22848-BS1)								Prepared & Analyzed: 03/24/2022			
1,1,1,2-Tetrachloroethane	8.87		ug/L	10.0		88.7	82-126				
1,1,1-Trichloroethane	8.82		"	10.0		88.2	78-136				
1,1,2,2-Tetrachloroethane	8.60		"	10.0		86.0	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.42		"	10.0		94.2	54-165				
1,1,2-Trichloroethane	8.14		"	10.0		81.4	82-123	Low Bias			
1,1-Dichloroethane	9.12		"	10.0		91.2	82-129				
1,1-Dichloroethylene	9.72		"	10.0		97.2	68-138				
1,2,3-Trichlorobenzene	7.44		"	10.0		74.4	76-136	Low Bias			
1,2,3-Trichloropropane	8.35		"	10.0		83.5	77-128				
1,2,4-Trichlorobenzene	8.07		"	10.0		80.7	76-137				
1,2,4-Trimethylbenzene	9.04		"	10.0		90.4	82-132				
1,2-Dibromo-3-chloropropane	6.41		"	10.0		64.1	45-147				
1,2-Dibromoethane	8.21		"	10.0		82.1	83-124	Low Bias			
1,2-Dichlorobenzene	9.10		"	10.0		91.0	79-123				
1,2-Dichloroethane	8.97		"	10.0		89.7	73-132				
1,2-Dichloropropane	9.75		"	10.0		97.5	78-126				
1,3,5-Trimethylbenzene	9.14		"	10.0		91.4	80-131				
1,3-Dichlorobenzene	8.77		"	10.0		87.7	86-122				
1,3-Dichloropropane	8.44		"	10.0		84.4	81-125				
1,4-Dichlorobenzene	8.88		"	10.0		88.8	85-124				
1,4-Dioxane	187		"	210		89.0	10-349				
2-Butanone	8.55		"	10.0		85.5	49-152				
2-Hexanone	8.95		"	10.0		89.5	51-146				
4-Methyl-2-pentanone	8.90		"	10.0		89.0	57-145				
Acetone	8.25		"	10.0		82.5	14-150				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22848 - EPA 5030B											
LCS (BC22848-BS1)								Prepared & Analyzed: 03/24/2022			
Acrolein	4.78		ug/L	10.0		47.8	10-153				
Acrylonitrile	8.34		"	10.0		83.4	51-150				
Benzene	8.86		"	10.0		88.6	85-126				
Bromochloromethane	9.41		"	10.0		94.1	77-128				
Bromodichloromethane	8.58		"	10.0		85.8	79-128				
Bromoform	8.53		"	10.0		85.3	78-133				
Bromomethane	10.0		"	10.0		100	43-168				
Carbon disulfide	8.53		"	10.0		85.3	68-146				
Carbon tetrachloride	9.24		"	10.0		92.4	77-141				
Chlorobenzene	9.27		"	10.0		92.7	88-120				
Chloroethane	10.5		"	10.0		105	65-136				
Chloroform	8.91		"	10.0		89.1	82-128				
Chloromethane	11.4		"	10.0		114	43-155				
cis-1,2-Dichloroethylene	9.21		"	10.0		92.1	83-129				
cis-1,3-Dichloropropylene	8.69		"	10.0		86.9	80-131				
Cyclohexane	7.18		"	10.0		71.8	63-149				
Dibromochloromethane	7.99		"	10.0		79.9	80-130	Low Bias			
Dibromomethane	8.34		"	10.0		83.4	72-134				
Dichlorodifluoromethane	12.4		"	10.0		124	44-144				
Ethyl Benzene	9.71		"	10.0		97.1	80-131				
Hexachlorobutadiene	10.1		"	10.0		101	67-146				
Isopropylbenzene	9.52		"	10.0		95.2	76-140				
Methyl acetate	8.45		"	10.0		84.5	51-139				
Methyl tert-butyl ether (MTBE)	8.21		"	10.0		82.1	76-135				
Methylcyclohexane	9.34		"	10.0		93.4	72-143				
Methylene chloride	9.47		"	10.0		94.7	55-137				
Naphthalene	7.36		"	10.0		73.6	70-147				
n-Butylbenzene	9.89		"	10.0		98.9	79-132				
n-Propylbenzene	9.71		"	10.0		97.1	78-133				
o-Xylene	9.55		"	10.0		95.5	78-130				
p- & m- Xylenes	16.6		"	20.0		82.9	77-133				
p-Diethylbenzene	9.21		"	10.0		92.1	84-134				
p-Ethyltoluene	10.3		"	10.0		103	88-129				
p-Isopropyltoluene	9.34		"	10.0		93.4	81-136				
sec-Butylbenzene	9.38		"	10.0		93.8	79-137				
Styrene	9.12		"	10.0		91.2	67-132				
tert-Butyl alcohol (TBA)	38.0		"	50.0		76.0	25-162				
tert-Butylbenzene	7.46		"	10.0		74.6	77-138	Low Bias			
Tetrachloroethylene	9.09		"	10.0		90.9	82-131				
Toluene	9.24		"	10.0		92.4	80-127				
trans-1,2-Dichloroethylene	9.31		"	10.0		93.1	80-132				
trans-1,3-Dichloropropylene	8.50		"	10.0		85.0	78-131				
Trichloroethylene	8.72		"	10.0		87.2	82-128				
Trichlorofluoromethane	10.8		"	10.0		108	67-139				
Vinyl Chloride	12.7		"	10.0		127	58-145				
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.2*		*"*	*10.0*		*102*	*69-130*				
Surrogate: SURR: Toluene-d8	*9.98*		*"*	*10.0*		*99.8*	*81-117*				
Surrogate: SURR: p-Bromofluorobenzene	*10.1*		*"*	*10.0*		*101*	*79-122*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22848 - EPA 5030B											
LCS Dup (BC22848-BSD1)								Prepared & Analyzed: 03/24/2022			
1,1,1,2-Tetrachloroethane	8.77		ug/L	10.0		87.7	82-126		1.13	30	
1,1,1-Trichloroethane	8.48		"	10.0		84.8	78-136		3.93	30	
1,1,2,2-Tetrachloroethane	8.61		"	10.0		86.1	76-129		0.116	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.89		"	10.0		88.9	54-165		5.79	30	
1,1,2-Trichloroethane	8.30		"	10.0		83.0	82-123		1.95	30	
1,1-Dichloroethane	8.90		"	10.0		89.0	82-129		2.44	30	
1,1-Dichloroethylene	9.18		"	10.0		91.8	68-138		5.71	30	
1,2,3-Trichlorobenzene	7.66		"	10.0		76.6	76-136		2.91	30	
1,2,3-Trichloropropane	8.43		"	10.0		84.3	77-128		0.954	30	
1,2,4-Trichlorobenzene	7.96		"	10.0		79.6	76-137		1.37	30	
1,2,4-Trimethylbenzene	8.54		"	10.0		85.4	82-132		5.69	30	
1,2-Dibromo-3-chloropropane	7.90		"	10.0		79.0	45-147		20.8	30	
1,2-Dibromoethane	8.51		"	10.0		85.1	83-124		3.59	30	
1,2-Dichlorobenzene	8.78		"	10.0		87.8	79-123		3.58	30	
1,2-Dichloroethane	9.01		"	10.0		90.1	73-132		0.445	30	
1,2-Dichloropropane	9.60		"	10.0		96.0	78-126		1.55	30	
1,3,5-Trimethylbenzene	8.58		"	10.0		85.8	80-131		6.32	30	
1,3-Dichlorobenzene	8.32		"	10.0		83.2	86-122	Low Bias	5.27	30	
1,3-Dichloropropane	8.60		"	10.0		86.0	81-125		1.88	30	
1,4-Dichlorobenzene	8.48		"	10.0		84.8	85-124	Low Bias	4.61	30	
1,4-Dioxane	196		"	210		93.6	10-349		4.96	30	
2-Butanone	8.88		"	10.0		88.8	49-152		3.79	30	
2-Hexanone	9.27		"	10.0		92.7	51-146		3.51	30	
4-Methyl-2-pentanone	9.45		"	10.0		94.5	57-145		5.99	30	
Acetone	8.83		"	10.0		88.3	14-150		6.79	30	
Acrolein	4.97		"	10.0		49.7	10-153		3.90	30	
Acrylonitrile	8.76		"	10.0		87.6	51-150		4.91	30	
Benzene	8.59		"	10.0		85.9	85-126		3.09	30	
Bromochloromethane	9.25		"	10.0		92.5	77-128		1.71	30	
Bromodichloromethane	8.49		"	10.0		84.9	79-128		1.05	30	
Bromoform	8.92		"	10.0		89.2	78-133		4.47	30	
Bromomethane	9.41		"	10.0		94.1	43-168		6.38	30	
Carbon disulfide	8.00		"	10.0		80.0	68-146		6.41	30	
Carbon tetrachloride	8.84		"	10.0		88.4	77-141		4.42	30	
Chlorobenzene	9.06		"	10.0		90.6	88-120		2.29	30	
Chloroethane	9.84		"	10.0		98.4	65-136		6.49	30	
Chloroform	8.68		"	10.0		86.8	82-128		2.62	30	
Chloromethane	10.2		"	10.0		102	43-155		11.3	30	
cis-1,2-Dichloroethylene	8.92		"	10.0		89.2	83-129		3.20	30	
cis-1,3-Dichloropropylene	8.66		"	10.0		86.6	80-131		0.346	30	
Cyclohexane	6.84		"	10.0		68.4	63-149		4.85	30	
Dibromochloromethane	8.14		"	10.0		81.4	80-130		1.86	30	
Dibromomethane	8.51		"	10.0		85.1	72-134		2.02	30	
Dichlorodifluoromethane	11.2		"	10.0		112	44-144		9.73	30	
Ethyl Benzene	9.40		"	10.0		94.0	80-131		3.24	30	
Hexachlorobutadiene	10.3		"	10.0		103	67-146		1.86	30	
Isopropylbenzene	8.85		"	10.0		88.5	76-140		7.29	30	
Methyl acetate	8.66		"	10.0		86.6	51-139		2.45	30	
Methyl tert-butyl ether (MTBE)	8.43		"	10.0		84.3	76-135		2.64	30	
Methylcyclohexane	9.00		"	10.0		90.0	72-143		3.71	30	
Methylene chloride	9.60		"	10.0		96.0	55-137		1.36	30	

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22848 - EPA 5030B											
LCS Dup (BC22848-BSD1)								Prepared & Analyzed: 03/24/2022			
Naphthalene	7.48		ug/L	10.0		74.8	70-147		1.62	30	
n-Butylbenzene	9.30		"	10.0		93.0	79-132		6.15	30	
n-Propylbenzene	9.05		"	10.0		90.5	78-133		7.04	30	
o-Xylene	9.33		"	10.0		93.3	78-130		2.33	30	
p- & m- Xylenes	16.1		"	20.0		80.6	77-133		2.81	30	
p-Diethylbenzene	8.69		"	10.0		86.9	84-134		5.81	30	
p-Ethyltoluene	9.61		"	10.0		96.1	88-129		6.93	30	
p-Isopropyltoluene	8.75		"	10.0		87.5	81-136		6.52	30	
sec-Butylbenzene	8.75		"	10.0		87.5	79-137		6.95	30	
Styrene	8.95		"	10.0		89.5	67-132		1.88	30	
tert-Butyl alcohol (TBA)	41.8		"	50.0		83.5	25-162		9.40	30	
tert-Butylbenzene	6.97		"	10.0		69.7	77-138	Low Bias	6.79	30	
Tetrachloroethylene	8.70		"	10.0		87.0	82-131		4.38	30	
Toluene	8.97		"	10.0		89.7	80-127		2.97	30	
trans-1,2-Dichloroethylene	8.93		"	10.0		89.3	80-132		4.17	30	
trans-1,3-Dichloropropylene	8.62		"	10.0		86.2	78-131		1.40	30	
Trichloroethylene	8.38		"	10.0		83.8	82-128		3.98	30	
Trichlorofluoromethane	10.0		"	10.0		100	67-139		7.67	30	
Vinyl Chloride	11.5		"	10.0		115	58-145		9.74	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.4*		*"*	*10.0*		*104*	*69-130*				
Surrogate: SURR: Toluene-d8	*10.0*		*"*	*10.0*		*100*	*81-117*				
Surrogate: SURR: p-Bromofluorobenzene	*9.76*		*"*	*10.0*		*97.6*	*79-122*				
Matrix Spike (BC22848-MS1)	*Source sample: 22C1250-04 (MW002)							Prepared & Analyzed: 03/24/2022			
1,1,1,2-Tetrachloroethane	7.86		ug/L	10.0	0.00	78.6	45-161				
1,1,1-Trichloroethane	8.22		"	10.0	0.00	82.2	70-146				
1,1,2,2-Tetrachloroethane	8.38		"	10.0	0.00	83.8	74-121				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.67		"	10.0	0.00	86.7	21-217				
1,1,2-Trichloroethane	7.52		"	10.0	0.00	75.2	59-146				
1,1-Dichloroethane	8.39		"	10.0	0.00	83.9	54-146				
1,1-Dichloroethylene	9.13		"	10.0	0.00	91.3	44-165				
1,2,3-Trichlorobenzene	6.91		"	10.0	0.00	69.1	40-161				
1,2,3-Trichloropropane	7.60		"	10.0	0.00	76.0	74-127				
1,2,4-Trichlorobenzene	7.28		"	10.0	0.00	72.8	41-161				
1,2,4-Trimethylbenzene	7.98		"	10.0	0.00	79.8	72-129				
1,2-Dibromo-3-chloropropane	5.88		"	10.0	0.00	58.8	31-151				
1,2-Dibromoethane	7.56		"	10.0	0.00	75.6	75-125				
1,2-Dichlorobenzene	7.89		"	10.0	0.00	78.9	63-122				
1,2-Dichloroethane	8.32		"	10.0	0.00	83.2	68-131				
1,2-Dichloropropane	9.11		"	10.0	0.00	91.1	77-121				
1,3,5-Trimethylbenzene	8.28		"	10.0	0.00	82.8	69-126				
1,3-Dichlorobenzene	7.55		"	10.0	0.00	75.5	74-119				
1,3-Dichloropropane	7.83		"	10.0	0.00	78.3	77-119				
1,4-Dichlorobenzene	7.62		"	10.0	0.00	76.2	70-124				
1,4-Dioxane	179		"	210	0.00	85.2	10-310				
2-Butanone	8.20		"	10.0	0.00	82.0	10-193				
2-Hexanone	8.58		"	10.0	0.00	85.8	53-133				
4-Methyl-2-pentanone	8.71		"	10.0	0.00	87.1	38-150				
Acetone	8.63		"	10.0	0.760	78.7	13-149				
Acrolein	4.03		"	10.0	0.00	40.3	10-195				
Acrylonitrile	7.50		"	10.0	0.00	75.0	37-165				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22848 - EPA 5030B											
Matrix Spike (BC22848-MS1)	*Source sample: 22C1250-04 (MW002)							Prepared & Analyzed: 03/24/2022			
Benzene	8.11		ug/L	10.0	0.00	81.1	38-155				
Bromochloromethane	8.49		"	10.0	0.00	84.9	75-121				
Bromodichloromethane	7.78		"	10.0	0.00	77.8	70-129				
Bromoform	7.32		"	10.0	0.00	73.2	66-136				
Bromomethane	3.95		"	10.0	0.00	39.5	30-158				
Carbon disulfide	7.72		"	10.0	0.00	77.2	10-138				
Carbon tetrachloride	8.55		"	10.0	0.00	85.5	71-146				
Chlorobenzene	8.44		"	10.0	0.00	84.4	81-117				
Chloroethane	9.43		"	10.0	0.00	94.3	51-145				
Chloroform	8.60		"	10.0	0.490	81.1	80-124				
Chloromethane	9.66		"	10.0	0.00	96.6	16-163				
cis-1,2-Dichloroethylene	8.35		"	10.0	0.00	83.5	76-125				
cis-1,3-Dichloropropylene	7.73		"	10.0	0.00	77.3	58-131				
Cyclohexane	6.87		"	10.0	0.00	68.7	70-130	Low Bias			
Dibromochloromethane	7.17		"	10.0	0.00	71.7	71-129				
Dibromomethane	7.65		"	10.0	0.00	76.5	76-120				
Dichlorodifluoromethane	10.2		"	10.0	0.00	102	30-147				
Ethyl Benzene	9.04		"	10.0	0.00	90.4	72-128				
Hexachlorobutadiene	10.1		"	10.0	0.00	101	34-166				
Isopropylbenzene	8.37		"	10.0	0.00	83.7	66-139				
Methyl acetate	7.32		"	10.0	0.00	73.2	10-200				
Methyl tert-butyl ether (MTBE)	7.44		"	10.0	0.00	74.4	75-128	Low Bias			
Methylcyclohexane	8.71		"	10.0	0.00	87.1	70-130				
Methylene chloride	8.97		"	10.0	0.700	82.7	57-128				
Naphthalene	6.96		"	10.0	0.00	69.6	39-158				
n-Butylbenzene	8.73		"	10.0	0.00	87.3	61-138				
n-Propylbenzene	8.92		"	10.0	0.00	89.2	66-134				
o-Xylene	8.84		"	10.0	0.00	88.4	69-126				
p- & m- Xylenes	15.3		"	20.0	0.00	76.6	67-130				
p-Diethylbenzene	8.17		"	10.0	0.00	81.7	52-150				
p-Ethyltoluene	9.19		"	10.0	0.00	91.9	76-127				
p-Isopropyltoluene	8.20		"	10.0	0.00	82.0	64-137				
sec-Butylbenzene	8.41		"	10.0	0.00	84.1	53-155				
Styrene	8.14		"	10.0	0.00	81.4	69-125				
tert-Butyl alcohol (TBA)	48.8		"	50.0	0.00	97.7	10-130				
tert-Butylbenzene	6.64		"	10.0	0.00	66.4	65-139				
Tetrachloroethylene	8.79		"	10.0	0.260	85.3	64-139				
Toluene	8.59		"	10.0	0.00	85.9	76-123				
trans-1,2-Dichloroethylene	8.64		"	10.0	0.00	86.4	79-131				
trans-1,3-Dichloropropylene	7.59		"	10.0	0.00	75.9	55-130				
Trichloroethylene	8.15		"	10.0	0.00	81.5	53-145				
Trichlorofluoromethane	9.88		"	10.0	0.00	98.8	61-142				
Vinyl Chloride	11.4		"	10.0	0.00	114	31-165				
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.5*		*"*	*10.0*		*105*	*69-130*				
Surrogate: SURR: Toluene-d8	*10.1*		*"*	*10.0*		*101*	*81-117*				
Surrogate: SURR: p-Bromofluorobenzene	*9.73*		*"*	*10.0*		*97.3*	*79-122*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22848 - EPA 5030B											
Matrix Spike Dup (BC22848-MSD1)	*Source sample: 22C1250-04 (MW002)							Prepared & Analyzed: 03/24/2022			
1,1,1,2-Tetrachloroethane	8.37		ug/L	10.0	0.00	83.7	45-161		6.28	30	
1,1,1-Trichloroethane	8.65		"	10.0	0.00	86.5	70-146		5.10	30	
1,1,2,2-Tetrachloroethane	8.37		"	10.0	0.00	83.7	74-121		0.119	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.10		"	10.0	0.00	91.0	21-217		4.84	30	
1,1,2-Trichloroethane	7.91		"	10.0	0.00	79.1	59-146		5.06	30	
1,1-Dichloroethane	8.85		"	10.0	0.00	88.5	54-146		5.34	30	
1,1-Dichloroethylene	9.56		"	10.0	0.00	95.6	44-165		4.60	30	
1,2,3-Trichlorobenzene	7.28		"	10.0	0.00	72.8	40-161		5.21	30	
1,2,3-Trichloropropane	7.96		"	10.0	0.00	79.6	74-127		4.63	30	
1,2,4-Trichlorobenzene	7.62		"	10.0	0.00	76.2	41-161		4.56	30	
1,2,4-Trimethylbenzene	8.48		"	10.0	0.00	84.8	72-129		6.08	30	
1,2-Dibromo-3-chloropropane	6.01		"	10.0	0.00	60.1	31-151		2.19	30	
1,2-Dibromoethane	7.98		"	10.0	0.00	79.8	75-125		5.41	30	
1,2-Dichlorobenzene	8.43		"	10.0	0.00	84.3	63-122		6.62	30	
1,2-Dichloroethane	8.74		"	10.0	0.00	87.4	68-131		4.92	30	
1,2-Dichloropropane	9.54		"	10.0	0.00	95.4	77-121		4.61	30	
1,3,5-Trimethylbenzene	8.62		"	10.0	0.00	86.2	69-126		4.02	30	
1,3-Dichlorobenzene	8.07		"	10.0	0.00	80.7	74-119		6.66	30	
1,3-Dichloropropane	8.32		"	10.0	0.00	83.2	77-119		6.07	30	
1,4-Dichlorobenzene	8.18		"	10.0	0.00	81.8	70-124		7.09	30	
1,4-Dioxane	186		"	210	0.00	88.5	10-310		3.82	30	
2-Butanone	8.36		"	10.0	0.00	83.6	10-193		1.93	30	
2-Hexanone	9.12		"	10.0	0.00	91.2	53-133		6.10	30	
4-Methyl-2-pentanone	9.18		"	10.0	0.00	91.8	38-150		5.25	30	
Acetone	9.10		"	10.0	0.760	83.4	13-149		5.30	30	
Acrolein	4.26		"	10.0	0.00	42.6	10-195		5.55	30	
Acrylonitrile	8.44		"	10.0	0.00	84.4	37-165		11.8	30	
Benzene	8.49		"	10.0	0.00	84.9	38-155		4.58	30	
Bromochloromethane	8.75		"	10.0	0.00	87.5	75-121		3.02	30	
Bromodichloromethane	8.30		"	10.0	0.00	83.0	70-129		6.47	30	
Bromoform	7.95		"	10.0	0.00	79.5	66-136		8.25	30	
Bromomethane	5.54		"	10.0	0.00	55.4	30-158		33.5	30	Non-dir.
Carbon disulfide	8.19		"	10.0	0.00	81.9	10-138		5.91	30	
Carbon tetrachloride	9.01		"	10.0	0.00	90.1	71-146		5.24	30	
Chlorobenzene	8.93		"	10.0	0.00	89.3	81-117		5.64	30	
Chloroethane	9.84		"	10.0	0.00	98.4	51-145		4.26	30	
Chloroform	8.98		"	10.0	0.490	84.9	80-124		4.32	30	
Chloromethane	10.2		"	10.0	0.00	102	16-163		5.34	30	
cis-1,2-Dichloroethylene	8.72		"	10.0	0.00	87.2	76-125		4.34	30	
cis-1,3-Dichloropropylene	8.24		"	10.0	0.00	82.4	58-131		6.39	30	
Cyclohexane	7.24		"	10.0	0.00	72.4	70-130		5.24	30	
Dibromochloromethane	7.60		"	10.0	0.00	76.0	71-129		5.82	30	
Dibromomethane	8.09		"	10.0	0.00	80.9	76-120		5.59	30	
Dichlorodifluoromethane	10.8		"	10.0	0.00	108	30-147		5.81	30	
Ethyl Benzene	9.58		"	10.0	0.00	95.8	72-128		5.80	30	
Hexachlorobutadiene	10.4		"	10.0	0.00	104	34-166		3.51	30	
Isopropylbenzene	8.98		"	10.0	0.00	89.8	66-139		7.03	30	
Methyl acetate	7.39		"	10.0	0.00	73.9	10-200		0.952	30	
Methyl tert-butyl ether (MTBE)	7.85		"	10.0	0.00	78.5	75-128		5.36	30	
Methylcyclohexane	9.35		"	10.0	0.00	93.5	70-130		7.09	30	
Methylene chloride	8.98		"	10.0	0.700	82.8	57-128		0.111	30	

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22848 - EPA 5030B											
Matrix Spike Dup (BC22848-MSD1)	*Source sample: 22C1250-04 (MW002)							Prepared & Analyzed: 03/24/2022			
Naphthalene	7.14		ug/L	10.0	0.00	71.4	39-158		2.55	30	
n-Butylbenzene	9.45		"	10.0	0.00	94.5	61-138		7.92	30	
n-Propylbenzene	9.33		"	10.0	0.00	93.3	66-134		4.49	30	
o-Xylene	9.34		"	10.0	0.00	93.4	69-126		5.50	30	
p- & m- Xylenes	16.2		"	20.0	0.00	81.2	67-130		5.96	30	
p-Diethylbenzene	8.79		"	10.0	0.00	87.9	52-150		7.31	30	
p-Ethyltoluene	9.72		"	10.0	0.00	97.2	76-127		5.61	30	
p-Isopropyltoluene	8.75		"	10.0	0.00	87.5	64-137		6.49	30	
sec-Butylbenzene	8.95		"	10.0	0.00	89.5	53-155		6.22	30	
Styrene	8.69		"	10.0	0.00	86.9	69-125		6.54	30	
tert-Butyl alcohol (TBA)	38.9		"	50.0	0.00	77.8	10-130		22.6	30	
tert-Butylbenzene	7.08		"	10.0	0.00	70.8	65-139		6.41	30	
Tetrachloroethylene	9.21		"	10.0	0.260	89.5	64-139		4.67	30	
Toluene	9.05		"	10.0	0.00	90.5	76-123		5.22	30	
trans-1,2-Dichloroethylene	9.08		"	10.0	0.00	90.8	79-131		4.97	30	
trans-1,3-Dichloropropylene	8.11		"	10.0	0.00	81.1	55-130		6.62	30	
Trichloroethylene	8.57		"	10.0	0.00	85.7	53-145		5.02	30	
Trichlorofluoromethane	10.5		"	10.0	0.00	105	61-142		5.70	30	
Vinyl Chloride	11.9		"	10.0	0.00	119	31-165		4.04	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.4*		*"*	*10.0*		*104*	*69-130*				
Surrogate: SURR: Toluene-d8	*10.1*		*"*	*10.0*		*101*	*81-117*				
Surrogate: SURR: p-Bromofluorobenzene	*9.86*		*"*	*10.0*		*98.6*	*79-122*				
Batch BC22933 - EPA 5030B											
Blank (BC22933-BLK1)								Prepared & Analyzed: 03/25/2022			
1,1,1,2-Tetrachloroethane	ND	0.500	ug/L								
1,1,1-Trichloroethane	ND	0.500	"								
1,1,2,2-Tetrachloroethane	ND	0.500	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"								
1,1,2-Trichloroethane	ND	0.500	"								
1,1-Dichloroethane	ND	0.500	"								
1,1-Dichloroethylene	ND	0.500	"								
1,2,3-Trichlorobenzene	ND	0.500	"								
1,2,3-Trichloropropane	ND	0.500	"								
1,2,4-Trichlorobenzene	ND	0.500	"								
1,2,4-Trimethylbenzene	ND	0.500	"								
1,2-Dibromo-3-chloropropane	ND	0.500	"								
1,2-Dibromoethane	ND	0.500	"								
1,2-Dichlorobenzene	ND	0.500	"								
1,2-Dichloroethane	ND	0.500	"								
1,2-Dichloropropane	ND	0.500	"								
1,3,5-Trimethylbenzene	ND	0.500	"								
1,3-Dichlorobenzene	ND	0.500	"								
1,3-Dichloropropane	ND	0.500	"								
1,4-Dichlorobenzene	ND	0.500	"								
1,4-Dioxane	ND	80.0	"								
2-Butanone	ND	0.500	"								
2-Hexanone	ND	0.500	"								
4-Methyl-2-pentanone	ND	0.500	"								
Acetone	ND	2.00	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22933 - EPA 5030B											
Blank (BC22933-BLK1)											
Prepared & Analyzed: 03/25/2022											
Acrolein	ND	0.500	ug/L								
Acrylonitrile	ND	0.500	"								
Benzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								
Carbon disulfide	ND	0.500	"								
Carbon tetrachloride	ND	0.500	"								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Cyclohexane	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								
Isopropylbenzene	ND	0.500	"								
Methyl acetate	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylcyclohexane	ND	0.500	"								
Methylene chloride	1.23	2.00	"								
Naphthalene	ND	2.00	"								
n-Butylbenzene	ND	0.500	"								
n-Propylbenzene	ND	0.500	"								
o-Xylene	ND	0.500	"								
p- & m- Xylenes	ND	1.00	"								
p-Diethylbenzene	ND	0.500	"								
p-Ethyltoluene	ND	0.500	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butyl alcohol (TBA)	ND	1.00	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Xylenes, Total	ND	1.50	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.5*		*"*	*10.0*		*105*	*69-130*				
Surrogate: SURR: Toluene-d8	*10.0*		*"*	*10.0*		*100*	*81-117*				
Surrogate: SURR: p-Bromofluorobenzene	*10.5*		*"*	*10.0*		*105*	*79-122*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22933 - EPA 5030B											
LCS (BC22933-BS1)								Prepared & Analyzed: 03/25/2022			
1,1,1,2-Tetrachloroethane	8.88		ug/L	10.0		88.8	82-126				
1,1,1-Trichloroethane	8.67		"	10.0		86.7	78-136				
1,1,2,2-Tetrachloroethane	8.53		"	10.0		85.3	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.95		"	10.0		89.5	54-165				
1,1,2-Trichloroethane	8.19		"	10.0		81.9	82-123	Low Bias			
1,1-Dichloroethane	9.18		"	10.0		91.8	82-129				
1,1-Dichloroethylene	9.49		"	10.0		94.9	68-138				
1,2,3-Trichlorobenzene	7.73		"	10.0		77.3	76-136				
1,2,3-Trichloropropane	8.38		"	10.0		83.8	77-128				
1,2,4-Trichlorobenzene	8.16		"	10.0		81.6	76-137				
1,2,4-Trimethylbenzene	9.03		"	10.0		90.3	82-132				
1,2-Dibromo-3-chloropropane	6.57		"	10.0		65.7	45-147				
1,2-Dibromoethane	8.25		"	10.0		82.5	83-124	Low Bias			
1,2-Dichlorobenzene	9.05		"	10.0		90.5	79-123				
1,2-Dichloroethane	9.05		"	10.0		90.5	73-132				
1,2-Dichloropropane	9.91		"	10.0		99.1	78-126				
1,3,5-Trimethylbenzene	9.12		"	10.0		91.2	80-131				
1,3-Dichlorobenzene	8.67		"	10.0		86.7	86-122				
1,3-Dichloropropane	8.62		"	10.0		86.2	81-125				
1,4-Dichlorobenzene	8.82		"	10.0		88.2	85-124				
1,4-Dioxane	194		"	210		92.5	10-349				
2-Butanone	8.28		"	10.0		82.8	49-152				
2-Hexanone	9.03		"	10.0		90.3	51-146				
4-Methyl-2-pentanone	9.16		"	10.0		91.6	57-145				
Acetone	8.52		"	10.0		85.2	14-150				
Acrolein	4.69		"	10.0		46.9	10-153				
Acrylonitrile	8.50		"	10.0		85.0	51-150				
Benzene	8.82		"	10.0		88.2	85-126				
Bromochloromethane	9.36		"	10.0		93.6	77-128				
Bromodichloromethane	8.66		"	10.0		86.6	79-128				
Bromoform	8.56		"	10.0		85.6	78-133				
Bromomethane	7.82		"	10.0		78.2	43-168				
Carbon disulfide	8.21		"	10.0		82.1	68-146				
Carbon tetrachloride	8.98		"	10.0		89.8	77-141				
Chlorobenzene	9.30		"	10.0		93.0	88-120				
Chloroethane	10.1		"	10.0		101	65-136				
Chloroform	8.84		"	10.0		88.4	82-128				
Chloromethane	10.3		"	10.0		103	43-155				
cis-1,2-Dichloroethylene	9.18		"	10.0		91.8	83-129				
cis-1,3-Dichloropropylene	8.76		"	10.0		87.6	80-131				
Cyclohexane	6.98		"	10.0		69.8	63-149				
Dibromochloromethane	8.03		"	10.0		80.3	80-130				
Dibromomethane	8.40		"	10.0		84.0	72-134				
Dichlorodifluoromethane	10.2		"	10.0		102	44-144				
Ethyl Benzene	9.82		"	10.0		98.2	80-131				
Hexachlorobutadiene	10.5		"	10.0		105	67-146				
Isopropylbenzene	9.36		"	10.0		93.6	76-140				
Methyl acetate	8.53		"	10.0		85.3	51-139				
Methyl tert-butyl ether (MTBE)	8.25		"	10.0		82.5	76-135				
Methylcyclohexane	9.10		"	10.0		91.0	72-143				
Methylene chloride	9.81		"	10.0		98.1	55-137				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22933 - EPA 5030B											
LCS (BC22933-BS1)								Prepared & Analyzed: 03/25/2022			
Naphthalene	7.17		ug/L	10.0		71.7	70-147				
n-Butylbenzene	9.91		"	10.0		99.1	79-132				
n-Propylbenzene	9.66		"	10.0		96.6	78-133				
o-Xylene	9.70		"	10.0		97.0	78-130				
p- & m- Xylenes	16.7		"	20.0		83.6	77-133				
p-Diethylbenzene	9.25		"	10.0		92.5	84-134				
p-Ethyltoluene	10.2		"	10.0		102	88-129				
p-Isopropyltoluene	9.28		"	10.0		92.8	81-136				
sec-Butylbenzene	9.28		"	10.0		92.8	79-137				
Styrene	9.25		"	10.0		92.5	67-132				
tert-Butyl alcohol (TBA)	39.7		"	50.0		79.5	25-162				
tert-Butylbenzene	7.38		"	10.0		73.8	77-138	Low Bias			
Tetrachloroethylene	8.89		"	10.0		88.9	82-131				
Toluene	9.17		"	10.0		91.7	80-127				
trans-1,2-Dichloroethylene	9.23		"	10.0		92.3	80-132				
trans-1,3-Dichloropropylene	8.63		"	10.0		86.3	78-131				
Trichloroethylene	8.68		"	10.0		86.8	82-128				
Trichlorofluoromethane	10.2		"	10.0		102	67-139				
Vinyl Chloride	11.9		"	10.0		119	58-145				
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.2*		*"*	*10.0*		*102*	*69-130*				
Surrogate: SURR: Toluene-d8	*10.0*		*"*	*10.0*		*100*	*81-117*				
Surrogate: SURR: p-Bromofluorobenzene	*9.94*		*"*	*10.0*		*99.4*	*79-122*				
LCS Dup (BC22933-BSD1)								Prepared & Analyzed: 03/25/2022			
1,1,1,2-Tetrachloroethane	9.32		ug/L	10.0		93.2	82-126		4.84	30	
1,1,1-Trichloroethane	9.19		"	10.0		91.9	78-136		5.82	30	
1,1,2,2-Tetrachloroethane	9.05		"	10.0		90.5	76-129		5.92	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.72		"	10.0		87.2	54-165		2.60	30	
1,1,2-Trichloroethane	8.89		"	10.0		88.9	82-123		8.20	30	
1,1-Dichloroethane	9.90		"	10.0		99.0	82-129		7.55	30	
1,1-Dichloroethylene	10.5		"	10.0		105	68-138		9.72	30	
1,2,3-Trichlorobenzene	7.77		"	10.0		77.7	76-136		0.516	30	
1,2,3-Trichloropropane	8.66		"	10.0		86.6	77-128		3.29	30	
1,2,4-Trichlorobenzene	8.10		"	10.0		81.0	76-137		0.738	30	
1,2,4-Trimethylbenzene	9.15		"	10.0		91.5	82-132		1.32	30	
1,2-Dibromo-3-chloropropane	7.81		"	10.0		78.1	45-147		17.2	30	
1,2-Dibromoethane	8.97		"	10.0		89.7	83-124		8.36	30	
1,2-Dichlorobenzene	9.04		"	10.0		90.4	79-123		0.111	30	
1,2-Dichloroethane	10.7		"	10.0		107	73-132		16.4	30	
1,2-Dichloropropane	11.3		"	10.0		113	78-126		13.0	30	
1,3,5-Trimethylbenzene	9.17		"	10.0		91.7	80-131		0.547	30	
1,3-Dichlorobenzene	8.32		"	10.0		83.2	86-122	Low Bias	4.12	30	
1,3-Dichloropropane	9.84		"	10.0		98.4	81-125		13.2	30	
1,4-Dichlorobenzene	8.57		"	10.0		85.7	85-124		2.88	30	
1,4-Dioxane	207		"	210		98.4	10-349		6.22	30	
2-Butanone	8.80		"	10.0		88.0	49-152		6.09	30	
2-Hexanone	11.2		"	10.0		112	51-146		21.3	30	
4-Methyl-2-pentanone	11.1		"	10.0		111	57-145		19.5	30	
Acetone	9.70		"	10.0		97.0	14-150		13.0	30	
Acrolein	5.81		"	10.0		58.1	10-153		21.3	30	
Acrylonitrile	9.69		"	10.0		96.9	51-150		13.1	30	

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC22933 - EPA 5030B											
LCS Dup (BC22933-BSD1)								Prepared & Analyzed: 03/25/2022			
Benzene	8.99		ug/L	10.0		89.9	85-126		1.91	30	
Bromochloromethane	10.2		"	10.0		102	77-128		8.69	30	
Bromodichloromethane	9.88		"	10.0		98.8	79-128		13.2	30	
Bromoform	8.86		"	10.0		88.6	78-133		3.44	30	
Bromomethane	2.66		"	10.0		26.6	43-168	Low Bias	98.5	30	Non-dir.
Carbon disulfide	8.62		"	10.0		86.2	68-146		4.87	30	
Carbon tetrachloride	9.35		"	10.0		93.5	77-141		4.04	30	
Chlorobenzene	9.74		"	10.0		97.4	88-120		4.62	30	
Chloroethane	10.1		"	10.0		101	65-136		0.0989	30	
Chloroform	9.35		"	10.0		93.5	82-128		5.61	30	
Chloromethane	11.8		"	10.0		118	43-155		14.1	30	
cis-1,2-Dichloroethylene	10.2		"	10.0		102	83-129		10.3	30	
cis-1,3-Dichloropropylene	9.81		"	10.0		98.1	80-131		11.3	30	
Cyclohexane	7.10		"	10.0		71.0	63-149		1.70	30	
Dibromochloromethane	8.58		"	10.0		85.8	80-130		6.62	30	
Dibromomethane	9.40		"	10.0		94.0	72-134		11.2	30	
Dichlorodifluoromethane	16.1		"	10.0		161	44-144	High Bias	44.5	30	Non-dir.
Ethyl Benzene	10.8		"	10.0		108	80-131		9.32	30	
Hexachlorobutadiene	11.0		"	10.0		110	67-146		3.82	30	
Isopropylbenzene	9.27		"	10.0		92.7	76-140		0.966	30	
Methyl acetate	9.77		"	10.0		97.7	51-139		13.6	30	
Methyl tert-butyl ether (MTBE)	8.48		"	10.0		84.8	76-135		2.75	30	
Methylcyclohexane	9.20		"	10.0		92.0	72-143		1.09	30	
Methylene chloride	10.5		"	10.0		105	55-137		7.17	30	
Naphthalene	7.42		"	10.0		74.2	70-147		3.43	30	
n-Butylbenzene	10.8		"	10.0		108	79-132		8.69	30	
n-Propylbenzene	9.91		"	10.0		99.1	78-133		2.55	30	
o-Xylene	10.7		"	10.0		107	78-130		9.71	30	
p- & m- Xylenes	18.6		"	20.0		93.0	77-133		10.6	30	
p-Diethylbenzene	9.34		"	10.0		93.4	84-134		0.968	30	
p-Ethyltoluene	9.85		"	10.0		98.5	88-129		3.59	30	
p-Isopropyltoluene	9.34		"	10.0		93.4	81-136		0.644	30	
sec-Butylbenzene	9.37		"	10.0		93.7	79-137		0.965	30	
Styrene	9.72		"	10.0		97.2	67-132		4.96	30	
tert-Butyl alcohol (TBA)	41.6		"	50.0		83.2	25-162		4.60	30	
tert-Butylbenzene	7.30		"	10.0		73.0	77-138	Low Bias	1.09	30	
Tetrachloroethylene	8.72		"	10.0		87.2	82-131		1.93	30	
Toluene	9.86		"	10.0		98.6	80-127		7.25	30	
trans-1,2-Dichloroethylene	10.2		"	10.0		102	80-132		9.59	30	
trans-1,3-Dichloropropylene	9.91		"	10.0		99.1	78-131		13.8	30	
Trichloroethylene	9.30		"	10.0		93.0	82-128		6.90	30	
Trichlorofluoromethane	10.0		"	10.0		100	67-139		1.78	30	
Vinyl Chloride	13.5		"	10.0		135	58-145		13.0	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	*11.5*		*"*	*10.0*		*115*	*69-130*				
Surrogate: SURR: Toluene-d8	*10.3*		*"*	*10.0*		*103*	*81-117*				
Surrogate: SURR: p-Bromofluorobenzene	*9.75*		*"*	*10.0*		*97.5*	*79-122*				

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
22C1250-01	EB	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
22C1250-02	TB	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
22C1250-03	MW001	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
22C1250-04	MW002	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
22C1250-05	MW003	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
22C1250-06	MW004	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
22C1250-07	MW005	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
22C1250-08	MW006	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
22C1250-09	DUP	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C

Sample and Data Qualifiers Relating to This Work Order

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
Cal-E	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration (average Rf>20%)
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

Field Chain-of-Custody Record

YORK ANALYTICAL LABORATORIES INC

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization for YORK to proceed with the analyses requested below.
Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No. 22C1250

120 Research Drive Stratford, CT 06615 | 132-02 89th Ave Queens, NY 11418 | clientservices@yorklab.com | www.yorklab.com | 800-306-YORK | 800-306-9675

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: ~~FAY210I~~ PWGC	Company: PWGC	Company: PWGC	FAY2101	RUSH - Next Day
Address: 630 Johnson Ave Bohemia, NY 11716	Address:	Address:	YOUR Project Name: FAY2101	RUSH - Two Day
Phone: (631) 589-6353	Phone: (631) 589-6353	Phone:		RUSH - Three Day
Contact: Michael Gaul	Contact: Michael Gaul	Contact:		RUSH - Four Day
E-mail: mgaul@pwgrosser.com	E-mail: mgaul@pwgrosser.com	E-mail:	YOUR PO#:	Standard (5-7 Day) X

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

Samples Collected by: (print AND sign your name)

Danielle Dulligan ~~Dyna Dulligan~~

Matrix Codes

S - soil / solid
GW - groundwater
DW - drinking water
WW - wastewater
O - Oil | Other

Samples From

New York X
New Jersey
Connecticut
Pennsylvania
Other:

Report / EDD Type (circle selections)

Summary Report | CT RCP | Standard Excel EDD
QA Report | CT RCP DQA/DUE | EQuIS (Standard)
NY ASP A Package | NJDEP Reduced Deliverables | NYSDEC EQuIS
NY ASP B Package | NJDKQP | NJDEP SRP HazSite
Other:

YORK Reg. Comp.

Compared to the following Regulation(s): (please fill in)

Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
~~AAW~~ EB	GW	03/21/22	TCL VOCs	
TB				
MW001		15:30		
MW002		15:00		
MW003		12:00		
MW004		11:00		
MW005		16:30		
MW006		~~14:15~~		
DUPE		~~15:05~~		
MS/MSD		15:05		

Comments:

Preservation: (check all that apply)

HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH ___
ZnAc ___ Ascorbic Acid ___ Other: ___

Special Instruction

Field Filtered
Lab to Filter

Samples iced/chilled at time of lab pickup? circle Yes or No

1. Samples Relinquished by / Company	Date/Time	1. Samples Received by / Company	Date/Time	2. Samples Relinquished by / Company	Date/Time
Danielle Dulligan	03/22/22 15:07	Andrew S. York	3/22/22 1507	Andrew S. York	3/22/22 1613
Samples Received by / Company	Date/Time	3. Samples Relinquished by / Company	Date/Time	3. Samples Received by / Company	Date/Time
[illegible]	3/22/22 1613	Ivan B	3-22-22		
Samples Relinquished by / Company	Date/Time	4. Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time / Temperature
				[illegible]	03/23/2022 9:00am / 2.4 Degrees C

APPENDIX D
MONITORING WELL DEVELOPMENT LOGS

Groundwater Monitoring Well Development Log

SITE INFORMATION

Site/Project Number:	FAY2101		
Development Point:	MW001	**Developed By:**	NR
Date Developed:	3/14/2022	**Well Diameter (inches):**	2
Depth to Water (feet):	10.92	**Total Well Depth (feet):**	19.6

DEVELOPMENT INFORMATION

Purge Method:	Peristaltic Pump	**Purge Time (min):**	42
Purge Rate (gpm):	0.076	**Gallons Purged:**	3

DEVELOPMENT PARAMETERS

Casing Volumes	Time	Flow Rate (gpm)	pH	Cond. (µS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)	ORP mV	Temp (ºC)
0	0	0.076	7.51	1.61	444	10.81	NA	178	15.86
0.228	3	0.076	7.55	1.62	1000	8.81	NA	167	15.75
0.456	6	0.076	7.56	1.65	1000	7.76	NA	158	15.71
0.684	9	0.076	7.66	1.68	1000	7.77	NA	142	15.62
0.912	12	0.076	7.71	1.72	1000	7.21	NA	135	15.64
1.14	15	0.076	7.75	1.75	1000	7.21	NA	122	15.66
1.368	18	0.076	7.82	1.78	1000	7.18	NA	106	15.52
1.596	21	0.076	7.88	1.78	1000	7.04	NA	105	15.47
1.824	24	0.076	7.92	1.78	1000	7.02	NA	104	15.45
2.052	27	0.076	7.95	1.73	1000	8.41	NA	107	15.84
2.28	30	0.076	7.96	1.73	836	8.02	NA	111	16.31
2.508	33	0.076	8.04	1.69	167	7.86	NA	120	16.69
2.736	36	0.076	7.98	1.62	52.0	7.08	NA	102	16.86
2.964	39	0.076	7.99	1.62	48.6	7.08	NA	105	16.88
3.192	42	0.076	7.98	1.61	32.7	7.09	NA	103	16.90

Groundwater Monitoring Well Development Log

SITE INFORMATION

Site/Project Number:	FAY2101		
Development Point:	MW002	**Developed By:**	NR
Date Developed:	3/14/2022	**Well Diameter (inches)**	2
Depth to Water (feet):	11.47	**Total Well Depth (feet)**	17.79

DEVELOPMENT INFORMATION

Purge Method:	Peristaltic Pump	**Purge Time (min):**	39
Purge Rate (gpm):	0.076	**Gallons Purged:**	2.5

DEVELOPMENT PARAMETERS

Casing Volumes	Time Minutes	Flow Rate (gpm)	pH	Cond. (µS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)	ORP mV	Temp (ºC)
0	0	0.076	6.68	0.469	0.0	3.08	NA	182	15.44
0.228	3	0.076	7.01	0.476	0.0	3.21	NA	177	15.42
0.456	6	0.076	7.07	0.479	0.0	3.36	NA	176	15.31
0.684	9	0.076	7.12	0.478	0.0	3.48	NA	175	15.28
0.912	12	0.076	7.34	0.483	0.0	3.97	NA	173	15.24
1.14	15	0.076	7.49	0.538	0.0	4.79	NA	174	15.22
1.368	18	0.076	7.50	0.561	0.0	5.92	NA	180	15.17
1.596	21	0.076	7.49	0.563	0.0	5.99	NA	181	15.15
1.824	24	0.076	7.49	0.562	0.0	6.00	NA	181	15.14
2.052	27	0.076	7.49	0.563	0.0	5.98	NA	181	15.13
2.28	30	0.076	7.48	0.564	0.0	5.99	NA	182	15.13
2.508	33	0.076	7.48	0.569	0.0	5.75	NA	183	15.10
2.736	36	0.076	7.48	0.569	0.0	5.78	NA	183	15.09
2.964	39	0.076	7.44	0.568	0.0	5.76	NA	182	15.09

Groundwater Monitoring Well Development Log

SITE INFORMATION

Site/Project Number:	FAY2101		
Development Point:	MW003	**Developed By:**	NR
Date Developed:	3/14/2022	**Well Diameter (inches)**	1
Depth to Water (feet):	0.5	**Total Well Depth (feet)**	5

DEVELOPMENT INFORMATION

Purge Method:	Peristaltic Pump	**Purge Time (min):**	5
Purge Rate (gpm):	0.076	**Gallons Purged:**	0.38

DEVELOPMENT PARAMETERS

Casing Volumes	Time	Flow Rate (gpm)	pH	Cond. (µS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)	ORP mV	Temp (ºC)
WELL FULLY PURGED PRIOR TO FIRST READING.									

Groundwater Monitoring Well Development Log

SITE INFORMATION

Site/Project Number:	FAY2101		
Development Point:	MW004	**Developed By:**	NR
Date Developed:	3/14/2022	**Well Diameter (inches)**	1
Depth to Water (feet):	0.5	**Total Well Depth (feet)**	5

DEVELOPMENT INFORMATION

Purge Method:	Peristaltic Pump	**Purge Time (min):**	5
Purge Rate (gpm):	0.076	**Gallons Purged:**	0.38

DEVELOPMENT PARAMETERS

Casing Volumes	Time	Flow Rate (gpm)	pH	Cond. (µS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)	ORP mV	Temp (ºC)
WELL FULLY PURGED PRIOR TO FIRST READING.									

Groundwater Monitoring Well Development Log

SITE INFORMATION

Site/Project Number:	FAY2101		
Development Point:	MW005	**Developed By:**	NR
Date Developed:	3/14/2022	**Well Diameter (inches)**	1
Depth to Water (feet):	5.3	**Total Well Depth (feet)**	9.6

DEVELOPMENT INFORMATION

Purge Method:	Peristaltic Pump	**Purge Time (min):**	3
Purge Rate (gpm):	0.076	**Gallons Purged:**	0.228

DEVELOPMENT PARAMETERS

Casing Volumes	Time	Flow Rate (gpm)	pH	Cond. (µS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)	ORP mV	Temp (ºC)
WELL FULLY PURGED PRIOR TO FIRST READING.									

Groundwater Monitoring Well Development Log

SITE INFORMATION

Site/Project Number:	FAY2101		
Development Point:	MW006	**Developed By:**	NR
Date Developed:	3/14/2022	**Well Diameter (inches)**	1
Depth to Water (feet):	3.4	**Total Well Depth (feet)**	5.01

DEVELOPMENT INFORMATION

Purge Method:	Peristaltic Pump	**Purge Time (min):**	3
Purge Rate (gpm):	0.076	**Gallons Purged:**	0.228

DEVELOPMENT PARAMETERS

Casing Volumes	Time	Flow Rate (gpm)	pH	Cond. (µS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)	ORP mV	Temp (ºC)
WELL FULLY PURGED PRIOR TO FIRST READING.									

APPENDIX E
PURGE WATER DISPOSAL RECEIPTS

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	CESQC	1	631-727-2700	

5. Generator's Name and Mailing Address
Fay Realty / Norman Minsky
4341 Riverdale Avenue
Yonkers, NY

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name: Eastern Environmental Solutions, Inc. — U.S. EPA ID Number: NYR000135624

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
Cleanwater of New York
3249 Richmond Terrace
Staten Island, NY

U.S. EPA ID Number

Facility's Phone:

GENERATOR

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non Hazardous Non RCRA ~~Solids~~ Liquids (Purge Water)	001	DM	055	G	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
442-002

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Tim Mulvey On Behalf Of — Signature — Month: 03 Day: 21 Year: 22

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Tim Mulvey — Signature — Month: 03 Day: 21 Year: 22

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Alexian Acevedo — Signature — Month: 5 Day: 3 Year: 22

TRANSPORTER #1

APPENDIX F
MONITORING WELL SAMPLING LOGS

Groundwater Monitoring Well Sampling Log

SITE INFORMATION

Site/Project Number:	**FAY2101**		
Sampling Point:	MW001	**Sampled By:**	DD
Date Sampled:	3/21/2022	**Time Sampled:**	15:40
Depth to Water (feet):	10.87	**Total Well Depth (feet):**	19.61
Well Diameter (inches):	2	**Headspace (ppm):**	DNR

SAMPLING INFORMATION

Purge Method:	Peristaltic Pump	**Sample Method:**	Peristaltic Pump
Purge Rate (ml/min):	250	**Purge Time (min):**	24
Sample Appearance:	Clear	**Odors Observed:**	None
Analysis:	USEPA 8260	**Laboratory:**	York Analytical
Date Shipped:	3/22/2022	**Shipping Method:**	Courier Pick-up

SAMPLING PARAMETERS

Reading	Flow Rate	Time	Temp.	pH	Turbidity	ORP	Cond.	DO
	(mL/min)		(ºC)		NTU	mV	(mS/cm)	mg/L
1		15:14	INITIAL DISCHARGE					
2	250	15:17	15.37	7.57	208	244	1.91	0.96
3	250	15:20	15.19	7.55	154	205	1.92	0.79
4	250	15:23	15.04	7.54	144	168	1.93	0.95
5	250	15:26	15.16	7.52	145	148	1.92	1.35
6	250	15:29	15.19	7.52	143	144	1.92	1.28
7	250	15:32	15.38	7.49	108	148	1.92	1.26
8	250	15:35	15.79	7.48	91.6	152	1.89	0.57
9	250	15:38	15.80	7.49	62.5	153	1.89	0.58

(Take readings every three minutes.)

Notes: Total volume purged, 6L.

Groundwater Monitoring Well Sampling Log

SITE INFORMATION

Site/Project Number:	**FAY2101**		
Sampling Point:	MW002	**Sampled By:**	DD
Date Sampled:	3/21/2022	**Time Sampled:**	15:00
Depth to Water (feet):	11.5	**Total Well Depth (feet):**	17.1
Well Diameter (inches):	2	**Headspace (ppm):**	DNR

SAMPLING INFORMATION

Purge Method:	Peristaltic Pump	**Sample Method:**	Peristaltic Pump
Purge Rate (ml/min):	250	**Purge Time (min):**	16
Sample Appearance:	Clear	**Odors Observed:**	None
Analysis:	USEPA 8260	**Laboratory:**	York Analytical
Date Shipped:	3/22/2022	**Shipping Method:**	Courier Pick-up

SAMPLING PARAMETERS

Reading	Flow Rate (mL/min)	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
1		14:40	INITIAL DISCHARGE					
2	250	14:44	14.30	7.52	92.5	267	0.776	1.34
3	250	14:47	14.30	7.39	69.4	269	0.774	1.30
4	250	14:50	14.34	7.33	37.4	271	0.771	1.27
5	250	14:53	14.36	7.29	36.5	271	0.771	1.27
6	250	14:56	14.38	7.29	22.4	273	0.769	1.24

(Take readings every three minutes.)

Notes: Total volume purged, 4L.

Groundwater Monitoring Well Sampling Log

SITE INFORMATION

Site/Project Number:	**FAY2101**		
Sampling Point:	MW003	**Sampled By:**	DD
Date Sampled:	3/21/2022	**Time Sampled:**	12:00
Depth to Water (feet):	0.5	**Total Well Depth (feet):**	5
Well Diameter (inches):	1	**Headspace (ppm):**	DNR

SAMPLING INFORMATION

Purge Method:	Peristaltic Pump	**Sample Method:**	Peristaltic Pump
Purge Rate (ml/min):	333	**Purge Time (min):**	16
Sample Appearance:	Initially very turbid, cleared up	**Odors Observed:**	None
Analysis:	USEPA 8260	**Laboratory:**	York Analytical
Date Shipped:	3/22/2022	**Shipping Method:**	Courier Pick-up

SAMPLING PARAMETERS

Reading	Flow Rate (mL/min)	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
1	333	11:21	INITIAL DISCHARGE					
2	333	11:25	12.27	7.90	686	229	1.58	1.81
3	333	11:28	12.38	7.57	957	152	1.58	0.79
4	333	11:31	12.38	7.52	893	150	1.58	0.77
5	333	11:34	12.37	7.52	668	116	1.56	0.73
6	333	11:37	12.35	7.49	562	104	1.51	0.71
7	N/A	11:39	WELL FULLY PURGED, WAIT FOR RECHARGE					

(Take readings every three minutes.)

Notes: Total volume purged, 6L.

PWGC
Strategic Environmental Engineering Solutions

Groundwater Monitoring Well Sampling Log

SITE INFORMATION

Site/Project Number:	**FAY2101**		
Sampling Point:	MW004	**Sampled By:**	DD
Date Sampled:	3/21/2022	**Time Sampled:**	11:00
Depth to Water (feet):	0.5	**Total Well Depth (feet):**	5
Well Diameter (inches):	1	**Headspace (ppm):**	DNR

SAMPLING INFORMATION

Purge Method:	Peristaltic Pump	**Sample Method:**	Peristaltic Pump
Purge Rate (ml/min):	333	**Purge Time (min):**	16
Sample Appearance:	Initially chalky, cleared up	**Odors Observed:**	None
Analysis:	USEPA 8260	**Laboratory:**	York Analytical
Date Shipped:	3/22/2022	**Shipping Method:**	Courier Pick-up

SAMPLING PARAMETERS

Reading	Flow Rate (mL/min)	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
1	333	10:28	INITIAL DISCHARGE					
2	333	10:31	11.67	7.23	0.0	257	1.10	0.97
3	333	10:34	11.67	7.23	0.0	257	1.10	0.97
4	333	10:37	11.67	7.23	0.0	257	1.10	0.97
5	333	10:40	11.67	7.23	0.0	257	1.10	0.97
6	333	10:42	12.12	7.63	419	238	1.10	0.86
7	333	10:45	12.26	7.59	637	232	1.09	1.00
8	333	10:48	12.42	7.66	941	223	1.08	1.24
9	333	10:51	12.31	7.70	417	219	0.948	2.16
10	333	10:53	WELL FULLY PURGED, WAIT FOR RECHARGE					

(Take readings every three minutes.)

Notes: Total volume purged, 8.3L.

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New York, NY • Syracuse, NY • Seattle, WA • Shelton, CT

Groundwater Monitoring Well Sampling Log

SITE INFORMATION

Site/Project Number:	**FAY2101**		
Sampling Point:	MW005	**Sampled By:**	DD
Date Sampled:	3/21/2022	**Time Sampled:**	16:30
Depth to Water (feet):	5.22	**Total Well Depth (feet):**	8.5
Well Diameter (inches):	1	**Headspace (ppm):**	DNR

SAMPLING INFORMATION

Purge Method:	Peristaltic Pump	**Sample Method:**	Peristaltic Pump
Purge Rate (ml/min):	300	**Purge Time (min):**	3
Sample Appearance:	Yellow	**Odors Observed:**	None
Analysis:	USEPA 8260	**Laboratory:**	York Analytical
Date Shipped:	3/22/2022	**Shipping Method:**	Courier Pick-up

SAMPLING PARAMETERS

Reading	Flow Rate (mL/min)	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
1		16:24	INITIAL DISCHARGE					
2		16:26	WELL FULLY PURGED PRIOR TO FIRST READING, WAIT FOR RECHARGE					

(Take readings every three minutes.)

Notes: Total volume purged, 1L.

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Groundwater Monitoring Well Sampling Log

SITE INFORMATION

Site/Project Number:	**FAY2101**		
Sampling Point:	MW006	**Sampled By:**	DD
Date Sampled:	3/21/2022	**Time Sampled:**	14:15
Depth to Water (feet):	3.75	**Total Well Depth (feet):**	5.1
Well Diameter (inches):	1	**Headspace (ppm):**	DNR

SAMPLING INFORMATION

Purge Method:	Peristaltic Pump	**Sample Method:**	Peristaltic Pump
Purge Rate (ml/min):	333	**Purge Time (min):**	3
Sample Appearance:	Turbid	**Odors Observed:**	Sulfur
Analysis:	USEPA 8260	**Laboratory:**	York Analytical
Date Shipped:	3/22/2022	**Shipping Method:**	Courier Pick-up

SAMPLING PARAMETERS

Reading	Flow Rate (mL/min)	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
1		14:01	INITIAL DISCHARGE, VERY LOW FLOW					
2		14:03	PAUSE TO ALLOW RECHARGE					

(Take readings every three minutes.)

Notes: Total volume purged, 1L.

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APPENDIX G
SOIL VAPOR SAMPLING LOGS

APPENDIX H
434 Riverdale Avenue
Yonkers, NY
TO-15 Sampling Log

Sample ID	Date	Start Time	End Time	Initial Vacuum in/Hg	Final Vacuum in/Hg	Canister ID	Regulator ID	Location
SV- El Valle	3/22/2022	13:08	13:06	-30	-8.0	20944	13558	El Valle
AA- El Valle	3/22/2022	13:10	13:10	-30	-4.2	17346	12191	El Valle
SV- Deli	3/22/2022	13:18	13:19	-30	-4.2	18299	13565	Food Center Deli
AA- Deli	3/22/2022	13:19	13:20	-30	-4.5	41937	3540	Food Center Deli
SV- Supermarket	3/22/2022	13:26	13:30	-30	-19.0	23995	6881	Lorena Mex Mini Market
AA- Supermarket	3/22/2022	13:27	13:31	-30	-5.0	28845	13569	Lorena Mex Mini Market
SV- Laundromat East	3/22/2022	13:33	13:40	-30	-9.0	20754	6874	D&K Laundry
AA- Laundromat East	3/22/2022	13:34	13:41	-30	-8.0	36889	5611	D&K Laundry
SV- Laundromat West	3/22/2022	13:39	13:44	-30	-1.5	37794	13574	D&K Laundry
AA- Laundromat West	3/22/2022	13:40	13:45	-30	-10.0	17349	7609	D&K Laundry
OA-001	3/22/2022	13:55	14:00	-30	-7.0	28316	6870	Riverdale Avenue

APPENDIX H
SOIL VAPOR MATRICES

NYSDOH Decision Matrix A Sample Location: El Valle			Indoor Air Concentration - TRICHLOROETHENE (TCE) (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
			0.142		
Sub-Slab Concentration - TRICHLOROETHENE (TCE) (ug/m3)	< 6	**<0.958**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix A Sample Location: El Valle			Indoor Air Concentration - cis-1,2-Dichloroethene (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
				0.418	
Sub-Slab Concentration - cis-1,2-Dichloroethene(ug/m3)	< 6	**<1.41**	1. No further Action	**2. No Further Action**	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix A Sample Location: El Valle			Indoor Air Concentration - 1,1-Dichloroethene (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
			<0.48		
Sub-Slab Concentration - TRICHLOROETHENE (ug/m3)	< 6	**<3.89**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix A Sample Location: El Valle			Indoor Air Concentration - Carbon Tetrachloride (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
				0.387	
Sub-Slab Concentration - Carbon Tetrachloride(ug/m3)	< 6	**<1.12**	1. No further Action	**2. No Further Action**	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix B Sample Location: El Valle			Indoor Air Concentration - Tetrachloroethene (PCE) (µg/m³)		
			< 3	3 to < 10	10 and Above
			1.37		
Sub-Slab Concentration - Tetrachloroethene (PCE) (ug/m3)	< 100	**27.6**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	100 to < 1,000		4. No Further Action	5. MONITOR	6. MITIGATE
	1,000 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix B Sample Location: El Valle			Indoor Air Concentration - 1,1,1-Trichloroethane (µg/m³)		
			< 3	3 to < 10	10 and Above
			<0.48		
Sub-Slab Concentration - 1,1,1-Trichloroethane (ug/m3)	< 100	**<3.89**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	100 to < 1,000		4. No Further Action	5. MONITOR	6. MITIGATE
	1,000 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix B Sample Location: El Valle			Indoor Air Concentration - Methylene Chloride (µg/m³)		
			< 3	3 to < 10	10 and Above
			2.29		
Sub-Slab Concentration - Methylene Chloride (ug/m3)	< 100	**<4.95**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	100 to < 1,000		4. No Further Action	5. MONITOR	6. MITIGATE
	1,000 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix C Sample Location: El Valle			Indoor Air Concentration - Vinyl Chloride (µg/m³)	
			< 0.2	0.2 and Above
			<0.112	
Sub-Slab Concentration - Vinyl Chloride (ug/m3)	< 6	**<0.911**	**1. No further Action**	2. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		3. MONITOR	4. MITIGATE
	60 and Above		5. MITIGATE	6. MITIGATE

NYSDOH Decision Matrix A Sample Location: Deli			Indoor Air Concentration - TRICHLOROETHENE (TCE) (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
			<0.574		
Sub-Slab Concentration - TRICHLOROETHENE (TCE) (ug/m3)	< 6		1. No further Action	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60	**9.45**	**4. No Further Action**	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix A Sample Location: Deli			Indoor Air Concentration - cis-1,2-Dichloroethene (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
			<0.168		
Sub-Slab Concentration - cis-1,2-Dichloroethene(ug/m3)	< 6	**<0.318**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix A Sample Location: Deli			Indoor Air Concentration - 1,1-Dichloroethene (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
			<0.168		
Sub-Slab Concentration - TRICHLOROETHENE (ug/m3)	< 6	**<0.318**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix A Sample Location: Deli			Indoor Air Concentration - Carbon Tetrachloride (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
				0.426	
Sub-Slab Concentration - Carbon Tetrachloride(ug/m3)	< 6	**0.403**	1. No further Action	**2. No Further Action**	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix B Sample Location: Deli			Indoor Air Concentration - Tetrachloroethene (PCE) (µg/m³)		
			< 3	3 to < 10	10 and Above
			<0.574		
Sub-Slab Concentration - Tetrachloroethene (PCE) (ug/m3)	< 100	**9.45**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	100 to < 1,000		4. No Further Action	5. MONITOR	6. MITIGATE
	1,000 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix B Sample Location: Deli			Indoor Air Concentration - 1,1,1-Trichloroethane (µg/m³)		
			< 3	3 to < 10	10 and Above
			<0.462		
Sub-Slab Concentration - 1,1,1-Trichloroethane (ug/m3)	< 100	**<0.874**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	100 to < 1,000		4. No Further Action	5. MONITOR	6. MITIGATE
	1,000 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix B Sample Location: Deli			Indoor Air Concentration - Methylene Chloride (µg/m³)		
			< 3	3 to < 10	10 and Above
			0.852		
Sub-Slab Concentration - Methylene Chloride (ug/m3)	< 100	**3.17**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	100 to < 1,000		4. No Further Action	5. MONITOR	6. MITIGATE
	1,000 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix C Sample Location: Deli			Indoor Air Concentration - Vinyl Chloride (µg/m³)	
			< 0.2	0.2 and Above
			<0.108	
Sub-Slab Concentration - Vinyl Chloride (ug/m3)	< 6	**<0.205**	**1. No further Action**	2. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		3. MONITOR	4. MITIGATE
	60 and Above		5. MITIGATE	6. MITIGATE

NYSDOH Decision Matrix A Sample Location: Supermarket			Indoor Air Concentration - TRICHLOROETHENE (TCE) (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
			0.134		
Sub-Slab Concentration - TRICHLOROETHENE (TCE) (ug/m3)	< 6	**<0.507**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix A Sample Location: Supermarket			Indoor Air Concentration - cis-1,2-Dichloroethene (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
				0.693	
Sub-Slab Concentration - cis-1,2-Dichloroethene(ug/m3)	< 6	**2.09**	1. No further Action	**2. No Further Action**	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix A Sample Location: Supermarket			Indoor Air Concentration - 1,1-Dichloroethene (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
			<0.165		
Sub-Slab Concentration - TRICHLOROETHENE (ug/m3)	< 6	**<0.748**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix A Sample Location: Supermarket			Indoor Air Concentration - Carbon Tetrachloride (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
				0.209	
Sub-Slab Concentration - Carbon Tetrachloride(ug/m3)	< 6	**<0.593**	1. No further Action	**2. No Further Action**	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix B Sample Location: Supermarket			Indoor Air Concentration - Tetrachloroethene (PCE) (µg/m³)		
			< 3	3 to < 10	10 and Above
			1.35		
Sub-Slab Concentration - Tetrachloroethene (PCE) (ug/m3)	< 100	**3.58**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	100 to < 1,000		4. No Further Action	5. MONITOR	6. MITIGATE
	1,000 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix B Sample Location: Supermarket			Indoor Air Concentration - 1,1,1-Trichloroethane (µg/m³)		
			< 3	3 to < 10	10 and Above
			<0.454		
Sub-Slab Concentration - 1,1,1-Trichloroethane (ug/m3)	< 100	**<2.06**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	100 to < 1,000		4. No Further Action	5. MONITOR	6. MITIGATE
	1,000 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix B Sample Location: Supermarket			Indoor Air Concentration - Methylene Chloride (µg/m³)		
			< 3	3 to < 10	10 and Above
			0.751		
Sub-Slab Concentration - Methylene Chloride (ug/m3)	< 100	**<2.62**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	100 to < 1,000		4. No Further Action	5. MONITOR	6. MITIGATE
	1,000 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix C Sample Location: Supermarket			Indoor Air Concentration - Vinyl Chloride (µg/m³)	
			< 0.2	0.2 and Above
			<0.106	
Sub-Slab Concentration - Vinyl Chloride (ug/m3)	< 6	**<0.482**	**1. No further Action**	2. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		3. MONITOR	4. MITIGATE
	60 and Above		5. MITIGATE	6. MITIGATE

NYSDOH Decision Matrix A Sample Location: Laundromat East			Indoor Air Concentration - TRICHLOROETHENE (TCE) (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
			<0.121		
Sub-Slab Concentration - TRICHLOROETHENE (TCE) (ug/m3)	< 6	**<0.255**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix A Sample Location: Laundromat East			Indoor Air Concentration - cis-1,2-Dichloroethene (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
			<0.179		
Sub-Slab Concentration - cis-1,2-Dichloroethene(ug/m3)	< 6	**<0.376**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix A Sample Location: Laundromat East			Indoor Air Concentration - 1,1-Dichloroethene (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
			<0.179		
Sub-Slab Concentration - TRICHLOROETHENE (ug/m3)	< 6	**<0.376**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix A Sample Location: Laundromat East			Indoor Air Concentration - Carbon Tetrachloride (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
				0.454	
Sub-Slab Concentration - Carbon Tetrachloride(ug/m3)	< 6	**<0.298**	1. No further Action	**2. No Further Action**	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix B Sample Location: Laundromat East			Indoor Air Concentration - Tetrachloroethene (PCE) (µg/m³)		
			< 3	3 to < 10	10 and Above
			0.612		
Sub-Slab Concentration - Tetrachloroethene (PCE) (ug/m3)	< 100	**6.18**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	100 to < 1,000		4. No Further Action	5. MONITOR	6. MITIGATE
	1,000 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix B Sample Location: Laundromat East			Indoor Air Concentration - 1,1,1-Trichloroethane (µg/m³)		
			< 3	3 to < 10	10 and Above
			<0.493		
Sub-Slab Concentration - 1,1,1-Trichloroethane (ug/m3)	< 100	**<1.04**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	100 to < 1,000		4. No Further Action	5. MONITOR	6. MITIGATE
	1,000 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix B Sample Location: Laundromat East			Indoor Air Concentration - Methylene Chloride (µg/m³)		
			< 3	3 to < 10	10 and Above
			2.29		
Sub-Slab Concentration - Methylene Chloride (ug/m3)	< 100	**1.52**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	100 to < 1,000		4. No Further Action	5. MONITOR	6. MITIGATE
	1,000 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix C Sample Location: Laundromat East			Indoor Air Concentration - Vinyl Chloride (µg/m³)	
			< 0.2	0.2 and Above
			<0.115	
Sub-Slab Concentration - Vinyl Chloride (ug/m3)	< 6	**<0.242**	**1. No further Action**	2. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		3. MONITOR	4. MITIGATE
	60 and Above		5. MITIGATE	6. MITIGATE

NYSDOH Decision Matrix A Sample Location: Laundromat West			Indoor Air Concentration - TRICHLOROETHENE (TCE) (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
			<0.136		
Sub-Slab Concentration - TRICHLOROETHENE (TCE) (ug/m3)	< 6	**<0.188**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix A Sample Location: Laundromat West			Indoor Air Concentration - cis-1,2-Dichloroethene (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
			<0.201		
Sub-Slab Concentration - cis-1,2-Dichloroethene(ug/m3)	< 6	**<0.278**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix A Sample Location: Laundromat West			Indoor Air Concentration - 1,1-Dichloroethene (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
			<0.201		
Sub-Slab Concentration - TRICHLOROETHENE (ug/m3)	< 6	**<0.278**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix A Sample Location: Laundromat West			Indoor Air Concentration - Carbon Tetrachloride (µg/m³)		
			< 0.2	0.2 to < 1	1 and Above
				0.447	
Sub-Slab Concentration - Carbon Tetrachloride(ug/m3)	< 6	**0.353**	1. No further Action	**2. No Further Action**	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		4. No Further Action	5. MONITOR	6. MITIGATE
	60 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix B Sample Location: Laundromat West			Indoor Air Concentration - Tetrachloroethene (PCE) (µg/m³)		
			< 3	3 to < 10	10 and Above
				5.93	
Sub-Slab Concentration - Tetrachloroethene (PCE) (ug/m3)	< 100	**58.8**	1. No further Action	**2. No Further Action**	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	100 to < 1,000		4. No Further Action	5. MONITOR	6. MITIGATE
	1,000 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix B Sample Location: Laundromat West			Indoor Air Concentration - 1,1,1-Trichloroethane (µg/m³)		
			< 3	3 to < 10	10 and Above
			<0.554		
Sub-Slab Concentration - 1,1,1-Trichloroethane (ug/m3)	< 100	**<0.766**	**1. No further Action**	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	100 to < 1,000		4. No Further Action	5. MONITOR	6. MITIGATE
	1,000 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix B Sample Location: Laundromat West			Indoor Air Concentration - Methylene Chloride (µg/m³)		
			< 3	3 to < 10	10 and Above
				4.69	
Sub-Slab Concentration - Methylene Chloride (ug/m3)	< 100	**<0.975**	1. No further Action	**2. No Further Action**	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	100 to < 1,000		4. No Further Action	5. MONITOR	6. MITIGATE
	1,000 and Above		7. MITIGATE	8. MITIGATE	9. MITIGATE

NYSDOH Decision Matrix C Sample Location: Laundromat West			Indoor Air Concentration - Vinyl Chloride (µg/m³)	
			< 0.2	0.2 and Above
			<0.13	
Sub-Slab Concentration - Vinyl Chloride (ug/m3)	< 6	**<0.179**	**1. No further Action**	2. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
	6 to < 60		3. MONITOR	4. MITIGATE
	60 and Above		5. MITIGATE	6. MITIGATE

PWGC
CLIENT DRIVEN SOLUTIONS

APPENDIX I
DUSR

LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

P.W. Grosser Consulting
630 Johnson Ave, Suite 7
Bohemia, NY 11716
ATTN: Mr. Michael Gaul
mgaul@pwgrosser.com

June 23, 2022

SUBJECT: FAY2101 - 434 Reiverdale Ave, Yonkers - Data Usability Summary Report

Dear Mr. Gaul,

Enclosed are the final data usability summary reports for the fractions listed below. These SDGs were received on April 19, 2022. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #54080:

SDG #	Fraction
22C0596	Volatiles
22C0658	
22C1239	
22C1250	

The data validation was performed under modified Category B guidelines using quality control summaries provided by the laboratory. The analyses were validated using the following documents, as applicable to each method:

- USEPA Region 2 *Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry*, SOP HW-24, Revision 4 (October 2014)
- USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, EPA 540-R-20-005 (November 2020)
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014; update VI, July 2018

Please feel free to contact us if you have any questions.

Sincerely,

Kevin Kha
Project Manager/Chemist
kkha@lab-data.com

340 pages-DL DUSR No EDD

Attachment 1

Category B (5% per SDG) LDC# 54080 (P.W. Grosser Consulting - Bohemia, NY / FAY2101 - 434 Riverdale Ave, Yonkers)

LDC	SDG#	DATE REC'D	(3) DATE DUE	VOA (8260C)																																	
Matrix: Air/Water/Soil				A	S	W		W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	22C0596	04/19/22	05/10/22	0	1	0																															
B	22C0658	04/19/22	05/10/22	0	1	0																															
C	22C1239	04/19/22	05/10/22	1	0	0																															
D	22C1250	04/19/22	05/10/22	0	0	1																															
Total	T/KK			1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4

Shaded cells indicate Category B validation (all other cells are Category A validation). These sample counts do not include MS, MSD, or DUP.

Site:	FAY2101 – 434 Riverdale Ave, Yonkers
Laboratory:	York Analytical Laboratories, Inc., Stratford, CT
Report No.:	22C0596
Reviewer:	Felomina Tanguilig and Kevin Kha/Laboratory Data Consultants for P.W. Grosser Consulting
Date:	June 22, 2022

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SB-002 (0-2)	22C0596-05	VOC

Associated QC Samples(s):
Field/Trip Blanks: Trip Blank, Equipment Blank
Field Duplicate pair: None Associated

The above-listed soil sample was collected on March 9, 2022 and was analyzed for volatile organic compounds (VOCs) by SW-846 method 8260C. The data validation was performed in accordance with the USEPA Region 2 *Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry,* SOP HW-24, Revision 4 (October 2014) and the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review,* EPA 540-R-20-005 (November 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Moisture Content
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial Calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
03/16/22	ICV	Acrolein	30.2	SB-002 (0-2)	SS	UJ nondetects
		Dichlorodifluoromethane	45.8		SS	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The acrolein and dichlorodifluoromethane results were estimated due to second source verification exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Continuing Calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
03/17/22	CCV	Acetone	23.9	SB-002 (0-2)	XX	J detects/UJ nondetects
		Acrolein	66.1		XX	J detects/UJ nondetects
		Bromomethane	26.2		XX	J detects/UJ nondetects
		Dichlorodifluoromethane	108		XX	J detects/UJ nondetects
		Tetrachloroethene	31.0		XX	J detects/UJ nondetects
		Vinyl chloride	44.3		XX	J detects/UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The acetone, acrolein, bromomethane, dichlorodifluoromethane, tetrachloroethene, and vinyl chloride results were estimated due to continuing calibration exceedances. The bias cannot be determined. The results can be used for project objectives as estimated values (J) or nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Blanks

Contamination was not detected in the method blanks.

Contamination was detected in the trip blank sample Trip Blank and equipment blank sample Equipment Blank for VOC analysis. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at <2x RL (for common contaminants) and <RL (for other contaminants) of the concentrations detected. The following table summarizes the contamination detected.

Field Blank ID	Compound	Level Detected	Action Level	Associated Samples
Trip Blank	2-Butanone	2.45 ug/L	2xRL	SB-002 (0-2)
	2-Hexanone	0.570 ug/L	RL	
	Acetone	3.45 ug/L	2xRL	
	Chloromethane	0.270 ug/L	RL	
Equipment Blank	1,1,2-Trichloroethane	2.16 ug/L	RL	SB-002 (0-2)
	1,2-Dichloroethane	0.770 ug/L	RL	
	4-Methyl-2-pentanone	0.530 ug/L	RL	
	tert-Butyl alcohol	1.97 ug/L	RL	

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.

Qualified sample results are listed in the table below.

Sample ID	Compound	Level Detected	Validation Action
SB-002 (0-2)	2-Butanone	0.0045 mg/Kg	0.0048U mg/Kg

These results can be used for project objectives as nondetects (U) which may have a minor impact on the data usability.

Surrogate Recoveries

All criteria were met.

MS/MSD Results

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

LCS Results

The following table lists the LCS/LCSD percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	LCS/D %R (Limits)	Affected Sample	Validation Action
BC22411-LCS/LCSD	4-Methyl-2-pentanone	70.7 (72-132)	-	SB-002 (0-2)	UJ nondetects
	tert-Butylbenzene	79.4 (80-127)	-		UJ nondetects
	Tetrachloroethene	78.4 (80-129)	-		UJ nondetects

- Within control limits

The 4-methyl-2-pentanone, tert-butylbenzene, and tetrachloroethene results may be biased low due to low LCS/LCSD percent recoveries. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Internal Standards

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Moisture Content

All criteria were met.

Quantitation Limits and Data Assessment

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analysis. These results were qualified as estimated (J) by the laboratory.

Dilutions were not required for the VOC analysis.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 54080A1a **VALIDATION COMPLETENESS WORKSHEET** Date: 6/2/22
SDG #: 22C0596 Category B Page: 1 of 1
Laboratory: York Analytical Laboratories, Inc., Stratford, CT Reviewer: D
2nd Reviewer: KK

METHOD: GC/MS Volatiles (EPA SW-846 Method 8260C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A / SW	% RSD ≤ 20, r^2 ICV ≤ 30
IV.	Continuing calibration	SW	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	SW	TB = Trip Blank
VII.	Surrogate spikes	A	EB = Equipment Blk
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	SW	LCS/D
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Target analyte quantitation	A	Results < RL > MDL = Jdet
XIII.	Target analyte identification	A	MI
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-002 (0-2)	22C0596-05	Soil	03/09/22
2				
3				
4				
5				
6				
7				
8				
9				

Notes:

	BC22411						

LDC #: 54080A1a

VALIDATION FINDINGS CHECKLIST

Method: Volatiles (EPA SW 846 Method 8260 C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%, 15/30% and relative response factors (RRF) within method criteria?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	✓			
Were all percent differences (%D) ≤ 20% 30%?		✓		
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) within method criteria?		✓		
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation findings worksheet.		✓		
VI. Field blanks				
Were field blanks were identified in this SDG?	✓			
Were target analytes detected in the field blanks?	✓			
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓	✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target analytes detected in the field duplicates?			✓	
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XII. Target analyte quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the target analyte?	✓			
Were target analyte quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target analyte identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did analyte spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
Were manual integrations reviewed and found acceptable?	✓			
Did the laboratory provide before and after integration printouts?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO.1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 54080A 1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C4

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was an initial calibration verification standard analyzed after each ICAL for each instrument?

Y N N/A Were all %D within the validation criteria of ≤20 %D?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤20.0% / 30%)	Associated Samples	Qualifications
	3/16/17	ICV	FFFF	30.2	All	J/UJ/A ND
	0735		JJ	45.8		

LDC #: 54080A1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤20 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤20.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	3/17/22	ccv	F	23.9		All	J/UJ/A ND+Det
	0806		FFFF	66.1			
			~~FFFF~~ B	26.2	~~0.~~		
			JJ	108			
			~~AA~~ A	31.0			
			C	44.3			

LDC #: 54080A1a

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were field blanks identified in this SDG?

Y N N/A Were target compounds detected in the field blanks?

EB = Equipment Blank
TB = Trip Blank

Blank units: ug/L **Associated sample units:** ug/kg

Sampling date: 3/9/22

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: EB Associated Samples: All

Compound	Blank ID	Sample Identification								
	EB	TB		1						
U	2.16									
L	0.770									
Y	0.530									
ZZZ	1.97									
M	2.45	2.45		0.0045/0.0048U						
Z		0.570								
F		3.45								
A		0.270		0.024U						

Blank units: _____ **Associated sample units:** _____

Sampling date: _____

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 54080A1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

~~Y~~ N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	BC22411-LCS1P	Y	70.7 (72-132)	( )	( )	All	J/UJ/P ND
		CCC	79.4 (80-127)	( )	( )	↓	↓
		~~AA~~	78.4 (80-129)	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 54080A1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the target analytes identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of target analyte
C_x = Concentration of target analyte
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Target Analyte (Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/16/22	QQQ	1.680806	1.680806	1.776225	1.776225	8.400054	8.40
			AA	0.2529192	0.2529192	0.2736263	0.2736263	9.528935	9.53
			BB	0.6673345	0.6673345	0.7148345	0.7148345	11.47553	11.48
2									
3									
4									

Comments: _____

LDC #: 54080A1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the target analytes identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where:
ave. RRF = initial calibration average RRF
A_x = Area of target analyte
C_x = Concentration of target analyte
RRF = continuing calibration RRF
A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Target Analyte (Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv	3/17/22 0806	QQQ	1.716225	1.713567	1.714	3.5	3.5
			AA	0.2736263	0.358515	0.358	31.0	31.0
			BB	0.7148345	0.711097	0.7111	0.5	0.5
2								
3								
4								

LDC #: 54080A1a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260 B

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4	50.0	51.2	102	102	0
Toluene-d8	↓	49.4	98.9	98.9	↓
Bromofluorobenzene	↓	54.2	108	108	↓

Comments: _____

LDC #: 54080A1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate (if applicable) were recalculated for the target analytes identified below using the following calculation:

% Recovery = 100 * SSC/SA

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

Where: SSC = Spiked sample concentration
SA = Spike added
LCSC = Laboratory control sample concentration
LCSDC = Laboratory control sample duplicate concentration

LCS ID: BCZ2411 LCSIP

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
1,1-Dichloroethene	50.0	50.0	40.5	42.2	81.1	81.1	84.3	84.3	3.89	3.89
Trichloroethene			44.9	47.9	89.9	89.9	95.8	95.8	6.36	6.36
Benzene			43.6	46.2	87.2	87.2	92.4	92.4	5.81	5.81
Toluene			44.0	46.7	88.0	88.0	93.4	93.4	5.95	5.95
Chlorobenzene			46.2	48.4	92.5	92.5	96.7	96.7	4.46	4.46

Comments: _____

LDC #: 54080A/a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

The concentration of the sample was calculated for the target analytes identified below using the following calculation:

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the target analyte to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

%S = 79.42

5/6.57

Example:

Sample I.D. #1, QQQ

Conc. = $\frac{529826\ (50.0)\ (5)\ (1/1000)}{468350\ (1.771629)\ (6.57)\ (0.7942)}$

= 0.0305 mg/kg

#	Sample ID	Compound	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Qualification
	#1	QQQ	0.031	0.0305	-

Site:	FAY2101 – 434 Riverdale Ave, Yonkers
Laboratory:	York Analytical Laboratories, Inc., Stratford, CT
Report No.:	22C0658
Reviewer:	Felomina Tanguilig and Kevin Kha/Laboratory Data Consultants for P.W. Grosser Consulting
Date:	June 22, 2022

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SB-007 (0-2)	22C0658-03	VOC

Associated QC Samples(s):
Field/Trip Blanks: Trip Blank, Equipment Blank
Field Duplicate pair: None Associated

The above-listed soil sample was collected on March 10, 2022 and was analyzed for volatile organic compounds (VOCs) by SW-846 method 8260C. The data validation was performed in accordance with the USEPA Region 2 *Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry,* SOP HW-24, Revision 4 (October 2014) and the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review,* EPA 540-R-20-005 (November 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Moisture Content
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial Calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
03/16/22	ICV	Acrolein	30.2	SB-007 (0-2)	SS	UJ nondetects
		Dichlorodifluoromethane	45.8		SS	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The acrolein and dichlorodifluoromethane results were estimated due to second source verification exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Continuing Calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
03/17/22	CCV	Acetone	23.9	SB-007 (0-2)	XX	J detects/UJ nondetects
		Acrolein	66.1		XX	J detects/UJ nondetects
		Bromomethane	26.2		XX	J detects/UJ nondetects
		Dichlorodifluoromethane	108		XX	J detects/UJ nondetects
		Tetrachloroethene	31.0		XX	J detects/UJ nondetects
		Vinyl chloride	44.3		XX	J detects/UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The acetone, acrolein, bromomethane, dichlorodifluoromethane, tetrachloroethene, and vinyl chloride results were estimated due to continuing calibration exceedances. The bias cannot be determined. The results can be used for project objectives as estimated values (J) or nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Blanks

Contamination was not detected in the method blanks.

Contamination was detected in the trip blank sample Trip Blank for VOC analysis. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at <2x RL (for common contaminants) and <RL (for other contaminants) of the concentrations detected. The following table summarizes the contamination detected.

Field Blank ID	Compound	Level Detected	Action Level	Associated Samples
Trip Blank	2-Butanone	2.72 ug/L	2xRL	SB-007 (0-2)
	2-Hexanone	0.610 ug/L	RL	
	Acetone	3.44 ug/L	2xRL	

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.

Qualified sample results are listed in the table below.

Sample ID	Compound	Level Detected	Validation Action
SB-007 (0-2)	Acetone	0.016 ug/Kg	0.016U ug/Kg

These results can be used for project objectives as nondetects (U) which may have a minor impact on the data usability.

No positive results were found in the equipment blank sample Equipment Blank for VOC analysis.

Surrogate Recoveries

All criteria were met.

MS/MSD Results

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

LCS Results

The following table lists the LCS/LCSD percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	LCS/D %R (Limits)	Affected Sample	Validation Action
BC22411-LCS/LCSD	4-Methyl-2-pentanone	70.7 (72-132)	-	SB-002 (0-2)	J detects/UJ nondetects
	tert-Butylbenzene	79.4 (80-127)	-		J detects/UJ nondetects
	Tetrachloroethene	78.4 (80-129)	-		J detects/UJ nondetects

- Within control limits

The 4-methyl-2-pentanone, tert-butylbenzene, and tetrachloroethene results may be biased low due to low LCS/LCSD percent recoveries. The results can be used for project objectives as estimated values (J) or nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Internal Standards

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Moisture Content

All criteria were met.

Quantitation Limits and Data Assessment

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analysis. These results were qualified as estimated (J) by the laboratory.

Dilutions were not required for the VOC analysis.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 54080B1a **VALIDATION COMPLETENESS WORKSHEET** Date: 6/2/22
SDG #: 22C0658 Category B Page: 1 of 1
Laboratory: York Analytical Laboratories, Inc., Stratford, CT Reviewer: KM
2nd Reviewer: KMC

METHOD: GC/MS Volatiles (EPA SW-846 Method 8260C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A SW	%RSD ≤ 20, r² ICV ≤ 30
IV.	Continuing calibration	SW	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	SW	EB = Equipment Blank
VII.	Surrogate spikes	A	TB = Trip Blank
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	SW	LCS ID
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Target analyte quantitation	A	Results < RL > MDL = Jdet
XIII.	Target analyte identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-007 (0-2)	22C0658-03	Soil	03/10/22
2				
3				
4				
5				
6				
7				
8				
9				

Notes:

	BC22411						

LDC #: 54080 B1a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

Method: Volatiles (EPA SW 846 Method 8260 C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%, 15/30% and relative response factors (RRF) within method criteria?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	✓			
Were all percent differences (%D) ≤ 20% 30%?		✓		
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) within method criteria?		✓		
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation findings worksheet.		✓		
VI. Field blanks				
Were field blanks were identified in this SDG?	✓			
Were target analytes detected in the field blanks?	✓			
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target analytes detected in the field duplicates?			✓	
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XII. Target analyte quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the target analyte?	✓			
Were target analyte quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target analyte identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did analyte spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
Were manual integrations reviewed and found acceptable?	✓			
Did the laboratory provide before and after integration printouts?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO.1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 54080A6v

VALIDATION FINDINGS WORKSHEET
Initial Calibration Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was an initial calibration verification standard analyzed after each ICAL for each instrument?

Y N N/A Were all %D within the validation criteria of ≤20 %D?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤20.0% / 30%)	Associated Samples	Qualifications
	3/16/22	ICV	FFFF	30.2	All	J/UJ/A NO
	0735		JJ	45.8		↓

LDC #: 54080A1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤20 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤20.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	3/17/22 0806	CCV	F	23.9		All	J/UJ/A ND+Det
			FFFF	66.1			
			B	26.2			
			JJ	108			
			AA	31.0			
			C	44.3			

LDC #: 54080B1a

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C4)

(Y) N N/A Were field blanks identified in this SDG?

(Y) N N/A Were target compounds detected in the field blanks?

TB = Trip Blank

Blank units: ug/L **Associated sample units:** ug/L

Sampling date: 3/10/22

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: TB Associated Samples: All

Compound	Blank ID	Sample Identification								
	TB			1						
M	2.72									
Z	0.610									
F	3.44			0.0161 M						

Blank units: _____ **Associated sample units:** _____

Sampling date: _____

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:

Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 54080B1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	BC22411-LCS1D	Y	70.7 (72-132)	( )	( )	All	J/UJ/P ND+Det
		CCC	79.4 (80-127)	( )	( )	↓	↓
		AA	78.4 (80-129)	( )	( )	↓	↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 54080A1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the target analytes identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of target analyte
C_x = Concentration of target analyte
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Target Analyte (Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/16/22	000	1.680806	1.680806	1.776225	1.776225	8.400054	8.40
			AA	0.2529192	0.2529192	0.2736263	0.2736263	9.528935	9.53
			BB	0.6673345	0.667334	0.7148345	0.7148345	11.47553	11.48
2									
3									
4									

Comments: _____

LDC #: 54080A1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the target analytes identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where:
ave. RRF = initial calibration average RRF
A_x = Area of target analyte
C_x = Concentration of target analyte

RRF = continuing calibration RRF
A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Target Analyte (Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	3/17/22 0806	QQQ	1.776225	1.713567	1.714	3.5	3.5
			AA	0.2736263	0.353515	0.358	31.0	31.0
			BB	0.7148345	0.711097	0.7111	0.5	0.5
2								
3								
4								

LDC #: 54680A1a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4	50.0	51.8	104	104	0
Toluene-d8	↓	49.0	98.1	98.1	
Bromofluorobenzene	↓	53.5	107	107	↓

Comments: _____

LDC #: 54080A1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate (if applicable) were recalculated for the target analytes identified below using the following calculation:

% Recovery = 100 * SSC/SA

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

Where: SSC = Spiked sample concentration
SA = Spike added
LCSC = Laboratory control sample concentration
LCSDC = Laboratory control sample duplicate concentration

LCS ID: BC22411 water

Compound	Spike Added (ug/kg)		Spiked Sample Concentration ( )		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
1,1-Dichloroethene	50	50	40.5	42.7	81.1	81.1	84.3	84.3	3.89	3.89
Trichloroethene	↓	↓	44.9	47.9	89.9	89.9	95.8	95.8	6.36	6.36
Benzene	↓	↓	43.6	46.2	87.2	87.2	92.4	92.4	5.81	5.81
Toluene	↓	↓	44.0	46.7	88.0	88.0	93.4	93.4	5.95	5.95
Chlorobenzene	↓	↓	46.2	48.4	92.5	92.5	96.7	96.7	4.46	4.46

Comments: _____

LDC #: 54080B1a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

The concentration of the sample was calculated for the target analytes identified below using the following calculation:

$$\text{Concentration} = \frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$$

A_x = Area of the characteristic ion (EICP) for the target analyte to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1, AA

$$\text{Conc.} = \frac{(78771)(50)(1/1000)(5)}{(1966145)(0.273623)(311)(0.8400)}$$

$$= 0.014 \text{ mg/kg}$$

#	Sample ID	Compound	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Qualification
	#1	AA	0.014	0.014	-

Site:	FAY2101 – 434 Riverdale Ave, Yonkers
Laboratory:	York Analytical Laboratories, Inc., Stratford, CT
Report No.:	22C1239
Reviewer:	Felomina Tanguilig and Kevin Kha/Laboratory Data Consultants for P.W. Grosser Consulting
Date:	June 22, 2022

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SV-Deli	22C1239-03	VOC

Associated QC Samples(s):
Field/Trip Blanks: None Associated
Field Duplicate pair: None Associated

The above-listed air sample was collected on March 22, 2022 and were analyzed for volatile organic compounds (VOCs) by method TO-15. The data validation was performed in accordance with the USEPA Region 2 *Analysis of Volatile Organic Compounds in Air Contained Canisters*, SOP HW-31, Revision 6 (September 2016) and the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review,* EPA 540-R-20-005 (November 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Laboratory Duplicate Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial calibration:

All criteria were met.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
03/28/22	CCV	2-Hexanone	31.5	SV-Deli	XX	J detects/UJ nondetects
		Acetone	36.5		XX	J detects/UJ nondetects
		Chloromethane	30.4		XX	J detects/UJ nondetects
		Isopropanol	42.6		XX	J detects/UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 30; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.

The 2-hexanone, acetone, chloromethane, and isopropanol results were estimated due to continuing calibration exceedances. The bias cannot be determined. The results can be used for project objectives as estimated values (J) or nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Blanks

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Surrogate Recoveries

All criteria were met.

Laboratory Duplicate Results

Laboratory duplicates were not associated with this sample set. Validation action was not required on this basis.

LCS Results

The following table lists the LCS/LCSD percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	LCS/D %R (Limits)	Affected Sample	Validation Action
BC22981	2-Hexanone	68.4 (70-130)	-	SV-Deli	J detects
BC22981	Vinyl chloride	133 (70-130)	-	SV-Deli	None

- Within control limits

The 2-hexanone results may be biased low due to low LCS/LCSD percent recovery. The result can be used for project objectives as an estimated value (J) which may have a minor impact on the data usability.

Validation action was not required for vinyl chloride due to high LCS/LCSD percent recovery as positive results only are affected and this compound was not detected in the associated sample.

Internal Standards

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analysis.

Due to high target compound levels or difficult sample matrix, select samples were analyzed at dilutions. The following table lists the sample dilutions which were performed and the results reported. RLs were elevated accordingly.

Sample	VOC Analysis Reported
SV-Deli	1.6-fold dilution due to nature of sample matrix

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 54080C8 **VALIDATION COMPLETENESS WORKSHEET** Date: 6/2/22
SDG #: 22C1239 Category B Page: 1 of 1
Laboratory: York Analytical Laboratories, Inc., Stratford, CT Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA Method TO-15)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A / A	%RSD ≤ 30 ICV ≤ 30
IV.	Continuing calibration	SW	CCV ≤ 30
V.	Laboratory Blanks / canister check per batch	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	SW	
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Target analyte quantitation	A	No Results < RL > MDL
XIII.	Target analyte identification	A	MI
XIV.	System performance	A	
XV.	Leak Check Compounds	N	
XVI.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SV-Deli 1.6x	22C1239-03	Air	03/22/22
2				
3				
4				
5				
6				
7				
8				

Notes:

	BC2298 1						

LDC #: 54080 CX

VALIDATION FINDINGS CHECKLIST

Method: Volatiles (EPA Method TO-15)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was canister pressure criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 24 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30%?	✓			
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after every ICAL for each instrument?	✓			
Were all percent differences (%D) ≤ 30%?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 24 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 30%?	✓			
V. Laboratory Blanks/Canister Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 24 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
Was a canister blank analyzed for every canister?	✓			
Was there contamination in the canister blanks?		✓		
VI. Field Blanks				
Were field blanks identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	
VII. Surrogate spikes (Optional)				
Were all surrogate percent recoveries (%R) within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VIII. Laboratory Duplicate				
Was a laboratory duplicate analyzed for this SDG?			✓	
Were the relative percent differences (RPD) within the QC limits?			✓	

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch for this SDG?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
XI. Internal standards				
Were internal standard area counts within ± 40% from the associated calibration standard?	✓			
Were retention times within ± 20.0 seconds from the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Leak check compounds				
Was a leak check compound used to evaluate sample integrity and included in the laboratory analyte list?	✓			
Was the leak check compound detected in the samples? If yes, please see leak check validation findings worksheet.	✓			
XV. Overall assessment of data	✓			
Overall assessment of data was found to be acceptable.				

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO.1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 54080CS

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method ~~8260~~) 7015

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y N N/A Were all %D and RRFs within the validation criteria of ≤~~20 %~~D and ≥0.05 RRF ? 30 %

#	Date	Standard ID	Compound	Finding %D (Limit: ~~≤20.0%~~) 30	Finding RRF (Limit: >0.05)	Associated Samples	Qualifications
	3/28/22 2015	ccv	Z	31.5		All	J/UJ/P ND + Det
			F	36.5		↓	↓
			Δ	30.4			
			Isopropanol	42.6			

LDC #: 54080a8

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method ~~8260~~)7015

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	BC2298	Z	68.4 (70-130)	( )	( )	All	J/UJ/P Det
		C	133 (70-130)	( )	( )	↓	J/UJ/P ND
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		

LDC #: 54080C8

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
$\%RSD = 100 * (S/X)$

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (0.50 std)	Recalculated RRF (0.50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/27/21	V	2.241091	2.241091	2.240419	2.240419	10.80595	10.81
			CC	1.309094	1.309094	1.119945	1.119945	17.2762	17.28
			BD	0.7475505	0.7475505	0.7856572	0.785657	9.959481	9.96
2									
3									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 54080C8

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA TO-15)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv	3/28/2015	V	2.240419	2.625448	2.625	17.2	17.2
			cc	1.119945	1.020565	1.021	8.9	8.9
			BB	0.785672	0.737636	0.7377	6.1	6.1
2								
3								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 54080a8

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: GC/MS Volatiles (EPA Method TO-15)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:
% Recovery: SF/SS * 100 Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene	10.0	9.31	NR	93.1	0
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

LDC #: 54680C8

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: BC22981 - LCS

Compound	Spike Added (ppbv)		Spiked Sample Concentration (ppbv)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
N	10	NA	10.7	NA	107	107				
BB	10		9.56		95.6	95.6				
I			11.3		113	113				
H			10.0		100	100				
A			12.8		128	128				
Q&Q			11.0		110	110				

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 54080CX

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1 , √ :

Conc. = $\frac{12650\ (10)}{543047\ (2.240)}$ = 0.10 ppbv √

#	Sample ID	Compound	Reported Concentration (ug/m3)	Calculated Concentration (ug/m3)	Qualification
	#1	√	0.512	0.511	
		0.10 (78.11)/(24.45)	(1.6)		

Site:	FAY2101 – 434 Riverdale Ave, Yonkers
Laboratory:	York Analytical Laboratories, Inc., Stratford, CT
Report No.:	22C1250
Reviewer:	Felomina Tanguilig and Kevin Kha/Laboratory Data Consultants for P.W. Grosser Consulting
Date:	June 22, 2022

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
MW002	22C1250-04	VOC
MW002MS	22C1250-04MS	VOC
MW002MSD	22C1250-04MSD	VOC

Associated QC Samples(s):
Field/Trip Blanks: Trip Blank, Equipment Blank
Field Duplicate pair: None Associated

The above-listed water sample was collected on March 21, 2022 and was analyzed for volatile organic compounds (VOCs) by SW-846 method 8260C. The data validation was performed in accordance with the USEPA Region 2 *Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry,* SOP HW-24, Revision 4 (October 2014) and the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review,* EPA 540-R-20-005 (November 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to sample matrix or laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial Calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
01/21/22	ICV	Acrolein	47.4	MW002	SS	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The acrolein result was estimated due to second source verification exceedance. The bias cannot be determined. The result can be used for project objectives as a nondetect with an estimated quantitation limit (UJ) which may have a minor impact on the data usability.

Continuing Calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
03/24/22	CCV	1,2,3-Trichlorobenzene	20.7	MW002	XX	UJ nondetects
		1,2-Dibromo-3-chloropropane	30.8		XX	UJ nondetects
		Acrolein	22.5		XX	UJ nondetects
		Dichlorodifluoromethane	32.2		XX	UJ nondetects
		Naphthalene	22.6		XX	UJ nondetects
		Vinyl chloride	32.5		XX	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The 1,2,3-trichlorobenzene, 1,2-dibromo-3-chloropropane, acrolein, dichlorodifluoromethane, naphthalene, and vinyl chloride results were estimated due to continuing calibration exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Blanks

Contamination was detected in the associated VOC method blank samples. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at <2x RL (for common contaminants) and <RL (for other contaminants) of the concentrations detected. The following table summarizes the contamination detected.

Blank ID	Compound	Level Detected	Action Level	Associated Samples
BC22848-MB	Methylene chloride	1.13 ug/L	2xRL	MW002

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.
- If the sample concentration was > the RL and > the Action Level, qualification of the data was not required.

No samples were qualified since the associated sample results were nondetect.

Contamination was detected in the trip blank sample Trip Blank for VOC analysis. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at <2x RL (for common contaminants) and <RL (for other contaminants) of the concentrations detected. The following table summarizes the contamination detected.

Field Blank ID	Compound	Level Detected	Action Level	Associated Samples
Trip Blank	2-Butanone	2.76 ug/L	2xRL	MW002
	2-Hexanone	0.540 ug/L	RL	
	Acetone	3.47 ug/L	2xRL	

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.

No samples were qualified since the associated sample results were nondetect.

No positive results were found in the equipment blank sample Equipment Blank for VOC analysis.

Surrogate Recoveries

All criteria were met.

MS/MSD Results

MS/MSD analyses were performed on sample MW002 for VOC analysis. The following table lists the MS/MSD percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

MS ID	Compound	MS %R (Limits)	MS/D %R (Limits)	Affected Sample	Validation Action
MW002MS/MSD	Cyclohexane	68.7 (70-130)	-	MW002	UJ nondetects
	Methyl-tert-butyl ether	74.4 (75-128)	-		UJ nondetects
	Bromomethane	-	33.5 (30-158)		UJ nondetects

- Within control limits

The cyclohexane, methyl-tert-butyl ether, and bromomethane results may be biased low due to low MS/MSD percent recoveries. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

LCS Results

The following table lists the LCS/LCSD percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	LCS/D %R (Limits)	Affected Sample	Validation Action
BC22848-LCS/LCSD	Dibromochloromethane	79.9 (80-130)	-	MW002	UJ nondetects
	tert-Butylbenzene	74.6 (77-138)	-		UJ nondetects
	1,1,2-Trichloroethane	81.4 (82-123)	-		UJ nondetects
	1,2,3-Trichlorobenzene	74.4 (76-136)	-		UJ nondetects
	1,2-Dibromoethane	82.1 (83-124)	-		UJ nondetects
BC22848-LCS/LCSD	1,3-Dichlorobenzene	-	83.2 (86-122)	MW002	None
	1,4-Dichlorobenzene	-	84.8 (85-124)		None

- Within control limits

The dibromochloromethane, tert-butylbenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,1,2-trichloroethane, 1,2,3-trichlorobenzene, and 1,2-dibromoethane results may be biased low due to low LCS/LCSD percent recoveries. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Internal Standards

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Quantitation Limits and Data Assessment

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analysis. These results were qualified as estimated (J) by the laboratory.

Dilutions were not required for the VOC analysis.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 54080D1a **VALIDATION COMPLETENESS WORKSHEET** Date: 6/2/22
SDG #: 22C1250 Category B Page: 1 of 1
Laboratory: York Analytical Laboratories, Inc., Stratford, CT Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW-846 Method 8260C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A /A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A /SW	%RSD ≤30, r² ICV ≤30
IV.	Continuing calibration	SW	CCV ≤20
V.	Laboratory Blanks	SW	*
VI.	Field blanks	SW	EB = EB TB = TB
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	SW	
IX.	Laboratory control samples	SW	
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Target analyte quantitation	A	Results < RL > MDL = Jdt
XIII.	Target analyte identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	MW002	22C1250-04	Water	03/21/22
2	MW002MS	22C1250-04MS	Water	03/21/22
3	MW002MSD	22C1250-04MSD	Water	03/21/22
4				
5				
6				
7				
8				
9				

Notes:

	B022848						

LDC #: 54080D1a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

Method: Volatiles (EPA SW 846 Method 8260C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%, 15/30% and relative response factors (RRF) within method criteria?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	✓			
Were all percent differences (%D) ≤ 20% 30%?		✓		
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) within method criteria?		✓		
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation findings worksheet.	✓			
VI. Field blanks				
Were field blanks were identified in this SDG?	✓			
Were target analytes detected in the field blanks?	✓			
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target analytes detected in the field duplicates?			✓	
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XII. Target analyte quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the target analyte?	✓			
Were target analyte quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target analyte identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did analyte spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
Were manual integrations reviewed and found acceptable?	✓			
Did the laboratory provide before and after integration printouts?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO.1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #:_____

VALIDATION FINDINGS WORKSHEET
Initial Calibration Verification

Reviewer:___FT___

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was an initial calibration verification standard analyzed after each ICAL for each instrument?

Y N N/A Were all %D within the validation criteria of ≤~~20 %D?~~ 30 %

#	Date	Standard ID	Compound	Finding %D (Limit: <20.0% (30%))	Associated Samples	Qualifications
	1/21/22	ICV	FFFF	47.4	All	J/UJ/A ND

LDC #: 54080016

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤20 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: <20.0%)	Finding RRF (Limit: >0.05)	Associated Samples	Qualifications
	3/24/22 1057	CCV	NNN	20.7		All	J/UJ/A and MD
			MM	30.8		↓	↓
			FFFF	22.5			
			JJ	32.2			
			MMM	22.6			
			C	32.5			

LDC #: 54080D1a

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

Blank analysis date: 3/24/22
Conc. units: ug/L
Associated Samples: All (ND)

Compound	Blank ID	Sample Identification								
	BC72848-MB									
E	1.13									

Blank analysis date:
Conc. units:
Associated Samples:

Compound	Blank ID	Sample Identification								

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 54080D1a

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

Y N N/A Were field blanks identified in this SDG?

Y N N/A Were target compounds detected in the field blanks? TB= TB

Blank units: ug/L **Associated sample units:** ug/L

Sampling date: 3/21/22

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: TB Associated Samples: all (ND)

Compound	Blank ID	Sample Identification								
	TB									
M	2.76									
Z	0.54U									
F	3.47									

Blank units: _____ **Associated sample units:** _____

Sampling date: _____

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

.LDC #: 54080Q1a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT

METHOD : GC/MS VOA (EPA SW 846 Method 8260 Q

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	2+3	SSSS	68.7 (70-130)	( )	( )	#1	J/UJ/A NO
		LL	74.4 (75-125)	( )	( )	↓	↓
		B	( )	33.5 (30-158)	( )	↓	↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		

LDC #: 54080D1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	BC22848-LCS ID	T	79.9 (80-130)	( )	( )	All	J/UJ/P and ND
		CCC	74.6 (77-138)	( )	( )		↓
		FFF	( )	83.2 (86-122)	( )		J and UJ/P
		HHH	( )	84.8 (85-124)	( )		↓
		U	81.4 (82-123)	( )	( )		J/UJ/P
		NNN	74.4 (76-136)	( )	( )		↓
		TT	82.1 (83-124)	( )	( )	↓	↓
			( )	( )	( )		
			( )	( )	( )		
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LDC #: 54080D1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the target analytes identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of target analyte
C_x = Concentration of target analyte
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Target Analyte (Internal Standard)	Reported RRF (20 std)	Recalculated RRF (W std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/21/22	~~K~~ FT	~~1.577518~~	~~1.577518~~	~~5.38629~~	~~5.38629~~	4.952	4.954
			AA	0.228303	0.228303	0.232792	0.232792	6.418932	6.4189
			BP	0.7280623	0.7280623	0.5239088	0.523908	7.113233	7.1132
			K	1.577518	1.577518	1.554357	1.554357	5.38629	5.3862
2									
3									
4									

Comments: _____

LDC #: 54080D 1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the target analytes identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where:
ave. RRF = initial calibration average RRF
A_x = Area of target analyte
C_x = Concentration of target analyte
RRF = continuing calibration RRF
A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Target Analyte (Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	RCN	3/24/22 1057	K	1.554357	1.432147	1.432147	7.9	7.9
			AA	0.232792	0.223345	0.223345	4.1	4.1
			BD	0.523908	0.456030	0.456030	13.0	13.0
2								
3								
4								

LDC #: 540 80D/a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 Ⓒ)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane			F		
1,2-Dichloroethane-d4	10.0	10.6	~~106~~ 106	106	U
Toluene-d8	↓	10.1	101	101	U
Bromofluorobenzene	↓	10.1	101	101	↓

Comments: _____

LDC #: 54680D1a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method 8260 C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the target analytes identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA

Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD = | MSC - MSC | * 2/(MSC + MSDC)

MSC = Matrix spike concentration; MSDC = Matrix spike duplicate concentration

MS/MSD sample: 2 + 3

Compound	Spike Added (ug/L)		Sample Concentration (ug/L)	Spiked Sample Concentration (ug/L)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene	10.0	10.0	ND	9.13	9.56	91.3	91.3	95.6	95.6	4.6U	4.6U
Trichloroethene	↓	↓	↓	8.15	8.57	81.5	81.5	85.7	85.7	5.02	5.02
Benzene				8.11	8.49	81.1	81.1	84.9	84.9	4.58	4.58
Toluene				8.59	9.05	85.9	85.9	90.5	90.5	5.22	5.22
Chlorobenzene				8.44	8.93	84.4	84.4	89.3	89.3	5.64	5.64

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 54080D1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate (if applicable) were recalculated for the target analytes identified below using the following calculation:

% Recovery = 100 * SSC/SA

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

Where: SSC = Spiked sample concentration
SA = Spike added
LCSC = Laboratory control sample concentration
LCSDC = Laboratory control sample duplicate concentration

LCS ID: BC22848-LCS

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ng/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
1,1-Dichloroethene	10.0	10.0	9.72	9.18	97.2	97.2	91.8	91.8	5.71	5.71
Trichloroethene			8.72	8.38	87.2	87.2	83.8	83.8	3.98	3.98
Benzene			8.86	8.59	88.6	88.6	85.9	85.9	3.09	3.09
Toluene			9.24	8.97	92.4	92.4	89.7	89.7	2.97	2.97
Chlorobenzene	↓	↓	9.27	9.06	92.7	92.7	90.6	90.6	2.29	2.29

Comments: _____

LDC #: 54080Ka

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

The concentration of the sample was calculated for the target analytes identified below using the following calculation:

$$\text{Concentration} = \frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$$

A_x = Area of the characteristic ion (EICP) for the target analyte to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1, K

$$\text{Conc.} = \frac{(38691)(10.0)}{(504081)(1.554357)}$$

$$= 0.4938 \text{ ug/L}$$

#	Sample ID	Compound	Reported Concentration (ug/L)	Calculated Concentration (ug/L)	Qualification
	#1	K	0.490	0.4938	-

DT CONSULTING SERVICES, INC. & BELLUCCI ENGINEERING, PLLC

Rebound Testing Summary Letter Report

432 Riverdale Avenue
Yonkers, Westchester County, New York 10705

January 16, 2023

January 16, 2023

Mr. James Dibbini
James G. Dibbini & Associates, P.C.
570 Yonkers Ave.
Yonkers, New York 10704

RE: REBOUND TESTING SUMMARY LETTER REPORT
432 Riverdale Avenue
Yonkers, Westchester County, New York 10705

Dear Mr. Dibbini:

DT Consulting Services, Inc. (DTCS) and Bellucci Engineering, PLLC (BE) is pleased to present this *Rebound Testing Summary Letter Report* for the above referenced property. This report documents the sub-slab soil gas and indoor air sampling conducted at the Site approximately one month after the shutdown of the active on-Site Sub-Slab Depressurization System (SSDS). If you should have any questions or require additional information, please contact our office.

Respectfully submitted,

Daniel Bellucci, P.E.
Bellucci Engineering, PLLC

Deborah Thompson, Senior Geologist
DT Consulting Services, Inc.

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1.0 INTRODUCTION AND BACKGROUND

A Phase II Environmental Site Assessment (ESA) conducted by "Others" in May 2018 included collection of one sub-slab soil vapor sample, two indoor air samples and one ambient air sample. Pertinent findings identified in the Phase II ESA include the following:

- One (1) sub-slab soil vapor sample, two (2) indoor air samples, and one (1) ambient air sample was collected for laboratory analysis. Sub-slab and indoor air vapor analytical results identified tetrachloroethylene (PCE) and dichloroethylene (DCE) at concentrations exceeding their respective New York State Department of Health (NYSDOH) Decision Matrix guidelines (NYSDOH, Guidance for Evaluating Soil Vapor Intrusion in New York State, October 2006/Updates May 2017) requiring mitigation. In addition, trichloroethylene (TCE) and methylene chloride were also identified in the indoor air samples collected requiring mitigation regardless of sub-slab concentrations.

- Based on the results of the Phase II ESA, it appears that the former dry cleaner at 434 Riverdale Avenue has impacted the Subject Property. PCE and DCE were detected in sub-slab vapor and indoor air samples greatly exceeding their respective NYSDOH Matrix criteria that would require mitigation. In addition, TCE and methylene chloride were also identified in the indoor air samples collected requiring mitigation regardless of sub-slab concentrations. Finally, PCE and TCE were detected at concentrations exceeding their respective exposure thresholds in the indoor air sample collected from IA-1. A vapor mitigation specialist was recommended to be retained to determine the effectiveness and design of a sub-slab depressurization criteria (SSDS) at the Subject Property.

Sub-slab communication testing was conducted in May 2018 by "Others" to determine if SSDS technology would serve as an effective mitigation measure to minimize potential for vapor intrusion of chlorinated volatile organic compounds (cVOCs) to indoor air.

- Sub-slab air communication testing was utilized to design the most efficient system configuration. The test procedure included drilling full scale suction cavities and test holes in the basement slab to measure vacuum influence and design an appropriate SSDS configuration. Sub-slab soils were observed to be generally loose in most locations, with the exception of the location of an aboveground oil tank where dense soils were observed. A high suction fan with 2 extraction points was recommended in the location of the existing oil tank and a low suction high flow fan was recommended with 7-10 extraction points we recommended for the remaining portions of the building basement. The proposed installation included routing 3-6" PVC piping from the existing extraction

points to the roof of the building where the high suction HS5000 and low suction high flow RP-265 or RP-380 fans will be mounted.

An SSDS has been installed at the Subject Site to help mitigate potential vapor intrusion concerns associated with an adjacent dry cleaner. Testing and installation activities conducted between November 2018 and March 2019 included installation of three extraction wells, five vacuum monitoring points, two 55-gallon carbon vessels, a high suction fan, audible alarm, dedicated electrical outlet, a magnehelic vacuum gauge, and influent and effluent conveyance piping. Efforts to control the presence of water beneath the building slab were undertaken by the property owner and included installation of a sump pump in an existing sump pit. Vacuum testing conducted following system startup on March 25, 2019 indicates the system was creating sub-slab vacuum in each of the vacuum monitoring points. Consistent sub-slab vacuum has not been demonstrated based on the presence of shallow groundwater beneath the building slab. Pre and post treatment sampling performed between 2019 and 2021 showed significant VOC reduction with the operation of the SSDS on the 432 Riverdale facility. In an effort to determine if continued operation of the SSDS was necessary, system shutdown followed by rebound testing of sub-slab soil gas and indoor air was conducted by DTCS/BE. Details of the monitoring event are provided below.

2.0 SUBJECT SITE AND AREA DESCRIPTION

The Subject Site is located at 432 Riverdale Avenue in Yonkers, Westchester County, New York. The existing building is occupied by residential apartments in the basement and second, third and fourth floors of the building. The first floor is occupied by commercial tenants including a barber. The Subject Site is located in a commercial and residential area of Yonkers at an elevation of approximately 75 feet above mean seal level (MSL). The local topography slopes to the west and groundwater flow in the area is anticipated to flow to the west towards the Hudson River.

The Subject Site is abutted to the north by Yonkers Wholesale Beer Distribution located at 424 Riverdale Avenue. The Subject Site is abutted to the south by a vacant commercial building (former Riverdale Dry Cleaner) located at 434 Riverdale Avenue. The Subject Site is abutted to the east by a residential apartment building located to the east at 97 Saint Andrew's Place. The intersection of Riverdale Avenue and Belvedere Drive abuts the Subject Site to the west.

2.1 Release Description

There are no reported on-Site sources of cVOCs on-Site. The source of cVOCs detected in sub-slab soil vapor and indoor air on the Subject Property is likely originating from the adjacent

former dry cleaner located to the south and in the presumed cross gradient direction. The former dry cleaner reportedly operated at the adjacent Site from at least 2000 to 2014.

The New York State Department of Environmental Conservation's (NYSDEC) Division of Environmental Remediation (DER), via an Administrative Consent Order and Administrative Settlement (ACO) executed on July 29, 2020 and filed as Index #CO3-20191223-299, has compelled the owner of the former dry cleaner Site (434 Riverdale Avenue) to perform a Site characterization investigation. The Site has been classified with a "P" Listing #360197 (i.e., potential hazardous waste Site). A Site Characterization Work Plan was submitted to NYSDEC by Eastern Environmental Solutions (Eastern) in August 2021 and subsequently approved on August 10, 2021. An addendum to the work plan was prepared by P.W. Grosser Consulting, Inc. (PWGC) in January 2022 to limit the Site characterization to the contaminants of concern, to delineate potential areas of concern within the property boundary, and evaluate whether off-Site, up-gradient properties may be contributing to contaminants observed on-Site. The following pertinent information was obtained from the PWGC Site Characterization Report, dated August 2022 for the 434 Riverdale Ave parcel:

- The static water table elevation at the Site ranges from six inches below the basement slab at MW003 and MW004 (estimated 8.5-9.5 ft. below sidewalk grade), to approximately 5 feet below the basement slab at MW005 (estimated 13-13.5 ft. below sidewalk grade). The differential in the depth to groundwater is believed to be primarily as a result of the varied Site elevation, which ranged approximately four feet across the Site.

- A total of six soil borings were installed at the Site. Borings were installed to depths of up to 9 feet below grade, with a soil sample collected from the 0-2 foot interval in each boring. The soil lithology consisted of historic fill overlaying sandy silt. Evidence of cVOC contamination in the form of PID response, visible staining, or a solvent odor was not identified.

    - There were no exceedances of Unrestricted Use Soil Cleanup Objectives (SCOs) in the soil samples; however, PCE, TCE, and/or Dichloroethylene (DCE) were detected at low concentrations in three of the samples beneath the building.

- A total of six monitoring wells were installed and sampled as part of the investigation. Two of the monitoring wells were positioned off-Site to evaluate the potential for contamination migrating beneath the Site.

    - One monitoring well contained exceedances of Ambient Water Quality Standards (AWQSs) and is located in the vicinity of the former drycleaner unit. PCE was

detected at 32.1 micrograms per liter (µg/L), TCE was detected at 7.38 µg/L, and DCE was detected at 48.6 µg/L. The presence of TCE and DCE indicates that the PCE is naturally degrading. PCE, TCE, and/or DCE were detected in five of the six wells; however, they included estimated concentrations that did not exceed AWQSs. The off-Site wells did not indicate the presence of an off-Site source in these areas.

- Five soil vapor samples were collected throughout the footprint of the Site. VOC concentrations detected in soil vapor and indoor air were not observed at concentrations that included a recommendation of additional monitoring or remediation via the NYSDOH soil vapor matrices.

- The soil vapor sample SV-Supermarket was the sample located in the immediate area of the former Riverdale Dry-Cleaners and the monitoring well that contained exceedances of PCE, TCE, and DCE. The PCE concentration in this soil vapor sample was 3.58 micrograms per cubic meter (µg/m^3). The highest sub-slab soil vapor sample was collected beneath the laundromat which contained a PCE concentration of 58.8 µg/m^3 and is the furthest sample from the active SSDS located at 432 Riverdale Ave.

Based upon the observations and data generated during the Site Characterization, PWGC concluded that the contaminants of concern have been sufficiently investigated and have determined that no further action is necessary for the 434 Riverdale Avenue Site. PWGC concluded that limited contamination was identified and that the operation of the adjacent, active SSDS likely removed the bulk of the sub-slab vapor contamination while contamination in the one monitoring well closest to the source area is naturally attenuating. PWGC recommended converting the active SSDS at the Site (432 Riverdale Avenue) to a passive system following performance of a soil vapor intrusion study, to be approved by NYSDEC, to confirm that a rebound effect has not occurred.

3.0 SSDS POST-SHUTDOWN TESTING

On November 16, 2022, a Site inspection to document operational data for the SSDS was conducted by DTCS/BE. System readings including flow, temperature and vacuum were collected pre and post carbon treatment. Sub-slab vacuum readings were collected from existing vacuum monitoring points. Two effluent samples, including one pre-treatment and one post-treatment, were collected for laboratory analysis of VOCs via EPA Method TO-15.

3.1 SSDS Operational Data

Table 1 includes the system flow, vacuum and temperature readings collected from the Site since 2019. Flow readings ranged from 31.3 (pre-treatment) to 35.3 (post-treatment) cubic feet per minute (cfm). System vacuum ranged from 9 (pre-treatment) to 13 (post-treatment) inches of water (in-H_2O). Temperature readings were 76.7 (pre and post-treatment) degrees Fahrenheit (°F).

Table 2 includes sub-slab vacuum readings collected from the Site since 2019. Sub-slab vacuum was present in two of the four existing vacuum monitoring points. Sub slab vacuum was not present at VP-1 or VP-3. VP-5 is no longer a viable monitoring point and was removed during a prior inspection.

Table 3 includes historic pre and post treatment VOC sample results. Pre-treatment VOC concentrations have decreased significantly since system startup in March 2019. Of note, influent concentrations of tetrachloroethylene (PCE) and trichloroethylene (TCE), the primary contaminants of concern, have decreased from 90,000 (PCE) and 2,500 (TCE) micrograms per cubic meter ($\mu g/m^3$), to 92 (PCE) $\mu g/m^3$ and 8.7 (TCE) $\mu g/m^3$ during the November 2022 sampling event. Post-treatment sample results indicate 100% removal of PCE and TCE from the effluent air.

Table 4 includes estimated mass removal rates for the primary chlorinated VOCs of concern. As of December 7, 2022, the system had removed an estimated 3.44 pounds of chlorinated VOC mass from beneath the building.

Graphical representation of PCE, TCE and cis-1,2-DCE influent and effluent concentrations are included in **Table 5**. The complete laboratory analytical report and chain of custody documentation are included in **Appendix A**.

3.2 System Shutdown

Following collection of the system data, the SSDS was shutdown at 9:00 am on November 16, 2022. The powered fan was shut off, the audible alarm was disconnected and the gate valves for each extraction well were closed.

4.0 REBOUND TESTING

Rebound testing was conducted on December 20 and 21, 2022. The rebound testing included collection of sub-slab soil vapor, indoor air and outdoor ambient air samples from select locations.

4.1 Sample Collection

Sub-slab soil gas samples were collected from existing vacuum monitoring points VP-2 and VP-4. VP-1 and VP-3 were not sampled based on the absence of vacuum in these locations during the November 2022 testing event, likely based on the presence of shallow groundwater beneath the slab in these locations. Co-located indoor air samples were collected in proximity to each sub-slab soil vapor sample location, from a height set within the breathing zone (3-5 feet above the ground). One outdoor air sample, designated AO, was collected from an exterior upwind location on the north side of the building. The sample locations are depicted in **Figure 2**.

The samples were collected for analysis in batch clean SUMMA canisters equipped with a laboratory calibrated flow control device to facilitate the collection of the samples for a 24-hour sample duration. Following sampling, the pressure of the SUMMA canister was recorded and each sub-slab soil gas point was capped. The sub-slab soil gas and indoor air samples were analyzed for VOCs (USEPA Method TO-15) by a NYSDOH-approved laboratory.

4.2 Sub-slab Soil Gas and Indoor Air Sampling Results

Elevated concentrations of cis-1,2-DCE (6,800 µg/m^3), TCE (850 µg/m^3) and PCE (8,100 µg/m^3) were detected in the sub-slab soil gas sample VP-2. These cVOCs were also detected in the co-located indoor air sample at 6.7 µg/m^3 (cis-1,2-DCE), 1.1 µg/m^3 (TCE) and 6.6 µg/m^3 (PCE). Cis-1,2-DCE, TCE and PCE were also detected in VP-4, at significantly lower concentrations.

A comparison of the sub-slab soil gas and indoor air data (April 2022) with the NYSDOH May 2017 Decision Matrices is provided in **Table 6**. The DOH Matrices include select cVOC compounds, including 1,1-DCE, cis-1,2-DCE, carbon tetrachloride, TCE (Matrix A), PCE, 1,1,1-TCA, methylene chloride (Matrix B) and vinyl chloride (Matrix C). A comparison of the data indicates mitigation of the southern portion of the building is warranted based on elevated cis-1,2-DCE, TCE and PCE in sub-slab soil gas and indoor air in the location of VP-2. Mitigation in the location of VP-4 is not warranted based on a comparison of the sub-slab soil gas and co-located indoor air sample with the DOH matrices.

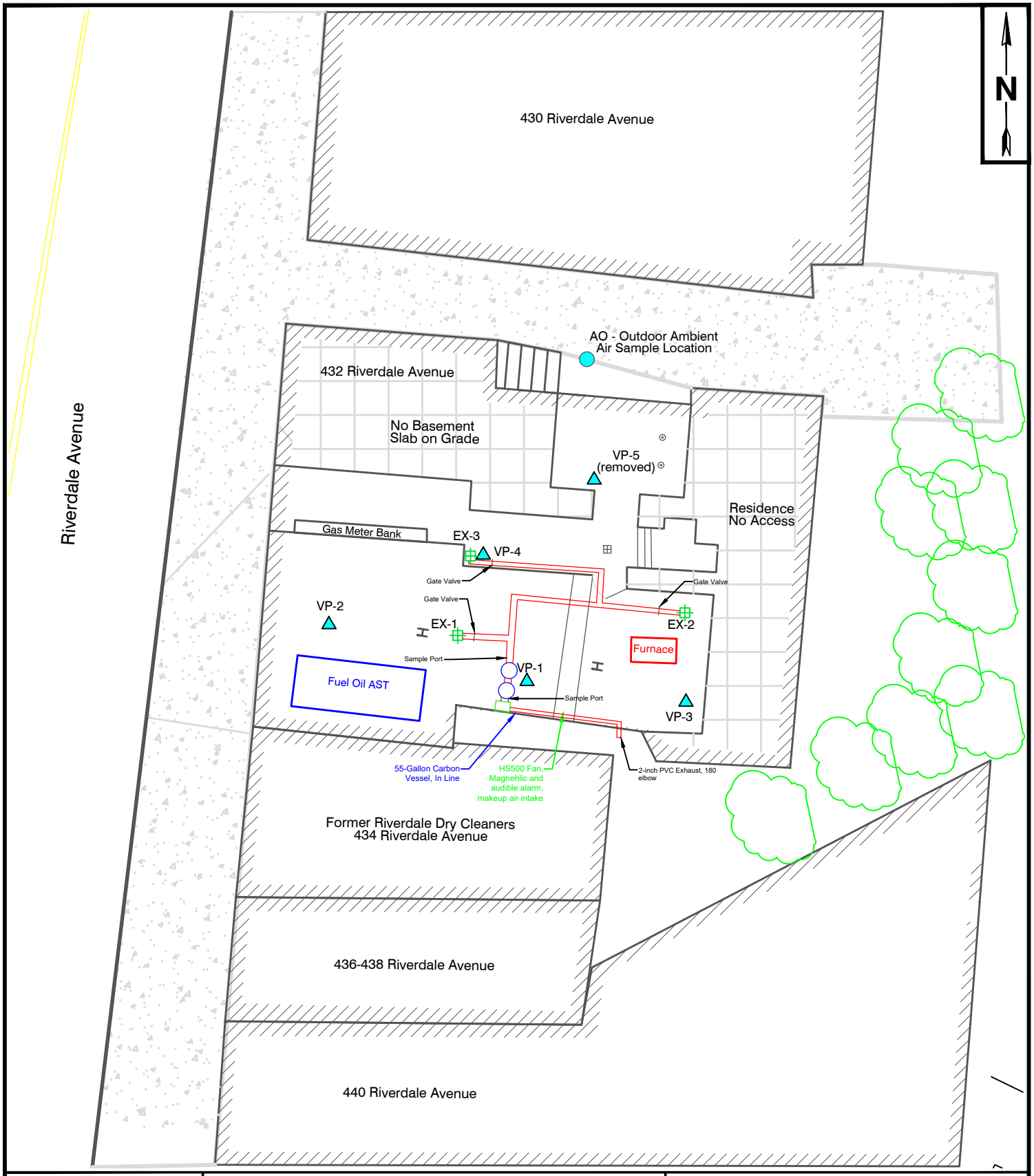
5.0 RECCOMENDATIONS

An SSDS has been installed at the Subject Site to help mitigate vapor intrusion concerns likely associated with the former dry cleaner which operated adjacent to the 432 Riverdale Avenue facility from at least 2000 to 2014. Rebound testing indicates continued operation of the SSDS is warranted to mitigate the vapor intrusion condition identified at the Site. The system should be re-started, and operation/maintenance visits (including indoor air sampling) should continue on quarterly basis. The elevated detections of cVOCs reported during the most recent rebound testing would indicate that there is an off-Site source still present which is impacting indoor air quality on-Site.

Figures

Core Down Drilling LLC

Figure 1 - Site Location Plan
432 Riverdale Avenue
Yonkers, New York



EXPLANATION BLOCK

- Sub Slab Depressurization Well
- Vapor Monitoring Point
- Vegetation
- Floor Drain
- Structural Column
- Structural I Beam
- SSDS PVC Piping

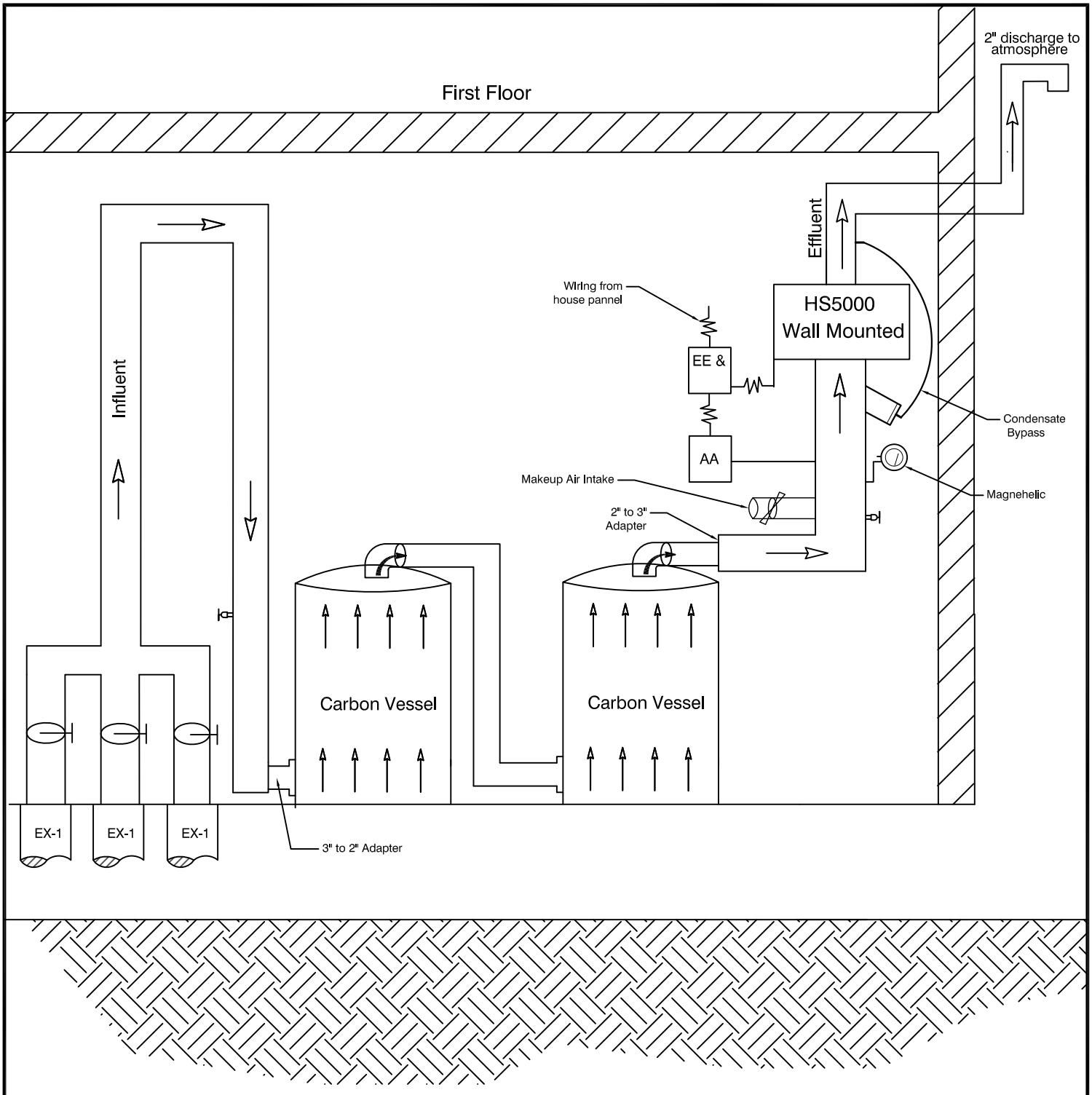
0 6 12

APPROXIMATE SCALE (FEET)

SSD WELL AND VAPOR MONITORING POINT LOCATION MAP

432 Riverdale Avenue
Yonkers, NY

PE/PG		Figure
DAB		2
Project Manager	Drafter	Date
DJT	DAB	1/16/2023



NOT TO SCALE

EXPLANATION BLOCK

- SAMPLE PORT
- HS-5000 CENTRIFUGAL FAN
- GATE VALVE
- BALL VALVE

EE - DEDICATED OUTLET
AA - AUDIBLE ALARM

PROCESS FLOW DIAGRAM

432 Riverdale Avenue
Yonkers, NY

PE/PG	Project Number	Figure
DB		3
Project Manager	Drafter	Date
DB	DB	04/06/2019

Tables

TABLE 1

System Data

432 Riverdale Avenue

Yonkers, NY

Date	Time	Flow Rate (CFM)		Vacuum (in-H_2O)		Temp (°F)	
		Pre-Treatment	Post Treatment	Pre-Treatment	Post Treatment	Pre-Treatment	Post Treatment
3/25/2019	10:35	40.0	14.2	38.0	38.0	87.3	86.6
7/23/2019	11:40	14.5	32.8	30.5	32.0	86.7	86.6
10/30/2019	11:55	30.5	35.0	14.5	16.0	80.1	82.2
1/13/2020	10:30	15.7	24.1	15.0	16.5	76.3	76.0
5/6/2020	10:30	33.5	37.4	6.5	8.5	73.3	73.0
9/29/2020	8:00	37.7	34.3	5.0	8.0	82.9	83.5
2/3/2021	12:30	24.5	26.5	8.0	9.0	67.6	69.2
4/28/2021	7:30	22.7	22.9	11.5	11.5	71.1	76.0
10/12/2021	8:15	23.8	23.6	8.0	9.0	78.9	81.1
11/16/2022	8:15	31.3	35.3	9.0	13.0	76.7	76.7

Notes:

in-H_2O = Inches of water

CFM = cubic feet per minute

TABLE 2
Vacuum Monitoring Point Data
432 Riverdale Avenue
Yonkers, NY

Date	Time	Vacuum Monitoring Points (in-H_2O)				
		VP-1	**VP-2**	**VP-3**	**VP-4**	**VP-5**
3/25/2019	13:30	-3.000	-1.500	-3.000	-0.300	-0.700
7/23/2019	11:40	0.050	-0.391	2.560	-0.007	-0.001
10/30/2019	10:40	-1.521 to 1.500	-1.100 to -1.250	3.000	-0.044 to -0.060	0.006 to 0.011
1/13/2020	10:30	3.000	-1.375	3.000	-0.039 to -0.055	0.000
5/6/2020	12:30	3.000	-0.940	3.000	-0.025	0.196
9/29/2020	8:00	3.000	-0.599	0.000 to -2.620	-0.010 to -0.026	N/A
2/3/2021	12:30	-1.142	3.000	3.000	-0.026	N/A
4/28/2021	7:30	3.000	-1.151	3.000	-0.029	N/A
10/12/2021	8:15	3.000	-0.778	3.000	-0.042	N/A
11/16/2022	8:15	3.000	-0.391	3.000	-0.013 to -0.019	N/A

Notes:
in-H_2O = Inches of water
Vacuum monitoring point measurements taken with Infiltec DMI Micro Manometer with a detection limit of 0.001
Negative (-) value indicates sub-slab vacuum
Positive (+) value indicates no sub-slab vacuum
N/A - Monitoing point no longer flush with slab - Point remvoed and sealed 2/3/21

TABLE 3

INFLUENT AND EFFLUENT SAMPLE DATA

432 Riverdale Avenue

Yonkers, NY

Parameter	EPA Target Indoor Air Concentrations Residential	EPA Target Indoor Air Concentrations Industrial/ Commercial	SAMPLING LOCATION												SAMPLING LOCATION							
			Pre-Treatment	Post - Treatment	Pre-Treatment	Post - Treatment	Pre-Treatment	Post - Treatment	Pre-Treatment	Post - Treatment	Pre-Treatment	Post - Treatment	Pre-Treatment	Post - Treatment	Pre-Treatment	Post - Treatment	Pre-Treatment	Post - Treatment	Pre-Treatment	Post - Treatment	Pre-Treatment	Post - Treatment
Date Sampled			**3/25/2019**		**7/23/2019**		**10/30/2019**		**1/13/2020**		**5/6/2020**		**9/29/2020**		**2/3/2021**		**4/28/2021**		**10/12/2021**		**11/16/2022**	
VOCs (TO-15) - ug/m^3																						
1,2,4-Trimethylbenzene	7.3	31	ND	ND	2.6	**8**	3.6	4.3	2.1	**15**	**8.6**	4.3	2.4	1.3	ND	5.6	ND	**9.6**	ND	**10**	ND	ND
1,3,5-Trimethylbenzene	~	~	ND	ND	0.97	2.3	ND	ND	ND	4.1	2.3	1.1	ND	ND	ND	1.5	ND	2.5	ND	2.7	ND	ND
1,2-Dichlorobenzene	210	880	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	~	~	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.26	1.1	ND	ND	ND	**16**	**7.1**	**6.5**	**1.9**	**1.8**	ND	ND	ND	ND	ND	ND	ND	**3.5**	**3.0**	**4.8**	ND	ND
4-Methyl-2-pentanone	3100	13000	ND	ND	7.6	1.1	ND	ND	*ND*	*ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	32000	140000	***27000****	*1300**	*61*	*12*	*2.8*	*2.4*	*6.8*	*12*	*17.0*	*5.0*	*25.0*	*2.5*	*26*	*5.1*	*2.9*	*9.9*	*10.0*	*10.0*	*5.5*	*4.5*
Benzene	0.36	1.6	**6.5**	**6.1**	**0.52**	ND	ND	ND	ND	ND	**0.6**	ND	**0.84**	ND	ND	ND	ND	**0.68**	ND	**0.66**	ND	ND
Carbon disulfide	730	3100	ND	ND	ND	0.81	0.59	ND	0.76	ND	ND	ND	2.70	1.0	0.72	ND	0.82	ND	1.00	ND	ND	ND
Carbon Tetrachloride	0.47	2	ND	ND	**0.72**	**0.61**	**0.48**	ND	0.55	*ND*	**0.75**	ND	**0.52**	**0.69**	**0.52**	**0.49**	**0.49**	0.41	0.43	0.55	0.31	0.43
Cyclohexane	6300	26000	ND	ND	ND	0.79	ND	1.4	ND	ND	ND	ND	ND	0.95	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	5200	22000	***54000***	*1600*	*6.2*	*3.2*	*1.4*	*ND*	*2.2*	*1.2*	*1.3*	*0.57*	*2.7*	*0.92*	*1.2*	*0.65*	*0.82*	*1.10*	*2.1*	*0.95*	*2.6*	*0.70*
Ethyl acetate	73	310	ND	ND	44	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Ethyl Benzene	~	~	ND	ND	3.4	4.4	1.2	1.8	0.91	8.1	4.1	2.1	0.72	ND	ND	2.4	ND	3.9	ND	5.0	ND	ND
Isopropanol	210	880	*73*	*65*	*72*	*31*	*6.9*	*15*	*3.3*	*75*	*62.0*	*15*	*9.2*	*14*	*5.2*	*11*	*14*	*20*	*1.4*	*11*	*1.6*	*14*
Methyl Methacrylate			ND	ND	ND	ND	ND	ND	3.0	ND	14	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	100	1200	ND	ND	16	16	3.6	5.6	15.0	4.4	5.5	3.5	ND	ND	9.6	2.2	ND	2.3	ND	1.2	ND	2.2
n-Heptane	~	~	ND	ND	15	2.2	ND	ND	0.78	0.92	0.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	730	3100	ND	ND	0.87	0.8	ND	ND	9.1	ND	0.66	ND	ND	ND	0.93	ND	0.71	0.8	ND	ND	ND	ND
Styrene	1000	4400	*ND*	*29*	*2.5*	*1.8*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	ND	ND	ND	ND
Tetrahydrofuran	2100	8800	***69,000***	***3700***	*ND*	*5.5*	*ND*	*70*	*2.1*	*8.7*	*ND*	*3.5*	*ND*	*2.4*	*ND*	*ND*	ND	ND	1.0	ND	ND	ND
Toluene	5200	22000	18	ND	43	4.3	1	ND	2.0	3.2	4.7	1.9	1.2	ND	1.2	1.4	0.82	2.3	1.2	8.9	ND	1.1
o xylenes	100	440	ND	5.9	3.7	5.2	1.3	1.8	0.91	8.3	4.7	2.3	0.9	ND	ND	3.0	ND	5.2	ND	4.7	ND	ND
m,p xylenes	100	440	ND	12	13	14	3	5	2.3	20	12	5.4	1.8	ND	ND	7.2	ND	11.0	ND	11	ND	ND
p-Ethyltoluene	~	~	ND	ND	ND	7.4	2.9	3.2	1.9	17	8.1	4.3	2.0	0.9	2.0	5.9	ND	10.0	ND	10	ND	ND
Chloroform	0.12	0.53	250	ND	ND	**0.8**	**2.7**	**5.2**	**2.0**	**2.0**	ND	**1.2**	**5.7**	**11.0**	**0.8**	**1.9**	**6.0**	**4.0**	**1.6**	**3.8**	ND	**1.7**
Chloromethane	94	390	16	ND	2.4	1.6	ND	ND	4.7	0.69	1.6	0.87	1.7	1.7	1.7	0.97	0.35	0.94	0.77	1.3	0.47	0.63
Dichlorodifluoromethane	100	440	ND	ND	2.6	2.4	2.9	2.8	1.9	1.9	2.4	2.1	2.6	2.1	2.1	2.1	2.4	2.3	2.3	2.3	2.5	ND
trans- 1,2-dichloroethylene	~	~	120	ND	ND	ND	ND	ND	1.1	ND	ND	ND	1.6	1.0	1.3	ND	1.4	ND	1.7	ND	ND	ND
1,1-Dichloroethylene	210	880	27	ND	ND	0.45	ND	ND	0.34	ND	ND	ND	0.20	ND	0.20	ND	0.31	ND	0.27	ND	ND	ND
cis-1,2-Dichloroethylene	~	~	10,000	2.7	ND	3.2	69	94	120	36	2.4	45	86.0	92	160	29	180	48	180	72	59	56
Tetrachloroethylene	11	47	**90,000**	ND	**25**	**78**	**170**	2.9	**360**	4.7	ND	ND	**150**	ND	**280**	1.1	**240**	3.7	**260**	2.4	**92**	ND
Trichloroethylene	0.48	3	**2,500**	**6.5**	0.35	**1.8**	**12**	ND	**22**	0.36	ND	ND	**18**	ND	**22**	ND	**18**	0.44	**21**	ND	**8.7**	ND
Trichlorofluoromethane (Freon 11)	~	~	ND	ND	2.10	1.9	1.7	1.8	1.5	ND	1.9	1.5	1.7	1.9	1.5	1.5	1.5	1.4	1.4	1.4	0.92	0.95
Vinyl Chloride	0.17	3	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

NOTES:

1. EPA OSWER Final Guidance For Assessing and Mitigating the Vapor Intrusion Pathway From Subsurface Sources to Indoor Air, June 2015

2. µg/m^3 - micrograms per cubic meter

3. VOCs - Volatile Organic Compounds by EPA TO-15

4. Italics values are associated with PVC pipe glue and primer*

5. **BOLD** vlaues exceed one or more EPA indoor air standard

TABLE 4-
MASS REMOVAL CALCULATIONS -LABORATORY ANALYTICAL DATA
432 Riverdale Avenue
Yonkers, NY

Sample Location	Sample Starting Period	System Startup Date and Time	Time Elapsed (minutes)	Average Flow Rate (CFM)	Temp. (°F)	Temp. (R)	In-Hg	Atm. (Relative)	Atm. (Corrected)	V=nRT/p	lb mole	Volume of Removed Soil Vapor (CF)	PCE (ppmv)	TCE (ppmv)	cis-1,2-DCE (ppmv)	PCE Mass Removed (lbs)	TCE Mass Removed (lbs)	cis-1,2-DCE Mass Removed (lbs)	Total Mass Removed (lbs)
Influent	03/25/201 13:00:00 PM	03/25/2019 13:00:00 PM	19380	24.0	76.5	536.5	2.792	0.093	0.907	432.1	0.00231	465120	13.300	0.4650	2.5000	2.37E+00	6.58E-02	2.61E-01	2.70E+00
Influent	03/25/2019 13:00:00 PM	07/23/2019 13:00:00 PM	172800	14.5	86.7	546.7	2.241	0.075	0.925	431.5	0.00232	2505600	0.0036	0.000065	0	3.47E-03	4.96E-05	0.00E+00	3.52E-03
Influent	07/23/2019 13:00:00 PM	10/30/2019 13:00:00 PM	142560	30.5	80.1	540.1	1.065	0.036	0.964	408.9	0.00245	4348080	0.025	0.0022	0.017	4.41E-02	3.07E-03	1.75E-02	6.47E-02
Influent	10/30/2019 13:00:00 PM	01/13/2020 13:00:00 PM	106560	15.7	76.3	536.3	1.102	0.037	0.963	406.6	0.00246	1672992	0.053	0.004	0.03	3.62E-02	2.16E-03	1.20E-02	5.03E-02
Influent	01/13/2020 13:00:00 PM	05/06/2020 13:00:00 PM	163980	33.495	73.3	533.3	0.477	0.016	0.984	395.7	0.00253	5492510	0.000	0.000	0.0006	0.00E+00	0.00E+00	8.07E-04	8.07E-04
Influent	05/06/2020 13:00:00 PM	09/29/2020 13:00:00 PM	210360	37.695	82.9	542.9	0.367	0.012	0.988	401.3	0.00249	7929520	0.022	0.003	0.0217	7.24E-02	8.83E-03	4.16E-02	1.23E-01
Influent	09/29/2020 13:00:00 PM	02/03/2021 13:00:00 PM	182880	24.528	67.6	527.6	0.587	0.020	0.980	393.0	0.00254	4485681	0.041	0.004	0.004	7.76E-02	6.00E-03	4.43E-03	8.80E-02
Influent	02/03/2021 13:00:00 PM	04/28/2021 13:00:00 PM	120960	22.701	71.1	531.1	0.845	0.028	0.972	399.1	0.00251	2745913	0.035	0.002	0.045	3.99E-02	1.81E-03	3.00E-02	7.18E-02
Influent	04/28/2021 13:00:00 PM	10/12/2021 13:00:00 PM	240480	23.835	78.9	538.9	0.588	0.020	0.980	401.4	0.00249	5731841	0.038	0.004	0.045	9.00E-02	7.50E-03	6.23E-02	1.60E-01
Influent	10/12/2021 13:00:00 PM	12/7/2022 13:00:00 PM	607680	31.332	76.7	536.7	0.661	0.022	0.978	400.8	0.00250	19039830	0.013	0.002	0.0148	1.02E-01	9.99E-03	6.82E-02	1.81E-01
			1,967,640									54,417,086				**2.84E+00**	**1.05E-01**	**4.98E-01**	**3.44E+00**
Total																			
												Mass Removal Rate (lbs/day)							**2.52E-03**

Where: V = volume of the gas; P = pressure of the gas; n = 1 lb-mole; R = Ideal Gas Constant (0.7302); T = Absolute

Notes: *Temperature (°F+460)*

V=nRT/p

Mass Removed = [(1 / Volume of gas) x (time elapsed) x (Flow) x (Concentration CVOC) x (molecular weight CVOC)] / $1x10^{6}$

Molecular weights (g/mole): PCE 165.83, TCE 131.39, cis-1,2-DCE 96.94

CFM = cubic foot per minute

ppmv = parts per million by volume

lbs = pounds

TABLE 5

GRAPHICAL REPRESENTAION OF PCE, TCE AND CIS-1,2-DCE INFLUENT AND EFFLUENT CONCENTRATIONS

432 Riverdale Avenue

Yonkers, NY

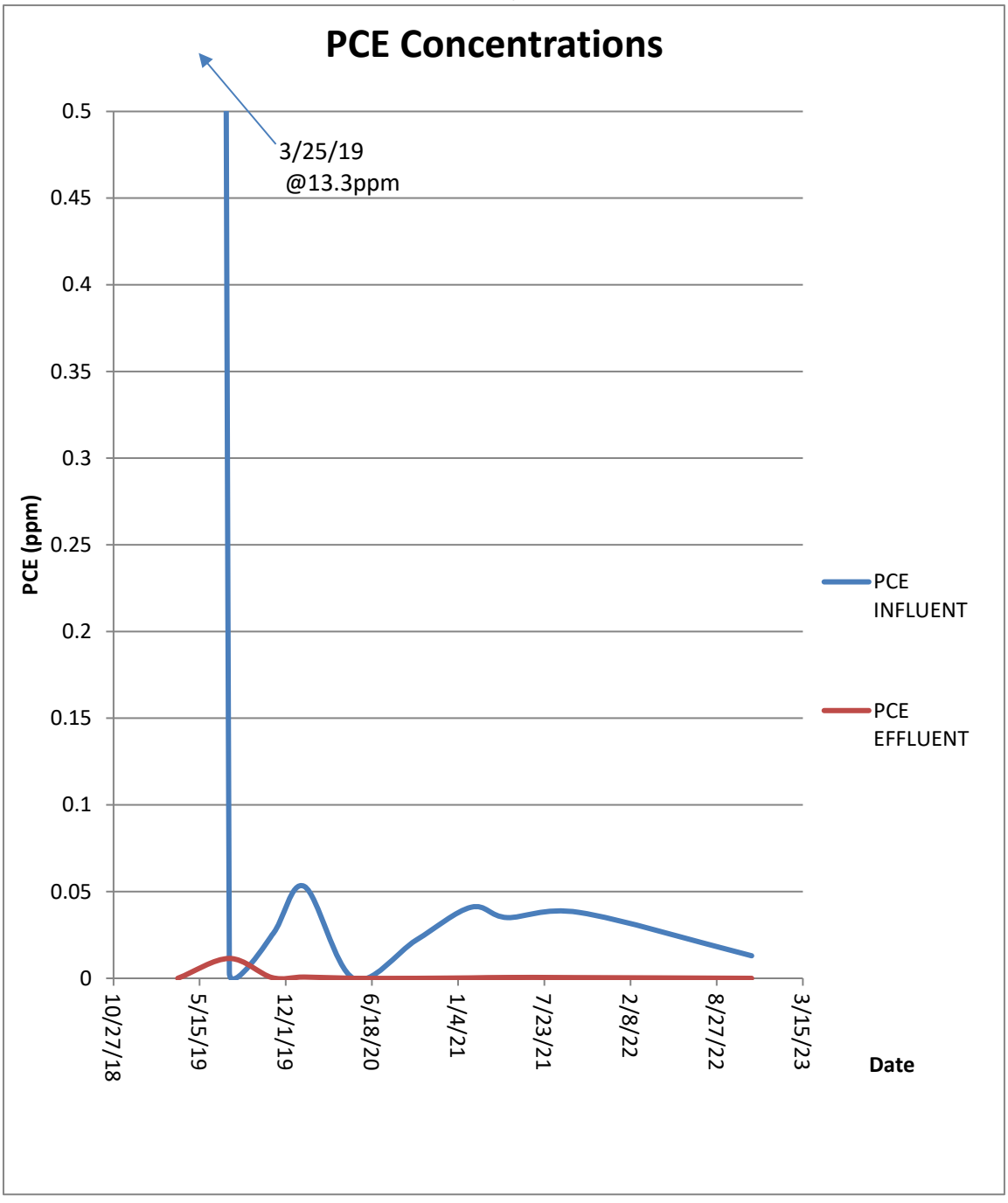


TABLE 5

GRAPHICAL REPRESENTAION OF PCE, TCE AND CIS-1,2-DCE INFLUENT AND EFFLUENT CONCENTRATIONS

432 Riverdale Avenue

Yonkers, NY

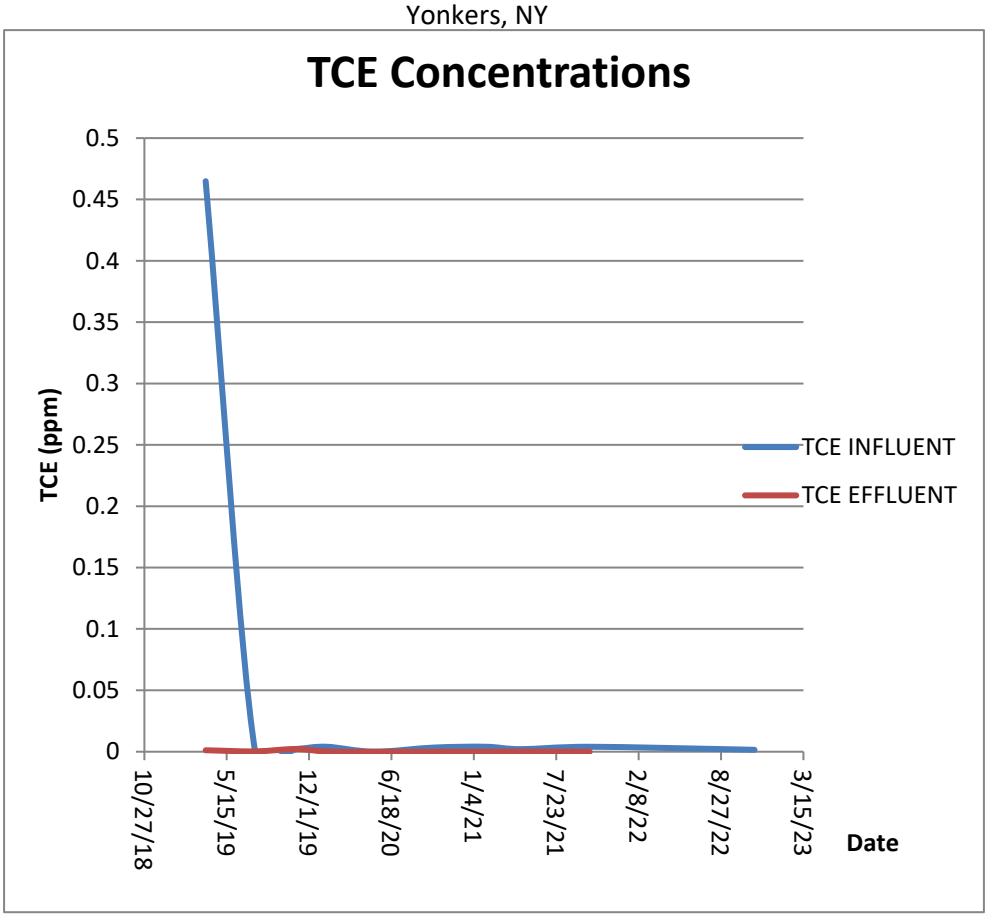


TABLE 5

GRAPHICAL REPRESENTAION OF PCE, TCE AND CIS-1,2-DCE INFLUENT AND EFFLUENT

432 Riverdale Avenue

Yonkers, NY

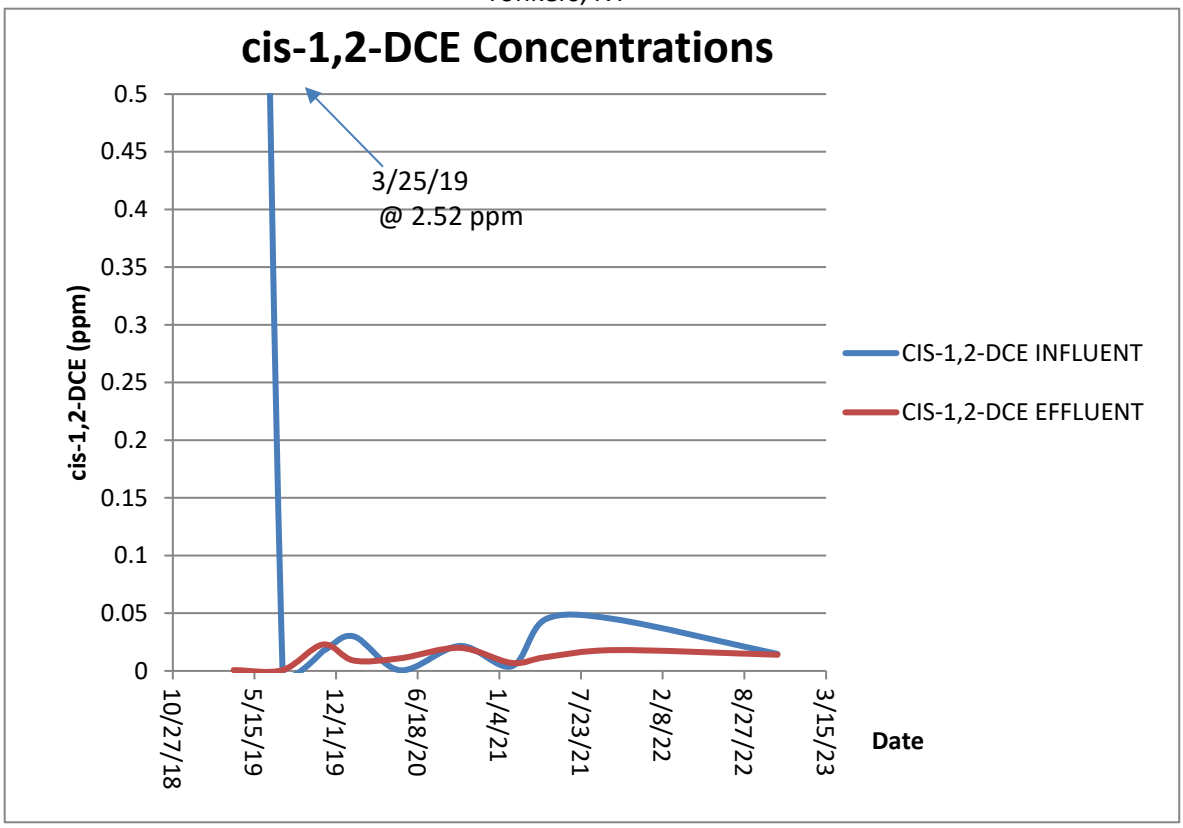


TABLE 6 - SUB-SLAB SOIL GAS INDOOR AIR COMPARISON - NYSDOH MATRIX A

432 Riverdale Avenue

Yonkers, NY

Compound	Soil Vapor and Indoor Air Concentrations (µg/m^3)					NYSDOH Decision Matrix A: Trichloroethylene (TCE), cis-1,2-Dichloroethene, 1,1-Dichloroethene and Carbon Tetrachloride				
	VP-2	VP-2 AI	VP-4	VP-4 AI	AO			Indoor Air Concentration		
								<0.2 µg/m^3	0.2 to <1 µg/m^3	1 µg/m^3 and above
Trichloroethylene	850	1.1	1.8	ND	ND	Sub-Slab Vapor Concentration	<6 µg/m^3	1. No Further Action	2. No Further Action	3. Identify Source(s) and Resample or Mitigate
cis-1,2-Dichloroethene	6800[E]	6.7	30	0.16	ND		6 to 60 µg/m^3	4. No Further Action	5. Monitor	6. Mitigate
1,1-Dichloroethene	13	ND	ND	ND	ND		60 µg/m^3 and above	7. Mitgate	8. Mitigate	9. Mitigate
Carbon Tetrachloride	ND	0.35	0.31	0.40	0.47					

NFA - No Further Action

µg/m^3 - micrograms per cubic meter

NYSDOH - New York State Department of Health - May 2017 - Soil Vapor Matrix A

ND - Compound not detected above laboratory detection limits

TABLE 6 - SUB-SLAB SOIL GAS INDOOR AIR COMPARISON - NYSDOH MATRIX C

432 Riverdale Avenue

Yonkers, NY

Compound	Soil Vapor and Indoor Air Concentrations (µg/m^3)					NYSDOH Decision Matrix C: Vinyl Chloride			
	VP-2	VP-2AI	VP-4	VP-4AI	AO			Indoor Air Concentration	
								<0.2 µg/m^3	0.2 µg/m^3 a and above
Vinyl Chloride	ND	ND	ND	ND	ND	Sub-Slab Vapor Concentration	<6 µg/m^3	1. No Further Action	2. Identify Source(s) and Resample or Mitigate
							6 to 60 µg/m^3	3. Monitor	4. Mitgate
							60 µg/m^3 and above	5. Mitgate	6. Mitgate

NFA - No Further Action

µg/m^3 - micrograms per cubic meter

NYSDOH - New York State Department of Health - May 2017 - Soil Vapor Matrix C

ND - Compound not detected above laboratory detection limits

TABLE 6 - SUB-SLAB SOIL GAS INDOOR AIR COMPARISON - NYSDOH MATRIX B

432 Riverdale Avenue

Yonkers, NY

Compound	Soil Vapor and Indoor Air Concentrations (µg/m^3)					NYSDOH Decision Matrix B: Tetrachloroethene (PCE), 1,1,1-Trichloroethane (1,1,1-TCA) and Methylene Chloride				
	VP-2	VP-2 AI	VP-4	VP-4 AI	AO			Indoor Air		
								<3 µg/m^3	3 to <10 µg/m^3	10 µg/m^3 and above
Tetrachloroethene	8100^E	6.6	3.2	ND	ND	Sub-Slab Vapor Concentration	<100 µg/m^3	1. No Further Action	2. No Further Action	3. Identify Source(s) and Resample or Mitigate
1,1,1-Trichloroethane	ND	ND	ND	ND	ND		100 to 1,000 µg/m^3	4. No Further Action	5. Monitor	6. Mitgate
Methylene Chloride	ND	2.8	ND	1.1	0.81		1,000 µg/m^3 and above	7. Mitgate	8. Mitgate	9. Mitgate

NFA - No Further Action

µg/m^3 - micrograms per cubic meter

NYSDOH - New York State Department of Health - May 2017 - Soil Vapor Matrix B

ND - Compound not detected above laboratory detection limits

E - The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.

Appendix A

Laboratory Analytical Reports

Technical Report

prepared for:

DT Consulting Services
1291 Old Post Road
Ulster Park NY, 12487
Attention: Deborah Thompson

Report Date: 11/23/2022
Client Project ID: 432 Riverdale Ave Yonkers, NY
York Project (SDG) No.: 22K1037

CT Cert. No. PH-0723 New Jersey Cert. No. CT005 and NY037 New York Cert. Nos. 10854 and 12058 PA Cert. No. 68-04440

120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418
www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@yorklab.com

Report Date: 11/23/2022
Client Project ID: 432 Riverdale Ave Yonkers, NY
York Project (SDG) No.: 22K1037

DT Consulting Services
1291 Old Post Road
Ulster Park NY, 12487
Attention: Deborah Thompson

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on November 17, 2022 and listed below. The project was identified as your project: **432 Riverdale Ave Yonkers, NY**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
22K1037-01	PRE TREATMENT	Vapor Extraction	11/16/2022	11/17/2022
22K1037-02	POST TREATMENT	Vapor Extraction	11/16/2022	11/17/2022

General Notes for York Project (SDG) No.: 22K1037

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By: **Date:** 11/23/2022

Cassie L. Mosher
Laboratory Manager

Sample Information

Client Sample ID: PRE TREATMENT

York Sample ID: 22K1037-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22K1037	432 Riverdale Ave Yonkers, NY	Vapor Extraction	November 16, 2022 8:35 am	11/17/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	1.1	1.639	EPA TO-15 Certifications:	11/21/2022 03:06	11/21/2022 05:44	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.89	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.1	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.3	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.89	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.66	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.16	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.2	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.81	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.3	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.99	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.66	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.76	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.1	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.81	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	1.1	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.99	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.76	1.639	EPA TO-15 Certifications:	11/21/2022 03:06	11/21/2022 05:44	LLJ

Sample Information

Client Sample ID: **PRE TREATMENT** **York Sample ID:** **22K1037-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22K1037	432 Riverdale Ave Yonkers, NY	Vapor Extraction	November 16, 2022 8:35 am	11/17/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.99	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	1.2	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ
78-93-3	**2-Butanone**	**2.6**		ug/m³	0.48	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	1.3	1.639	EPA TO-15 Certifications:	11/21/2022 03:06	11/21/2022 05:44	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	2.6	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.67	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ
67-64-1	**Acetone**	**5.5**		ug/m³	0.78	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.36	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ
71-43-2	Benzene	ND		ug/m³	0.52	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.85	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	1.1	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ
75-25-2	Bromoform	ND		ug/m³	1.7	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.64	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.51	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ
56-23-5	**Carbon tetrachloride**	**0.31**		ug/m³	0.26	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.75	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.43	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ
67-66-3	Chloroform	ND		ug/m³	0.80	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ
74-87-3	**Chloromethane**	**0.47**		ug/m³	0.34	1.639	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 05:44	LLJ

Sample Information

Client Sample ID: **PRE TREATMENT** **York Sample ID:** **22K1037-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22K1037	432 Riverdale Ave Yonkers, NY	Vapor Extraction	November 16, 2022 8:35 am	11/17/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-59-2	**cis-1,2-Dichloroethylene**	**59**		ug/m³	0.16	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.74	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.56	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	1.4	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
75-71-8	**Dichlorodifluoromethane**	**2.5**		ug/m³	0.81	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	1.2	1.639	EPA TO-15 Certifications:	11/21/2022 03:06	11/21/2022 05:44	LLJ
100-41-4	Ethyl Benzene	ND		ug/m³	0.71	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.7	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
67-63-0	**Isopropanol**	**1.6**	B	ug/m³	0.81	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
80-62-6	Methyl Methacrylate	ND		ug/m³	0.67	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.59	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
75-09-2	Methylene chloride	ND		ug/m³	1.1	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
142-82-5	n-Heptane	ND		ug/m³	0.67	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
110-54-3	n-Hexane	ND		ug/m³	0.58	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
95-47-6	o-Xylene	ND		ug/m³	0.71	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/m³	1.4	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.81	1.639	EPA TO-15 Certifications:	11/21/2022 03:06	11/21/2022 05:44	LLJ
115-07-1	*** Propylene**	**0.56**		ug/m³	0.28	1.639	EPA TO-15 Certifications:	11/21/2022 03:06	11/21/2022 05:44	LLJ
100-42-5	Styrene	ND		ug/m³	0.70	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ

Sample Information

Client Sample ID: PRE TREATMENT **York Sample ID:** 22K1037-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22K1037	432 Riverdale Ave Yonkers, NY	Vapor Extraction	November 16, 2022 8:35 am	11/17/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	**Tetrachloroethylene**	**92**		ug/m³	1.1	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.97	1.639	EPA TO-15 Certifications:	11/21/2022 03:06	11/21/2022 05:44	LLJ
108-88-3	Toluene	ND		ug/m³	0.62	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.65	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.74	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
79-01-6	**Trichloroethylene**	**8.7**		ug/m³	0.22	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
75-69-4	**Trichlorofluoromethane (Freon 11)**	**0.92**		ug/m³	0.92	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.58	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.72	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.21	1.639	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 05:44	LLJ

Sample Information

Client Sample ID: POST TREATMENT **York Sample ID:** 22K1037-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22K1037	432 Riverdale Ave Yonkers, NY	Vapor Extraction	November 16, 2022 8:35 am	11/17/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	1.2	1.692	EPA TO-15 Certifications:	11/21/2022 03:06	11/21/2022 07:30	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.92	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.2	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ

Sample Information

Client Sample ID: **POST TREATMENT** **York Sample ID:** **22K1037-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22K1037	432 Riverdale Ave Yonkers, NY	Vapor Extraction	November 16, 2022 8:35 am	11/17/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.3	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.92	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.68	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.17	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.3	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.83	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.3	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	1.0	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.68	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.78	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.2	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.83	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	1.1	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	1.0	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.78	1.692	EPA TO-15 Certifications:	11/21/2022 03:06	11/21/2022 07:30	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	1.0	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	1.2	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
78-93-3	**2-Butanone**	**0.70**		ug/m³	0.50	1.692	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	11/21/2022 03:06	11/21/2022 07:30	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	1.4	1.692	EPA TO-15 Certifications:	11/21/2022 03:06	11/21/2022 07:30	LLJ

Sample Information

Client Sample ID: **POST TREATMENT** **York Sample ID:** **22K1037-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22K1037	432 Riverdale Ave Yonkers, NY	Vapor Extraction	November 16, 2022 8:35 am	11/17/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	2.6	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.69	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
67-64-1	**Acetone**	**4.5**		ug/m³	0.80	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.37	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
71-43-2	Benzene	ND		ug/m³	0.54	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.88	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	1.1	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
75-25-2	Bromoform	ND		ug/m³	1.7	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.66	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.53	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
56-23-5	**Carbon tetrachloride**	**0.43**		ug/m³	0.27	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.78	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.45	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
67-66-3	**Chloroform**	**1.7**		ug/m³	0.83	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
74-87-3	**Chloromethane**	**0.63**		ug/m³	0.35	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
156-59-2	**cis-1,2-Dichloroethylene**	**56**		ug/m³	0.17	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.77	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.58	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	1.4	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ

Sample Information

Client Sample ID: **POST TREATMENT** **York Sample ID:** **22K1037-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22K1037	432 Riverdale Ave Yonkers, NY	Vapor Extraction	November 16, 2022 8:35 am	11/17/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	**Dichlorodifluoromethane**	**2.6**		ug/m³	0.84	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	1.2	1.692	EPA TO-15 Certifications:	11/21/2022 03:06	11/21/2022 07:30	LLJ
100-41-4	Ethyl Benzene	ND		ug/m³	0.73	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.8	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
67-63-0	**Isopropanol**	**14**	B	ug/m³	0.83	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
80-62-6	Methyl Methacrylate	ND		ug/m³	0.69	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.61	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
75-09-2	**Methylene chloride**	**2.2**		ug/m³	1.2	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
142-82-5	n-Heptane	ND		ug/m³	0.69	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
110-54-3	n-Hexane	ND		ug/m³	0.60	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
95-47-6	o-Xylene	ND		ug/m³	0.73	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/m³	1.5	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.83	1.692	EPA TO-15 Certifications:	11/21/2022 03:06	11/21/2022 07:30	LLJ
115-07-1	*** Propylene**	**1.7**		ug/m³	0.29	1.692	EPA TO-15 Certifications:	11/21/2022 03:06	11/21/2022 07:30	LLJ
100-42-5	Styrene	ND		ug/m³	0.72	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	1.1	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	1.0	1.692	EPA TO-15 Certifications:	11/21/2022 03:06	11/21/2022 07:30	LLJ
108-88-3	**Toluene**	**1.1**		ug/m³	0.64	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.67	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ

Sample Information

Client Sample ID: **POST TREATMENT** **York Sample ID:** **22K1037-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22K1037	432 Riverdale Ave Yonkers, NY	Vapor Extraction	November 16, 2022 8:35 am	11/17/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.77	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.23	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
75-69-4	**Trichlorofluoromethane (Freon 11)**	**0.95**		ug/m³	0.95	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.60	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.74	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.22	1.692	EPA TO-15 Certifications:	11/21/2022 03:06 NELAC-NY12058,NJDEP-Queens	11/21/2022 07:30	LLJ

Sample and Data Qualifiers Relating to This Work Order

TO-LCS-H	The result reported for this compound may be biased high due to its behavior in the analysis batch LCS where it recovered greater than 130% of the expected value.
QR-01	Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted based on LCS and/or LCSD QC results.
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon current NELAC/TNI Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

York Analytical Laboratories, Inc.
120 Research Drive, Stratford, CT 06615
132-02 89th Ave, Queens, NY 11418
clientservices@yorklab.com
www.yorklab.com

Field Chain-of-Custody Record - AIR

YORK Project No. 22K1037

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: DT Consulting Services Inc	Company:	Company:		RUSH - Next Day
Address: 1291 old Post Rd. Ulster Park, NY	Address: SAME	Address: SAME	YOUR Project Name: 432 Riverdale Ave Yonkers, NY	RUSH - Two Day
Phone: (845) 658-3484	Phone.:	Phone.:		RUSH - Three Day
Contact: Deborah Thompson	Contact:	Contact:		RUSH - Four Day
E-mail:	E-mail: dbellucciengineeringpllc@gmail.com	E-mail:	YOUR PO#:	Standard (5-7 Day) X

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

Daniel Bellucci

Samples Collected by: (print your name above and sign below)

Air Matrix Codes
- AI - Indoor Ambient Air
- AO - Outdoor Amb. Air
- AE - Vapor Extraction Well/ Process Gas/Effluent
- AS - Soil Vapor/Sub-Slab

Samples From
- New York X
- New Jersey
- Connecticut
- Pennsylvania
- Other

Report / EDD Type (circle selections)

Summary Report	CT RCP	Standard Excel EDD
QA Report	CT RCP DQA/DUE	EQuIS (Standard)
NY ASP A Package	NJDEP Reduced Deliv.	NYSDEC EQuIS
NY ASP B Package	NJDKQP	NJDEP SRP HazSite
Other:		

YORK Reg. Comp.
Compared to the following Regulation(s): (please fill in)

Certified Canisters: Batch X Individual ___

Please enter the following REQUIRED Field Data

Reporting Units: ug/m³ X ppbv ___ ppmv X

Sample Identification	Date/Time Sampled	Air Matrix	Canister Vacuum Before Sampling (in Hg)	Canister Vacuum After Sampling (in Hg)	Canister ID	Flow Cont. ID	Analysis Requested
PRE TREATMENT	11/16/22 @8:35	AE	-30	-6	4300E	/	TO-15
POST TREATMENT	11/16/22 @8:35	AE	-30	-6	37285	/	1/

Comments:

Detection Limits Required
≤ 1 ug/m³ ___ NYSDEC V1 Limits ___
Routine Survey ___ Other ___

Sampling Media
6 Liter Canister X
Tedlar Bag

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
Bellucci Engin.	11-17-22 13:45	Chris York	11-17-22 13:45	Chris York	11-17-22 1540
Blocher / York	11/17/22 1540	Blocher / York	11/17/22 2137		
				Samples Received in LAB by: / York	11/17/22 23:06

Technical Report

prepared for:

DT Consulting Services
1291 Old Post Road
Ulster Park NY, 12487
Attention: Deborah Thompson

Report Date: 12/27/2022
Client Project ID: 432 Riverdale Ave Yonkers, NY
York Project (SDG) No.: 22L1161

CT Cert. No. PH-0723 New Jersey Cert. No. CT005 and NY037 New York Cert. Nos. 10854 and 12058 PA Cert. No. 68-04440

120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418
www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@yorklab.com

Report Date: 12/27/2022
Client Project ID: 432 Riverdale Ave Yonkers, NY
York Project (SDG) No.: 22L1161

DT Consulting Services
1291 Old Post Road
Ulster Park NY, 12487
Attention: Deborah Thompson

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on December 21, 2022 and listed below. The project was identified as your project: **432 Riverdale Ave Yonkers, NY**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
22L1161-01	UP-2	Soil Vapor	12/20/2022	12/21/2022
22L1161-02	UP-2 AI	Indoor Ambient Air	12/20/2022	12/21/2022
22L1161-03	UP-4	Soil Vapor	12/20/2022	12/21/2022
22L1161-04	UP-4 AI	Indoor Ambient Air	12/20/2022	12/21/2022
22L1161-05	AO	Outdoor Ambient Ai	12/20/2022	12/21/2022

General Notes for York Project (SDG) No.: 22L1161

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By: **Date:** 12/27/2022

Cassie L. Mosher
Laboratory Manager

Sample Information

Client Sample ID: **UP-2** **York Sample ID:** **22L1161-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Soil Vapor	December 20, 2022 7:35 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND	IS-LO	ug/m³	26	37.66	EPA TO-15 Certifications:	12/23/2022 12:00	12/25/2022 03:22	VH
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	13	18.83	EPA TO-15 Certifications:	12/23/2022 12:00	12/24/2022 04:58	VH
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	21	37.66	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/25/2022 03:22	VH
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	10	18.83	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/24/2022 04:58	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND	IS-LO	ug/m³	26	37.66	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/25/2022 03:22	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	13	18.83	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/24/2022 04:58	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	TO-LCS-L	ug/m³	29	37.66	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/25/2022 03:22	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	14	18.83	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/24/2022 04:58	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	21	37.66	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/25/2022 03:22	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	10	18.83	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/24/2022 04:58	VH
75-34-3	1,1-Dichloroethane	ND	TO-LCS-L	ug/m³	15	37.66	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/25/2022 03:22	VH
75-34-3	1,1-Dichloroethane	ND	TO-LCS-L	ug/m³	7.6	18.83	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/24/2022 04:58	VH
75-35-4	**1,1-Dichloroethylene**	**12**		ug/m³	3.7	37.66	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/25/2022 03:22	VH
75-35-4	**1,1-Dichloroethylene**	**13**		ug/m³	1.9	18.83	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/24/2022 04:58	VH
120-82-1	1,2,4-Trichlorobenzene	ND	IS-LO	ug/m³	28	37.66	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/25/2022 03:22	VH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	14	18.83	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/24/2022 04:58	VH
95-63-6	1,2,4-Trimethylbenzene	ND	IS-LO	ug/m³	19	37.66	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/25/2022 03:22	VH
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	9.3	18.83	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/24/2022 04:58	VH

Sample Information

Client Sample ID: UP-2 **York Sample ID:** 22L1161-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Soil Vapor	December 20, 2022 7:35 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-93-4	1,2-Dibromoethane	ND		ug/m³	29	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
106-93-4	1,2-Dibromoethane	ND		ug/m³	14	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
95-50-1	1,2-Dichlorobenzene	ND	IS-LO	ug/m³	23	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	11	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
107-06-2	1,2-Dichloroethane	ND		ug/m³	15	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
107-06-2	1,2-Dichloroethane	ND		ug/m³	7.6	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
78-87-5	1,2-Dichloropropane	ND		ug/m³	17	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
78-87-5	1,2-Dichloropropane	ND		ug/m³	8.7	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	26	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	13	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
108-67-8	1,3,5-Trimethylbenzene	ND	IS-LO	ug/m³	19	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	9.3	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
106-99-0	1,3-Butadiene	ND		ug/m³	25	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
106-99-0	1,3-Butadiene	ND		ug/m³	12	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
541-73-1	1,3-Dichlorobenzene	ND	IS-LO	ug/m³	23	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	11	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	17	37.66	EPA TO-15 Certifications:	12/23/2022 12:00	12/25/2022 03:22	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	8.7	18.83	EPA TO-15 Certifications:	12/23/2022 12:00	12/24/2022 04:58	VH
106-46-7	1,4-Dichlorobenzene	ND	IS-LO	ug/m³	23	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH

Sample Information

Client Sample ID: **UP-2** **York Sample ID:** **22L1161-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Soil Vapor	December 20, 2022 7:35 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	11	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	27	37.66	EPA TO-15	12/23/2022 12:00	12/25/2022 03:22	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	14	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	2-Butanone	ND		ug/m³	11	37.66	EPA TO-15	12/23/2022 12:00	12/25/2022 03:22	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**11**		ug/m³	5.6	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	31	37.66	EPA TO-15	12/23/2022 12:00	12/25/2022 03:22	VH
							Certifications:			
591-78-6	* 2-Hexanone	ND		ug/m³	15	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:			
107-05-1	3-Chloropropene	ND		ug/m³	59	37.66	EPA TO-15	12/23/2022 12:00	12/25/2022 03:22	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-05-1	3-Chloropropene	ND		ug/m³	29	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	15	37.66	EPA TO-15	12/23/2022 12:00	12/25/2022 03:22	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	7.7	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	Acetone	ND		ug/m³	18	37.66	EPA TO-15	12/23/2022 12:00	12/25/2022 03:22	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**12**		ug/m³	8.9	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	8.2	37.66	EPA TO-15	12/23/2022 12:00	12/25/2022 03:22	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	4.1	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	Benzene	ND		ug/m³	12	37.66	EPA TO-15	12/23/2022 12:00	12/25/2022 03:22	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	Benzene	ND		ug/m³	6.0	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND	IS-LO	ug/m³	19	37.66	EPA TO-15	12/23/2022 12:00	12/25/2022 03:22	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	9.7	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **UP-2** **York Sample ID:** **22L1161-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Soil Vapor	December 20, 2022 7:35 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-27-4	Bromodichloromethane	ND		ug/m³	25	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
75-27-4	Bromodichloromethane	ND		ug/m³	13	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
75-25-2	Bromoform	ND	IS-LO	ug/m³	39	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
75-25-2	Bromoform	ND		ug/m³	19	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
74-83-9	Bromomethane	ND		ug/m³	15	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
74-83-9	Bromomethane	ND		ug/m³	7.3	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
75-15-0	Carbon disulfide	ND	TO-LCS-L	ug/m³	12	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
75-15-0	Carbon disulfide	ND		ug/m³	5.9	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
56-23-5	Carbon tetrachloride	ND		ug/m³	5.9	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
56-23-5	Carbon tetrachloride	ND		ug/m³	3.0	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
108-90-7	Chlorobenzene	ND	IS-LO	ug/m³	17	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
108-90-7	Chlorobenzene	ND		ug/m³	8.7	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
75-00-3	Chloroethane	ND		ug/m³	9.9	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
75-00-3	Chloroethane	ND		ug/m³	5.0	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
67-66-3	Chloroform	ND		ug/m³	18	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
67-66-3	**Chloroform**	**10**		ug/m³	9.2	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
74-87-3	Chloromethane	ND		ug/m³	7.8	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
74-87-3	Chloromethane	ND		ug/m³	3.9	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
156-59-2	**cis-1,2-Dichloroethylene**	**6200**		ug/m³	3.7	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH

Sample Information

Client Sample ID: **UP-2** **York Sample ID:** **22L1161-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Soil Vapor	December 20, 2022 7:35 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-59-2	**cis-1,2-Dichloroethylene**	**6800**	E	ug/m³	1.9	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	17	37.66	EPA TO-15	12/23/2022 12:00	12/25/2022 03:22	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	8.5	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	Cyclohexane	ND		ug/m³	13	37.66	EPA TO-15	12/23/2022 12:00	12/25/2022 03:22	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	Cyclohexane	ND		ug/m³	6.5	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	32	37.66	EPA TO-15	12/23/2022 12:00	12/25/2022 03:22	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	16	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	Dichlorodifluoromethane	ND	TO-CCV, TO-LCS-L	ug/m³	19	37.66	EPA TO-15	12/23/2022 12:00	12/25/2022 03:22	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	Dichlorodifluoromethane	ND	TO-CCV	ug/m³	9.3	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
141-78-6	* Ethyl acetate	ND		ug/m³	27	37.66	EPA TO-15	12/23/2022 12:00	12/25/2022 03:22	VH
							Certifications:			
141-78-6	* Ethyl acetate	ND		ug/m³	14	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:			
100-41-4	Ethyl Benzene	ND	IS-LO	ug/m³	16	37.66	EPA TO-15	12/23/2022 12:00	12/25/2022 03:22	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-41-4	Ethyl Benzene	ND		ug/m³	8.2	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
87-68-3	Hexachlorobutadiene	ND	CAL-E, IS-LO, TO-CCV, TO-LCS-L	ug/m³	40	37.66	EPA TO-15	12/23/2022 12:00	12/25/2022 03:22	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
87-68-3	Hexachlorobutadiene	ND	CAL-E, TO-LCS-L	ug/m³	20	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**34**		ug/m³	19	37.66	EPA TO-15	12/23/2022 12:00	12/25/2022 03:22	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**37**		ug/m³	9.3	18.83	EPA TO-15	12/23/2022 12:00	12/24/2022 04:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **UP-2** **York Sample ID:** **22L1161-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Soil Vapor	December 20, 2022 7:35 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	Methyl Methacrylate	ND		ug/m³	15	37.66	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/25/2022 03:22	VH
80-62-6	Methyl Methacrylate	ND		ug/m³	7.7	18.83	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/24/2022 04:58	VH
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	14	37.66	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/25/2022 03:22	VH
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	6.8	18.83	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/24/2022 04:58	VH
75-09-2	Methylene chloride	ND		ug/m³	26	37.66	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/25/2022 03:22	VH
75-09-2	Methylene chloride	ND		ug/m³	13	18.83	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/24/2022 04:58	VH
142-82-5	n-Heptane	ND		ug/m³	15	37.66	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/25/2022 03:22	VH
142-82-5	n-Heptane	ND		ug/m³	7.7	18.83	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/24/2022 04:58	VH
110-54-3	n-Hexane	ND		ug/m³	13	37.66	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/25/2022 03:22	VH
110-54-3	n-Hexane	ND		ug/m³	6.6	18.83	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/24/2022 04:58	VH
95-47-6	o-Xylene	ND	IS-LO	ug/m³	16	37.66	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/25/2022 03:22	VH
95-47-6	o-Xylene	ND		ug/m³	8.2	18.83	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/24/2022 04:58	VH
179601-23-1	p- & m- Xylenes	ND	IS-LO	ug/m³	33	37.66	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/25/2022 03:22	VH
179601-23-1	p- & m- Xylenes	ND		ug/m³	16	18.83	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/24/2022 04:58	VH
622-96-8	* p-Ethyltoluene	ND	IS-LO	ug/m³	19	37.66	EPA TO-15 Certifications:	12/23/2022 12:00	12/25/2022 03:22	VH
622-96-8	* p-Ethyltoluene	ND		ug/m³	9.3	18.83	EPA TO-15 Certifications:	12/23/2022 12:00	12/24/2022 04:58	VH
115-07-1	* Propylene	ND	TO-CCV	ug/m³	6.5	37.66	EPA TO-15 Certifications:	12/23/2022 12:00	12/25/2022 03:22	VH
115-07-1	* Propylene	ND	TO-CCV	ug/m³	3.2	18.83	EPA TO-15 Certifications:	12/23/2022 12:00	12/24/2022 04:58	VH
100-42-5	Styrene	ND	IS-LO	ug/m³	16	37.66	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/25/2022 03:22	VH

Sample Information

Client Sample ID: UP-2 **York Sample ID:** 22L1161-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Soil Vapor	December 20, 2022 7:35 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-42-5	Styrene	ND		ug/m³	8.0	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
127-18-4	**Tetrachloroethylene**	**4500**		ug/m³	26	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
127-18-4	**Tetrachloroethylene**	**8100**	E	ug/m³	13	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
109-99-9	*** Tetrahydrofuran**	**66**		ug/m³	22	37.66	EPA TO-15 Certifications:	12/23/2022 12:00	12/25/2022 03:22	VH
109-99-9	*** Tetrahydrofuran**	**79**		ug/m³	11	18.83	EPA TO-15 Certifications:	12/23/2022 12:00	12/24/2022 04:58	VH
108-88-3	Toluene	ND		ug/m³	14	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
108-88-3	Toluene	ND		ug/m³	7.1	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
156-60-5	**trans-1,2-Dichloroethylene**	**43**		ug/m³	15	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
156-60-5	**trans-1,2-Dichloroethylene**	**48**		ug/m³	7.5	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	17	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	8.5	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
79-01-6	**Trichloroethylene**	**690**		ug/m³	5.1	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
79-01-6	**Trichloroethylene**	**850**		ug/m³	2.5	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
75-69-4	Trichlorofluoromethane (Freon 11)	ND	TO-LCS-L	ug/m³	21	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
75-69-4	Trichlorofluoromethane (Freon 11)	ND	TO-CCV	ug/m³	11	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
108-05-4	Vinyl acetate	ND		ug/m³	13	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
108-05-4	Vinyl acetate	ND		ug/m³	6.6	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
593-60-2	Vinyl bromide	ND		ug/m³	16	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH
593-60-2	Vinyl bromide	ND	TO-CCV	ug/m³	8.2	18.83	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 04:58	VH
75-01-4	Vinyl Chloride	ND		ug/m³	4.8	37.66	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 03:22	VH

Sample Information

Client Sample ID: **UP-2** **York Sample ID:** **22L1161-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Soil Vapor	December 20, 2022 7:35 am	12/21/2022

Volatile Organics, EPA TO15 Full List **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	2.4	18.83	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/24/2022 04:58	VH

Sample Information

Client Sample ID: **UP-2 AI** **York Sample ID:** **22L1161-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Indoor Ambient Air	December 20, 2022 7:35 am	12/21/2022

Volatile Organics, EPA TO15 Full List **Log-in Notes:** **Sample Notes:** **TO-VAC**

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.55	0.803	EPA TO-15 Certifications:	12/24/2022 12:00	12/24/2022 23:13	VH
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.44	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.55	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	TO-LCS -L	ug/m³	0.62	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.44	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
75-34-3	1,1-Dichloroethane	ND	TO-LCS -L	ug/m³	0.33	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.080	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.60	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
95-63-6	**1,2,4-Trimethylbenzene**	**25**		ug/m³	0.39	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.62	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.48	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.32	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH

Sample Information

Client Sample ID: **UP-2 AI** **York Sample ID:** **22L1161-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Indoor Ambient Air	December 20, 2022 7:35 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: **TO-VAC**

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.37	0.803	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 23:13	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.56	0.803	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 23:13	VH
108-67-8	**1,3,5-Trimethylbenzene**	**5.6**		ug/m³	0.39	0.803	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 23:13	VH
106-99-0	1,3-Butadiene	ND		ug/m³	0.53	0.803	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 23:13	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.48	0.803	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 23:13	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.37	0.803	EPA TO-15 Certifications:	12/24/2022 12:00	12/24/2022 23:13	VH
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.48	0.803	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 23:13	VH
123-91-1	1,4-Dioxane	ND		ug/m³	0.58	0.803	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 23:13	VH
78-93-3	**2-Butanone**	**2.0**		ug/m³	0.24	0.803	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 23:13	VH
591-78-6	* 2-Hexanone	ND		ug/m³	0.66	0.803	EPA TO-15 Certifications:	12/24/2022 12:00	12/24/2022 23:13	VH
107-05-1	3-Chloropropene	ND		ug/m³	1.3	0.803	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 23:13	VH
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.33	0.803	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 23:13	VH
67-64-1	**Acetone**	**16**		ug/m³	0.38	0.803	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 23:13	VH
107-13-1	Acrylonitrile	ND		ug/m³	0.17	0.803	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 23:13	VH
71-43-2	**Benzene**	**0.49**		ug/m³	0.26	0.803	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 23:13	VH
100-44-7	Benzyl chloride	ND		ug/m³	0.42	0.803	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 23:13	VH
75-27-4	Bromodichloromethane	ND		ug/m³	0.54	0.803	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 23:13	VH
75-25-2	Bromoform	ND		ug/m³	0.83	0.803	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 23:13	VH
74-83-9	Bromomethane	ND		ug/m³	0.31	0.803	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/24/2022 23:13	VH

Sample Information

Client Sample ID: **UP-2 AI** **York Sample ID:** **22L1161-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Indoor Ambient Air	December 20, 2022 7:35 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: **TO-VAC**

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-15-0	Carbon disulfide	ND	TO-LCS-L	ug/m³	0.25	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
56-23-5	**Carbon tetrachloride**	**0.35**		ug/m³	0.13	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
108-90-7	Chlorobenzene	ND		ug/m³	0.37	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
75-00-3	Chloroethane	ND		ug/m³	0.21	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
67-66-3	Chloroform	ND		ug/m³	0.39	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
74-87-3	**Chloromethane**	**1.3**		ug/m³	0.17	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
156-59-2	**cis-1,2-Dichloroethylene**	**6.7**		ug/m³	0.080	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.36	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
110-82-7	Cyclohexane	ND		ug/m³	0.28	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
124-48-1	Dibromochloromethane	ND		ug/m³	0.68	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
75-71-8	**Dichlorodifluoromethane**	**1.4**	TO-CCV, TO-LCS-L	ug/m³	0.40	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
141-78-6	* Ethyl acetate	ND		ug/m³	0.58	0.803	EPA TO-15 Certifications:	12/24/2022 12:00	12/24/2022 23:13	VH
100-41-4	**Ethyl Benzene**	**7.2**		ug/m³	0.35	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
87-68-3	Hexachlorobutadiene	ND	CAL-E, TO-CCV, TO-LCS-L	ug/m³	0.86	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
67-63-0	**Isopropanol**	**240**	E, TO-IPA	ug/m³	0.39	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
80-62-6	Methyl Methacrylate	ND		ug/m³	0.33	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.29	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH
75-09-2	**Methylene chloride**	**2.8**		ug/m³	0.56	0.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/24/2022 23:13	VH

Sample Information

Client Sample ID: **UP-2 AI** **York Sample ID:** **22L1161-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Indoor Ambient Air	December 20, 2022 7:35 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
142-82-5	**n-Heptane**	**0.49**		ug/m³	0.33	0.803	EPA TO-15	12/24/2022 12:00	12/24/2022 23:13	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	n-Hexane	ND		ug/m³	0.28	0.803	EPA TO-15	12/24/2022 12:00	12/24/2022 23:13	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	**o-Xylene**	**10**		ug/m³	0.35	0.803	EPA TO-15	12/24/2022 12:00	12/24/2022 23:13	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	**p- & m- Xylenes**	**23**		ug/m³	0.70	0.803	EPA TO-15	12/24/2022 12:00	12/24/2022 23:13	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	*** p-Ethyltoluene**	**26**		ug/m³	0.39	0.803	EPA TO-15	12/24/2022 12:00	12/24/2022 23:13	VH
							Certifications:			
115-07-1	*** Propylene**	**5.8**	TO-CCV	ug/m³	0.14	0.803	EPA TO-15	12/24/2022 12:00	12/24/2022 23:13	VH
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.34	0.803	EPA TO-15	12/24/2022 12:00	12/24/2022 23:13	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**6.6**		ug/m³	0.54	0.803	EPA TO-15	12/24/2022 12:00	12/24/2022 23:13	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	*** Tetrahydrofuran**	**0.85**		ug/m³	0.47	0.803	EPA TO-15	12/24/2022 12:00	12/24/2022 23:13	VH
							Certifications:			
108-88-3	**Toluene**	**2.8**		ug/m³	0.30	0.803	EPA TO-15	12/24/2022 12:00	12/24/2022 23:13	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.32	0.803	EPA TO-15	12/24/2022 12:00	12/24/2022 23:13	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.36	0.803	EPA TO-15	12/24/2022 12:00	12/24/2022 23:13	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	**Trichloroethylene**	**1.1**		ug/m³	0.11	0.803	EPA TO-15	12/24/2022 12:00	12/24/2022 23:13	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**0.72**	TO-LCS-L	ug/m³	0.45	0.803	EPA TO-15	12/24/2022 12:00	12/24/2022 23:13	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.28	0.803	EPA TO-15	12/24/2022 12:00	12/24/2022 23:13	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	0.35	0.803	EPA TO-15	12/24/2022 12:00	12/24/2022 23:13	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.10	0.803	EPA TO-15	12/24/2022 12:00	12/24/2022 23:13	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: UP-4 **York Sample ID:** 22L1161-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Soil Vapor	December 20, 2022 7:40 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	1.1	1.631	EPA TO-15 Certifications:	12/24/2022 12:00	12/25/2022 04:15	VH
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.89	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.1	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	TO-LCS-L	ug/m³	1.2	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.89	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
75-34-3	1,1-Dichloroethane	ND	TO-LCS-L	ug/m³	0.66	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.16	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.2	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
95-63-6	**1,2,4-Trimethylbenzene**	**2.0**		ug/m³	0.80	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.3	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.98	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.66	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.75	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.1	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.80	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
106-99-0	1,3-Butadiene	ND		ug/m³	1.1	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.98	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.75	1.631	EPA TO-15 Certifications:	12/24/2022 12:00	12/25/2022 04:15	VH
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.98	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH

Sample Information

Client Sample ID: **UP-4** **York Sample ID:** **22L1161-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Soil Vapor	December 20, 2022 7:40 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		ug/m³	1.2	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
78-93-3	**2-Butanone**	**26**		ug/m³	0.48	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
591-78-6	*** 2-Hexanone**	**2.9**		ug/m³	1.3	1.631	EPA TO-15 Certifications:	12/24/2022 12:00	12/25/2022 04:15	VH
107-05-1	3-Chloropropene	ND		ug/m³	2.6	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.67	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
67-64-1	**Acetone**	**11**		ug/m³	0.77	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
107-13-1	Acrylonitrile	ND		ug/m³	0.35	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
71-43-2	Benzene	ND		ug/m³	0.52	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
100-44-7	Benzyl chloride	ND		ug/m³	0.84	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
75-27-4	Bromodichloromethane	ND		ug/m³	1.1	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
75-25-2	Bromoform	ND		ug/m³	1.7	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
74-83-9	Bromomethane	ND		ug/m³	0.63	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
75-15-0	Carbon disulfide	ND	TO-LCS-L	ug/m³	0.51	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
56-23-5	**Carbon tetrachloride**	**0.31**		ug/m³	0.26	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
108-90-7	Chlorobenzene	ND		ug/m³	0.75	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
75-00-3	Chloroethane	ND		ug/m³	0.43	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
67-66-3	Chloroform	ND		ug/m³	0.80	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
74-87-3	Chloromethane	ND		ug/m³	0.34	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
156-59-2	**cis-1,2-Dichloroethylene**	**30**		ug/m³	0.16	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH

Sample Information

Client Sample ID: **UP-4** **York Sample ID:** **22L1161-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Soil Vapor	December 20, 2022 7:40 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.74	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
110-82-7	Cyclohexane	ND		ug/m³	0.56	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
124-48-1	Dibromochloromethane	ND		ug/m³	1.4	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
75-71-8	**Dichlorodifluoromethane**	**1.4**	TO-CCV, TO-LCS-L	ug/m³	0.81	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
141-78-6	* Ethyl acetate	ND		ug/m³	1.2	1.631	EPA TO-15 Certifications:	12/24/2022 12:00	12/25/2022 04:15	VH
100-41-4	**Ethyl Benzene**	**0.85**		ug/m³	0.71	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
87-68-3	Hexachlorobutadiene	ND	CAL-E, TO-CCV, TO-LCS-L	ug/m³	1.7	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
67-63-0	**Isopropanol**	**13**		ug/m³	0.80	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
80-62-6	Methyl Methacrylate	ND		ug/m³	0.67	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.59	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
75-09-2	Methylene chloride	ND		ug/m³	1.1	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
142-82-5	n-Heptane	ND		ug/m³	0.67	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
110-54-3	n-Hexane	ND		ug/m³	0.57	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
95-47-6	**o-Xylene**	**1.3**		ug/m³	0.71	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
179601-23-1	**p- & m- Xylenes**	**3.0**		ug/m³	1.4	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH
622-96-8	* **p-Ethyltoluene**	**1.5**		ug/m³	0.80	1.631	EPA TO-15 Certifications:	12/24/2022 12:00	12/25/2022 04:15	VH
115-07-1	* Propylene	ND	TO-CCV	ug/m³	0.28	1.631	EPA TO-15 Certifications:	12/24/2022 12:00	12/25/2022 04:15	VH
100-42-5	Styrene	ND		ug/m³	0.69	1.631	EPA TO-15 Certifications:	12/24/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/25/2022 04:15	VH

Sample Information

Client Sample ID: **UP-4** **York Sample ID:** **22L1161-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Soil Vapor	December 20, 2022 7:40 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	**Tetrachloroethylene**	**3.2**		ug/m³	1.1	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
109-99-9	*** Tetrahydrofuran**	**190**		ug/m³	0.96	1.631	EPA TO-15 Certifications:	12/24/2022 12:00	12/25/2022 04:15	VH
108-88-3	**Toluene**	**2.1**		ug/m³	0.61	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.65	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.74	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
79-01-6	**Trichloroethylene**	**1.8**		ug/m³	0.22	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
75-69-4	Trichlorofluoromethane (Freon 11)	ND	TO-LCS -L	ug/m³	0.92	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
108-05-4	Vinyl acetate	ND		ug/m³	0.57	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
593-60-2	Vinyl bromide	ND		ug/m³	0.71	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH
75-01-4	Vinyl Chloride	ND		ug/m³	0.21	1.631	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/24/2022 12:00	12/25/2022 04:15	VH

Sample Information

Client Sample ID: **UP-4 AI** **York Sample ID:** **22L1161-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Indoor Ambient Air	December 20, 2022 7:40 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.55	0.802	EPA TO-15 Certifications:	12/23/2022 12:00	12/23/2022 22:08	VH
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.44	0.802	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/23/2022 22:08	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.55	0.802	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/23/2022 22:08	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.61	0.802	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	12/23/2022 12:00	12/23/2022 22:08	VH

Sample Information

Client Sample ID: **UP-4 AI** **York Sample ID:** **22L1161-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Indoor Ambient Air	December 20, 2022 7:40 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.44	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
75-34-3	1,1-Dichloroethane	ND	TO-LCS -L	ug/m³	0.32	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.079	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.60	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.39	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.62	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.48	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.32	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.37	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.56	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.39	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
106-99-0	1,3-Butadiene	ND		ug/m³	0.53	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.48	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.37	0.802	EPA TO-15 Certifications:	12/23/2022 12:00	12/23/2022 22:08	VH
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.48	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
123-91-1	1,4-Dioxane	ND		ug/m³	0.58	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
78-93-3	**2-Butanone**	**0.24**		ug/m³	0.24	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
591-78-6	* 2-Hexanone	ND		ug/m³	0.66	0.802	EPA TO-15 Certifications:	12/23/2022 12:00	12/23/2022 22:08	VH
107-05-1	3-Chloropropene	ND		ug/m³	1.3	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH

Sample Information

Client Sample ID: **UP-4 AI** **York Sample ID:** **22L1161-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Indoor Ambient Air	December 20, 2022 7:40 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.33	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
67-64-1	**Acetone**	**3.4**		ug/m³	0.38	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
107-13-1	Acrylonitrile	ND		ug/m³	0.17	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
71-43-2	**Benzene**	**0.31**		ug/m³	0.26	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
100-44-7	Benzyl chloride	ND		ug/m³	0.42	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
75-27-4	Bromodichloromethane	ND		ug/m³	0.54	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
75-25-2	Bromoform	ND		ug/m³	0.83	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
74-83-9	Bromomethane	ND		ug/m³	0.31	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
75-15-0	Carbon disulfide	ND		ug/m³	0.25	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
56-23-5	**Carbon tetrachloride**	**0.40**		ug/m³	0.13	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
108-90-7	Chlorobenzene	ND		ug/m³	0.37	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
75-00-3	Chloroethane	ND		ug/m³	0.21	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
67-66-3	Chloroform	ND		ug/m³	0.39	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
74-87-3	**Chloromethane**	**0.99**		ug/m³	0.17	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
156-59-2	**cis-1,2-Dichloroethylene**	**0.16**		ug/m³	0.079	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.36	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
110-82-7	Cyclohexane	ND		ug/m³	0.28	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
124-48-1	Dibromochloromethane	ND		ug/m³	0.68	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
75-71-8	**Dichlorodifluoromethane**	**1.6**	TO-CCV	ug/m³	0.40	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH

Sample Information

Client Sample ID: **UP-4 AI** **York Sample ID:** **22L1161-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Indoor Ambient Air	December 20, 2022 7:40 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
141-78-6	* Ethyl acetate	ND		ug/m³	0.58	0.802	EPA TO-15 Certifications:	12/23/2022 12:00	12/23/2022 22:08	VH
100-41-4	Ethyl Benzene	ND		ug/m³	0.35	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
87-68-3	Hexachlorobutadiene	ND	CAL-E, TO-LCS -L	ug/m³	0.86	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
67-63-0	**Isopropanol**	**69**		ug/m³	0.39	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
80-62-6	Methyl Methacrylate	ND		ug/m³	0.33	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.29	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
75-09-2	**Methylene chloride**	**1.1**		ug/m³	0.56	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
142-82-5	n-Heptane	ND		ug/m³	0.33	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
110-54-3	n-Hexane	ND		ug/m³	0.28	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
95-47-6	o-Xylene	ND		ug/m³	0.35	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
179601-23-1	p- & m- Xylenes	ND		ug/m³	0.70	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.39	0.802	EPA TO-15 Certifications:	12/23/2022 12:00	12/23/2022 22:08	VH
115-07-1	* Propylene	ND	TO-CCV	ug/m³	0.14	0.802	EPA TO-15 Certifications:	12/23/2022 12:00	12/23/2022 22:08	VH
100-42-5	Styrene	ND		ug/m³	0.34	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
127-18-4	Tetrachloroethylene	ND		ug/m³	0.54	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.47	0.802	EPA TO-15 Certifications:	12/23/2022 12:00	12/23/2022 22:08	VH
108-88-3	**Toluene**	**0.45**		ug/m³	0.30	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.32	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.36	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH

Sample Information

Client Sample ID: **UP-4 AI** **York Sample ID:** **22L1161-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Indoor Ambient Air	December 20, 2022 7:40 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-01-6	Trichloroethylene	ND		ug/m³	0.11	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
75-69-4	**Trichlorofluoromethane (Freon 11)**	**0.81**	TO-CCV	ug/m³	0.45	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
108-05-4	Vinyl acetate	ND		ug/m³	0.28	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
593-60-2	Vinyl bromide	ND	TO-CCV	ug/m³	0.35	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH
75-01-4	Vinyl Chloride	ND		ug/m³	0.10	0.802	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 22:08	VH

Sample Information

Client Sample ID: **AO** **York Sample ID:** **22L1161-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Outdoor Ambient Air	December 20, 2022 7:45 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.64	0.937	EPA TO-15 Certifications:	12/23/2022 12:00	12/23/2022 23:07	VH
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.51	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.64	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.72	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.51	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
75-34-3	1,1-Dichloroethane	ND	TO-LCS-L	ug/m³	0.38	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.093	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.70	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH

Sample Information

Client Sample ID: **AO** **York Sample ID:** **22L1161-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Outdoor Ambient Air	December 20, 2022 7:45 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.46	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.72	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.56	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.38	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.43	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.66	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.46	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
106-99-0	1,3-Butadiene	ND		ug/m³	0.62	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.56	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.43	0.937	EPA TO-15 Certifications:	12/23/2022 12:00	12/23/2022 23:07	VH
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.56	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
123-91-1	1,4-Dioxane	ND		ug/m³	0.68	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
78-93-3	**2-Butanone**	**0.28**		ug/m³	0.28	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
591-78-6	* 2-Hexanone	ND		ug/m³	0.77	0.937	EPA TO-15 Certifications:	12/23/2022 12:00	12/23/2022 23:07	VH
107-05-1	3-Chloropropene	ND		ug/m³	1.5	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.38	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
67-64-1	**Acetone**	**2.9**		ug/m³	0.45	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
107-13-1	Acrylonitrile	ND		ug/m³	0.20	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
71-43-2	**Benzene**	**0.36**		ug/m³	0.30	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH

Sample Information

Client Sample ID: AO

York Sample ID: 22L1161-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Outdoor Ambient Air	December 20, 2022 7:45 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-44-7	Benzyl chloride	ND		ug/m³	0.49	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
75-27-4	Bromodichloromethane	ND		ug/m³	0.63	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
75-25-2	Bromoform	ND		ug/m³	0.97	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
74-83-9	Bromomethane	ND		ug/m³	0.36	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
75-15-0	Carbon disulfide	ND		ug/m³	0.29	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
56-23-5	**Carbon tetrachloride**	**0.47**		ug/m³	0.15	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
108-90-7	Chlorobenzene	ND		ug/m³	0.43	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
75-00-3	Chloroethane	ND		ug/m³	0.25	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
67-66-3	Chloroform	ND		ug/m³	0.46	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
74-87-3	**Chloromethane**	**1.2**		ug/m³	0.19	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.093	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.43	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
110-82-7	Cyclohexane	ND		ug/m³	0.32	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
124-48-1	Dibromochloromethane	ND		ug/m³	0.80	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
75-71-8	**Dichlorodifluoromethane**	**1.9**	TO-CCV	ug/m³	0.46	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
141-78-6	* Ethyl acetate	ND		ug/m³	0.68	0.937	EPA TO-15 Certifications:	12/23/2022 12:00	12/23/2022 23:07	VH
100-41-4	Ethyl Benzene	ND		ug/m³	0.41	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
87-68-3	Hexachlorobutadiene	ND	CAL-E, TO-LCS-L	ug/m³	1.0	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
67-63-0	**Isopropanol**	**1.5**		ug/m³	0.46	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH

Sample Information

Client Sample ID: AO

York Sample ID: 22L1161-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Outdoor Ambient Air	December 20, 2022 7:45 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	Methyl Methacrylate	ND		ug/m³	0.38	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.34	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
75-09-2	**Methylene chloride**	**0.81**		ug/m³	0.65	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
142-82-5	n-Heptane	ND		ug/m³	0.38	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
110-54-3	n-Hexane	ND		ug/m³	0.33	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
95-47-6	o-Xylene	ND		ug/m³	0.41	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
179601-23-1	p- & m- Xylenes	ND		ug/m³	0.81	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.46	0.937	EPA TO-15 Certifications:	12/23/2022 12:00	12/23/2022 23:07	VH
115-07-1	* Propylene	ND	TO-CCV	ug/m³	0.16	0.937	EPA TO-15 Certifications:	12/23/2022 12:00	12/23/2022 23:07	VH
100-42-5	Styrene	ND		ug/m³	0.40	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
127-18-4	Tetrachloroethylene	ND		ug/m³	0.64	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.55	0.937	EPA TO-15 Certifications:	12/23/2022 12:00	12/23/2022 23:07	VH
108-88-3	**Toluene**	**0.46**		ug/m³	0.35	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.37	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.43	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
79-01-6	Trichloroethylene	ND		ug/m³	0.13	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.0**	TO-CCV	ug/m³	0.53	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
108-05-4	Vinyl acetate	ND		ug/m³	0.33	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH
593-60-2	Vinyl bromide	ND	TO-CCV	ug/m³	0.41	0.937	EPA TO-15 Certifications:	12/23/2022 12:00 NELAC-NY12058,NJDEP-Queens	12/23/2022 23:07	VH

Sample Information

Client Sample ID: AO

York Sample ID: 22L1161-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L1161	432 Riverdale Ave Yonkers, NY	Outdoor Ambient Air	December 20, 2022 7:45 am	12/21/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	0.12	0.937	EPA TO-15	12/23/2022 12:00	12/23/2022 23:07	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample and Data Qualifiers Relating to This Work Order

TO-VAC	The final vacuum in the canister was less than -2 inches Hg vacuum. The time integrated sampling may be affected and not reflect proper sampling over the time period. The data user should take note.
TO-LCS-L	The result reported for this compound may be biased low due to its behavior in the analysis batch LCS where it recovered less 70% of the expected value.
TO-IPA	The value for isopropanol is estimated. Dilutions are not conducted for this species as not to preclude actionable analytes by dilution.
TO-CCV	The value reported is ESTIMATED for this compound due to its behavior during continuing calibration verification (>30% Difference from initial calibration).
IS-LO	The internal std associated with this target compound did not meet acceptance criteria (area <50% CCV) at the stated dilution due to matrix effects. Sample was rerun to confirm matrix effects.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
CAL-E	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration (average Rf>20%)
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon current NELAC/TNI Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

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Field Chain-of-Custody Record - AIR

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No. 221161

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: DI Consulting Services	Company:	Company:		RUSH - Next Day
Address: 1291 Old Post Rd. Ulster Park, NY	Address: SAME	Address: SAME	YOUR Project Name: 432 Riverdale Ave. Yonkers, NY	RUSH - Two Day
Phone:	Phone:	Phone:		RUSH - Three Day
Contact: Deborah Thompson	Contact:	Contact:		RUSH - Four Day
E-mail:	E-mail:	E-mail:	YOUR PO#:	Standard (5-7 Day) X

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

Samples Collected by: (print your name above and sign below) Daniel Bellanci

Air Matrix Codes
- AI - Indoor Ambient Air
- AO - Outdoor Amb. Air
- AE - Vapor Extraction Well/ Process Gas/Effluent
- AS - Soil Vapor/Sub-Slab

Samples From
- New York X
- New Jersey
- Connecticut
- Pennsylvania
- Other

Report / EDD Type (circle selections)

Summary Report	CT RCP	Standard Excel EDD
QA Report	CT RCP DQA/DUE	EQuIS (Standard)
NY ASP A Package	NJDEP Reduced Deliv.	NYSDEC EQuIS
NY ASP B Package	NJDKQP	NJDEP SRP HazSite
Other:		

YORK Reg. Comp.
Compared to the following Regulation(s): (please fill in)

Certified Canisters: Batch ✓ Individual ___

Please enter the following REQUIRED Field Data

Reporting Units: ug/m³ X ppbv ___ ppmv X

Sample Identification	Date/Time Sampled	Air Matrix	Canister Vacuum Before Sampling (in Hg)	Canister Vacuum After Sampling (in Hg)	Canister ID	Flow Cont. ID	Analysis Requested
VP-2	12/20/22 7:35	AS	-30	-9	37803	5605	VOCs TO-15
VP-2 AI	7:35	AI	-30	-4	43008	5612	
VP-4	7:40	AS	-30	-5	41648	5607	
VP-4 AI	7:40	AI	-30	-5	20944	5415	
AO	7:45	AO	-30	-6	16456	17178	

Comments:

Detection Limits Required
≤ 1 ug/m³ ___ NYSDEC V1 Limits X
Routine Survey ___ Other ___

Sampling Media
6 Liter Canister X
Tedlar Bag

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
Daniel Bellanci, DYC	12/21/22 10:00		12/21/22 11:16		12/21/22 12:45
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
K Blackman / York	12/21/22 1245	K Blackman / York	12/22/22 1530		
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time
				M Palau / YORK	12/22/22 1340

APPENDIX B

USEPA Low-Flow Groundwater Sampling Procedures

United States Environmental Protection Agency | Office of Research and Development | Office of Solid Waste and Emergency Response | EPA/540/S-95/504 April 1996

Ground Water Issue

LOW-FLOW (MINIMAL DRAWDOWN) GROUND-WATER SAMPLING PROCEDURES

by Robert W. Puls[1] and Michael J. Barcelona[2]

Background

The Regional Superfund Ground Water Forum is a group of ground-water scientists, representing EPA's Regional Superfund Offices, organized to exchange information related to ground-water remediation at Superfund sites. One of the major concerns of the Forum is the sampling of ground water to support site assessment and remedial performance monitoring objectives. This paper is intended to provide background information on the development of low-flow sampling procedures and its application under a variety of hydrogeologic settings. It is hoped that the paper will support the production of standard operating procedures for use by EPA Regional personnel and other environmental professionals engaged in ground-water sampling.

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I. Introduction

The methods and objectives of ground-water sampling to assess water quality have evolved over time. Initially the emphasis was on the assessment of water quality of aquifers as sources of drinking water. Large water-bearing units were identified and sampled in keeping with that objective. These were highly productive aquifers that supplied drinking water via private wells or through public water supply systems. Gradually, with the increasing awareness of subsurface pollution of these water resources, the understanding of complex hydrogeochemical processes which govern the fate and transport of contaminants in the subsurface increased. This increase in understanding was also due to advances in a number of scientific disciplines and improvements in tools used for site characterization and ground-water sampling. Ground-water quality investigations where pollution was detected initially borrowed ideas, methods, and materials for site characterization from the water supply field and water analysis from public health practices. This included the materials and manner in which monitoring wells were installed and the way in which water was brought to the surface, treated, preserved and analyzed. The prevailing conceptual ideas included convenient generalizations of ground-water resources in terms of large and relatively homogeneous hydrologic *units*. With time it became apparent that conventional water supply generalizations of *homogeneity* did not adequately represent field data regarding pollution of these subsurface resources. The important role of *heterogeneity* became increasingly clear not only in geologic terms, but also in terms of complex physical,

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Director

chemical and biological subsurface processes. With greater appreciation of the role of heterogeneity, it became evident that subsurface pollution was ubiquitous and encompassed the unsaturated zone to the deep subsurface and included unconsolidated sediments, fractured rock, and *aquitards* or low-yielding or impermeable formations. Small-scale processes and heterogeneities were shown to be important in identifying contaminant distributions and in controlling water and contaminant flow paths.

It is beyond the scope of this paper to summarize all the advances in the field of ground-water quality investigations and remediation, but two particular issues have bearing on ground-water sampling today: aquifer heterogeneity and colloidal transport. Aquifer heterogeneities affect contaminant flow paths and include variations in geology, geochemistry, hydrology and microbiology. As methods and the tools available for subsurface investigations have become increasingly sophisticated and understanding of the subsurface environment has advanced, there is an awareness that in most cases a primary concern for site investigations is characterization of contaminant flow paths rather than entire aquifers. In fact, in many cases, plume thickness can be less than well screen lengths (e.g., 3-6 m) typically installed at hazardous waste sites to detect and monitor plume movement over time. Small-scale differences have increasingly been shown to be important and there is a general trend toward smaller diameter wells and shorter screens.

The hydrogeochemical significance of colloidal-size particles in subsurface systems has been realized during the past several years (Gschwend and Reynolds, 1987; McCarthy and Zachara, 1989; Puls, 1990; Ryan and Gschwend, 1990). This realization resulted from both field and laboratory studies that showed faster contaminant migration over greater distances and at higher concentrations than flow and transport model predictions would suggest (Buddemeier and Hunt, 1988; Enfield and Bengtsson, 1988; Penrose et al., 1990). Such models typically account for interaction between the mobile aqueous and immobile solid phases, but do not allow for a mobile, reactive solid phase. It is recognition of this third *phase* as a possible means of contaminant transport that has brought increasing attention to the manner in which samples are collected and processed for analysis (Puls et al., 1990; McCarthy and Degueldre, 1993; Backhus et al., 1993; U. S. EPA, 1995). If such a phase is present in sufficient mass, possesses high sorption reactivity, large surface area, and remains stable in suspension, it can serve as an important mechanism to facilitate contaminant transport in many types of subsurface systems.

Colloids are particles that are sufficiently small so that the surface free energy of the particle dominates the bulk free energy. Typically, in ground water, this includes particles with diameters between 1 and 1000 nm. The most commonly observed mobile particles include: secondary clay minerals; hydrous iron, aluminum, and manganese oxides; dissolved and particulate organic materials, and viruses and bacteria. These reactive particles have been shown to be mobile under a variety of conditions in both field studies and laboratory column experiments, and as such need to be included in monitoring programs where identification of the *total* mobile contaminant loading (dissolved + naturally suspended particles) at a site is an objective. To that end, sampling methodologies must be used which do not artificially bias *naturally* suspended particle concentrations.

Currently the most common ground-water purging and sampling methodology is to purge a well using bailers or high speed pumps to remove 3 to 5 casing volumes followed by sample collection. This method can cause adverse impacts on sample quality through collection of samples with high levels of turbidity. This results in the inclusion of otherwise immobile artifactual particles which produce an overestimation of certain analytes of interest (e.g., metals or hydrophobic organic compounds). Numerous documented problems associated with filtration (Danielsson, 1982; Laxen and Chandler, 1982; Horowitz et al., 1992) make this an undesirable method of rectifying the turbidity problem, and include the removal of potentially mobile (contaminant-associated) particles during filtration, thus artificially biasing contaminant concentrations low. Sampling-induced turbidity problems can often be mitigated by using low-flow purging and sampling techniques.

Current subsurface conceptual models have undergone considerable refinement due to the recent development and increased use of field screening tools. So-called hydraulic *push* technologies (e.g., cone penetrometer, Geoprobe®, QED HydroPunch®) enable relatively fast screening site characterization which can then be used to design and install a monitoring well network. Indeed, alternatives to conventional monitoring wells are now being considered for some hydrogeologic settings. The ultimate design of any monitoring system should however be based upon adequate site characterization and be consistent with established monitoring objectives.

If the sampling program objectives include accurate assessment of the magnitude and extent of subsurface contamination over time and/or accurate assessment of subsequent remedial performance, then some information regarding plume delineation in three-dimensional space is necessary prior to monitoring well network design and installation. This can be accomplished with a variety of different tools and equipment ranging from hand-operated augers to screening tools mentioned above and large drilling rigs. Detailed information on ground-water flow velocity, direction, and horizontal and vertical variability are essential baseline data requirements. Detailed soil and geologic data are required prior to and during the installation of sampling points. This includes historical as well as detailed soil and geologic logs which accumulate during the site investigation. The use of borehole geophysical techniques is also recommended. With this information (together with other site characterization data) and a clear understanding of sampling

objectives, then appropriate location, screen length, well diameter, slot size, etc. for the monitoring well network can be decided. This is especially critical for new in situ remedial approaches or natural attenuation assessments at hazardous waste sites.

In general, the overall goal of any ground-water sampling program is to collect water samples with no alteration in water chemistry; analytical data thus obtained may be used for a variety of specific monitoring programs depending on the regulatory requirements. The sampling methodology described in this paper assumes that the monitoring goal is to sample monitoring wells for the presence of contaminants and it is applicable whether mobile colloids are a concern or not and whether the analytes of concern are metals (and metalloids) or organic compounds.

II. Monitoring Objectives and Design Considerations

The following issues are important to consider prior to the design and implementation of any ground-water monitoring program, including those which anticipate using low-flow purging and sampling procedures.

A. Data Quality Objectives (DQOs)

Monitoring objectives include four main types: detection, assessment, corrective-action evaluation and resource evaluation, along with *hybrid* variations such as site-assessments for property transfers and water availability investigations. Monitoring objectives may change as contamination or water quality problems are discovered. However, there are a number of common components of monitoring programs which should be recognized as important regardless of initial objectives. These components include:

1) Development of a conceptual model that incorporates elements of the regional geology to the local geologic framework. The conceptual model development also includes initial site characterization efforts to identify hydrostratigraphic units and likely flow-paths using a minimum number of borings and well completions;

2) Cost-effective and well documented collection of high quality data utilizing simple, accurate, and reproducible techniques; and

3) Refinement of the conceptual model based on supplementary data collection and analysis.

These fundamental components serve many types of monitoring programs and provide a basis for future efforts that evolve in complexity and level of spatial detail as purposes and objectives expand. High quality, reproducible data collection is a common goal regardless of program objectives.

High quality data collection implies data of sufficient accuracy, precision, and completeness (i.e., ratio of valid analytical results to the minimum sample number called for by the program design) to meet the program objectives. Accuracy depends on the correct choice of monitoring tools and procedures to minimize sample and subsurface disturbance from collection to analysis. Precision depends on the repeatability of sampling and analytical protocols. It can be assured or improved by replication of sample analyses including blanks, field/lab standards and reference standards.

B. Sample Representativeness

An important goal of any monitoring program is collection of data that is truly representative of conditions at the site. The term *representativeness* applies to chemical and hydrogeologic data collected via wells, borings, piezometers, geophysical and soil gas measurements, lysimeters, and temporary sampling points. It involves a recognition of the statistical variability of individual subsurface physical properties, and contaminant or major ion concentration levels, while explaining extreme values. Subsurface temporal and spatial variability are facts. Good professional practice seeks to maximize representativeness by using proven accurate and reproducible techniques to define limits on the distribution of measurements collected at a site. However, measures of representativeness are dynamic and are controlled by evolving site characterization and monitoring objectives. An evolutionary site characterization model, as shown in Figure 1, provides a systematic approach to the goal of consistent data collection.

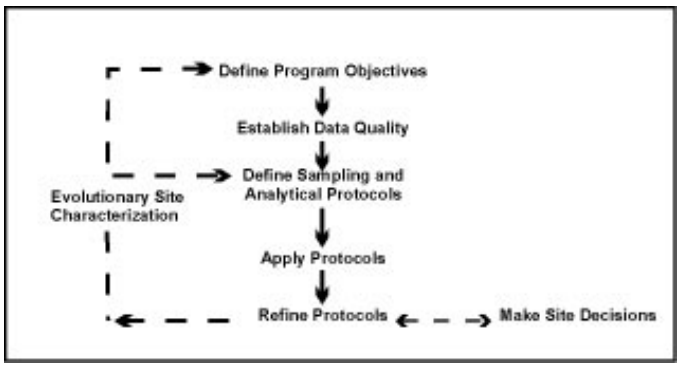

Figure 1. Evolutionary Site Characterization Model

The model emphasizes a recognition of the causes of the variability (e.g., use of inappropriate technology such as using bailers to purge wells; imprecise or operator-dependent methods) and the need to control avoidable errors.

1) Questions of Scale

A sampling plan designed to collect representative samples must take into account the potential scale of changes in site conditions through space and time as well as the chemical associations and behavior of the parameters that are targeted for investigation. In subsurface systems, physical (i.e., aquifer) and chemical properties over time or space are not statistically independent. In fact, samples taken in close proximity (i.e., within distances of a few meters) or within short time periods (i.e., more frequently than monthly) are highly auto-correlated. This means that designs employing high-sampling frequency (e.g., monthly) or dense spatial monitoring designs run the risk of redundant data collection and misleading inferences regarding trends in values that aren't statistically valid. In practice, contaminant detection and assessment monitoring programs rarely suffer these *over-sampling* concerns. In corrective-action evaluation programs, it is also possible that too little data may be collected over space or time. In these cases, false interpretation of the spatial extent of contamination or underestimation of temporal concentration variability may result.

2) Target Parameters

Parameter selection in monitoring program design is most often dictated by the regulatory status of the site. However, background water quality constituents, purging indicator parameters, and contaminants, all represent targets for data collection programs. The tools and procedures used in these programs should be equally rigorous and applicable to all categories of data, since all may be needed to determine or support regulatory action.

C. Sampling Point Design and Construction

Detailed site characterization is central to all decision-making purposes and the basis for this characterization resides in identification of the geologic framework and major hydro-stratigraphic units. Fundamental data for sample point location include: subsurface lithology, head-differences and background geochemical conditions. Each sampling point has a proper use or uses which should be documented at a level which is appropriate for the program's data quality objectives. Individual sampling points may not always be able to fulfill multiple monitoring objectives (e.g., detection, assessment, corrective action).

1) Compatibility with Monitoring Program and Data Quality Objectives

Specifics of sampling point location and design will be dictated by the complexity of subsurface lithology and variability in contaminant and/or geochemical conditions. It should be noted that, regardless of the ground-water sampling approach, few sampling points (e.g., wells, drive-points, screened augers) have zones of influence in excess of a few feet. Therefore, the spatial frequency of sampling points should be carefully selected and designed.

2) Flexibility of Sampling Point Design

In most cases *well-point* diameters in excess of 1 7/8 inches will permit the use of most types of submersible pumping devices for low-flow (minimal drawdown) sampling. It is suggested that *short* (e.g., less than 1.6 m) screens be incorporated into the monitoring design where possible so that comparable results from one device to another might be expected. *Short*, of course, is relative to the degree of vertical water quality variability expected at a site.

3) Equilibration of Sampling Point

Time should be allowed for equilibration of the well or sampling point with the formation after installation. Placement of well or sampling points in the subsurface produces some disturbance of ambient conditions. Drilling techniques (e.g., auger, rotary, etc.) are generally considered to cause more disturbance than *direct-push* technologies. In either case, there may be a period (i.e., days to months) during which water quality near the point may be distinctly different from that in the formation. Proper development of the sampling point and adjacent formation to remove fines created during emplacement will shorten this water quality *recovery* period.

III. Definition of Low-Flow Purging and Sampling

It is generally accepted that water in the well casing is non-representative of the formation water and needs to be purged prior to collection of ground-water samples. However, the water in the screened interval may indeed be representative of the formation, depending upon well construction and site hydrogeology. Wells are purged to some extent for the following reasons: the presence of the air interface at the top of the water column resulting in an oxygen concentration gradient with depth, loss of volatiles up the water column, leaching from or sorption to the casing or filter pack, chemical changes due to clay seals or backfill, and surface infiltration.

Low-flow purging, whether using portable or dedicated systems, should be done using pump-intake located in the middle or slightly above the middle of the screened interval. Placement of the pump too close to the bottom of the well will cause increased entrainment of solids which have collected in the well over time. These particles are present as a result of well development, prior purging and sampling events, and natural colloidal transport and deposition. Therefore, placement of the pump in the middle or toward the top of the screened interval is suggested. Placement of the pump at the top of the water column for sampling is only recommended in unconfined aquifers, screened across the water table, where this is the desired sampling point. Low-

flow purging has the advantage of minimizing mixing between the overlying stagnant casing water and water within the screened interval.

A. Low-Flow Purging and Sampling

Low-flow refers to the velocity with which water enters the pump intake and that is imparted to the formation pore water in the immediate vicinity of the well screen. It does not necessarily refer to the flow rate of water discharged at the surface which can be affected by flow regulators or restrictions. Water level drawdown provides the best indication of the stress imparted by a given flow-rate for a given hydrological situation. The objective is to pump in a manner that minimizes stress (drawdown) to the system to the extent practical taking into account established site sampling objectives. Typically, flow rates on the order of 0.1 - 0.5 L/min are used, however this is dependent on site-specific hydrogeology. Some extremely coarse-textured formations have been successfully sampled in this manner at flow rates to 1 L/min. The effectiveness of using low-flow purging is intimately linked with proper screen location, screen length, and well construction and development techniques. The reestablishment of natural flow paths in both the vertical and horizontal directions is important for correct interpretation of the data. For high resolution sampling needs, screens less than 1 m should be used. Most of the need for purging has been found to be due to passing the sampling device through the overlying casing water which causes mixing of these stagnant waters and the dynamic waters within the screened interval. Additionally, there is disturbance to suspended sediment collected in the bottom of the casing and the displacement of water out into the formation immediately adjacent to the well screen. These disturbances and impacts can be avoided using dedicated sampling equipment, which precludes the need to insert the sampling device prior to purging and sampling.

Isolation of the screened interval water from the overlying stagnant casing water may be accomplished using low-flow minimal drawdown techniques. If the pump intake is located within the screened interval, most of the water pumped will be drawn in directly from the formation with little mixing of casing water or disturbance to the sampling zone. However, if the wells are not constructed and developed properly, zones other than those intended may be sampled. At some sites where geologic heterogeneities are sufficiently different within the screened interval, higher conductivity zones may be preferentially sampled. This is another reason to use shorter screened intervals, especially where high spatial resolution is a sampling objective.

B. Water Quality Indicator Parameters

It is recommended that water quality indicator parameters be used to determine purging needs prior to sample collection in each well. Stabilization of parameters such as pH, specific conductance, dissolved oxygen, oxidation-reduction potential, temperature and turbidity should be used to determine when formation water is accessed during purging. In general, the order of stabilization is pH, temperature, and specific conductance, followed by oxidation-reduction potential, dissolved oxygen and turbidity. Temperature and pH, while commonly used as purging indicators, are actually quite insensitive in distinguishing between formation water and stagnant casing water; nevertheless, these are important parameters for data interpretation purposes and should also be measured. Performance criteria for determination of stabilization should be based on water-level drawdown, pumping rate and equipment specifications for measuring indicator parameters. Instruments are available which utilize in-line flow cells to continuously measure the above parameters.

It is important to establish specific well stabilization criteria and then consistently follow the same methods thereafter, particularly with respect to drawdown, flow rate and sampling device. Generally, the time or purge volume required for parameter stabilization is independent of well depth or well volumes. Dependent variables are well diameter, sampling device, hydrogeochemistry, pump flow rate, and whether the devices are used in a portable or dedicated manner. If the sampling device is already in place (i.e., dedicated sampling systems), then the time and purge volume needed for stabilization is much shorter. Other advantages of dedicated equipment include less purge water for waste disposal, much less decontamination of equipment, less time spent in preparation of sampling as well as time in the field, and more consistency in the sampling approach which probably will translate into less variability in sampling results. The use of dedicated equipment is strongly recommended at wells which will undergo routine sampling over time.

If parameter stabilization criteria are too stringent, then minor oscillations in indicator parameters may cause purging operations to become unnecessarily protracted. It should also be noted that turbidity is a very conservative parameter in terms of stabilization. Turbidity is always the last parameter to stabilize. Excessive purge times are invariably related to the establishment of too stringent turbidity stabilization criteria. It should be noted that natural turbidity levels in ground water may exceed 10 nephelometric turbidity units (NTU).

C. Advantages and Disadvantages of Low-Flow (Minimum Drawdown) Purging

In general, the advantages of low-flow purging include:

- samples which are representative of the *mobile* load of contaminants present (dissolved and colloid-associated);
- minimal disturbance of the sampling point thereby minimizing sampling artifacts;
- less operator variability, greater operator control;

- reduced stress on the formation (minimal drawdown);
- less mixing of stagnant casing water with formation water;
- reduced need for filtration and, therefore, less time required for sampling;
- smaller purging volume which decreases waste disposal costs and sampling time;
- better sample consistency; reduced artificial sample variability.

Some disadvantages of low-flow purging are:

- higher initial capital costs,
- greater set-up time in the field,
- need to transport additional equipment to and from the site,
- increased training needs,
- resistance to change on the part of sampling practitioners,
- concern that new data will indicate a *change in conditions* and trigger an *action*.

IV. Low-Flow (Minimal Drawdown) Sampling Protocols

The following ground-water sampling procedure has evolved over many years of experience in ground-water sampling for organic and inorganic compound determinations and as such summarizes the authors' (and others) experiences to date (Barcelona et al., 1984, 1994; Barcelona and Helfrich, 1986; Puls and Barcelona, 1989; Puls et. al. 1990, 1992; Puls and Powell, 1992; Puls and Paul, 1995). High-quality chemical data collection is essential in ground-water monitoring and site characterization. The primary limitations to the collection of *representative* ground-water samples include: mixing of the stagnant casing and *fresh* screen waters during insertion of the sampling device or ground-water level measurement device; disturbance and resuspension of settled solids at the bottom of the well when using high pumping rates or raising and lowering a pump or bailer; introduction of atmospheric gases or degassing from the water during sample handling and transfer, or inappropriate use of vacuum sampling device, etc.

A. Sampling Recommendations

Water samples should not be taken immediately following well development. Sufficient time should be allowed for the ground-water flow regime in the vicinity of the monitoring well to stabilize and to approach chemical equilibrium with the well construction materials. This lag time will depend on site conditions and methods of installation but often exceeds one week.

Well purging is nearly always necessary to obtain samples of water flowing through the geologic formations in the screened interval. Rather than using a general but arbitrary guideline of purging three casing volumes prior to sampling, it is recommended that an in-line water quality measurement device (e.g., flow-through cell) be used to establish the stabilization time for several parameters (e.g. , pH, specific conductance, redox, dissolved oxygen, turbidity) on a well-specific basis. Data on pumping rate, drawdown, and volume required for parameter stabilization can be used as a guide for conducting subsequent sampling activities.

The following are recommendations to be considered before, during and after sampling:

- use low-flow rates (<0.5 L/min), during both purging and sampling to maintain minimal drawdown in the well;
- maximize tubing wall thickness, minimize tubing length;
- place the sampling device intake at the desired sampling point;
- minimize disturbances of the stagnant water column above the screened interval during water level measurement and sampling device insertion;
- make proper adjustments to stabilize the flow rate as soon as possible;
- monitor water quality indicators during purging;
- collect unfiltered samples to estimate contaminant loading and transport potential in the subsurface system.

B. Equipment Calibration

Prior to sampling, all sampling device and monitoring equipment should be calibrated according to manufacturer's recommendations and the site Quality Assurance Project Plan (QAPP) and Field Sampling Plan (FSP). Calibration of pH should be performed with at least two buffers which bracket the expected range. Dissolved oxygen calibration must be corrected for local barometric pressure readings and elevation.

C. Water Level Measurement and Monitoring

It is recommended that a device be used which will least disturb the water surface in the casing. Well depth should be obtained from the well logs. Measuring to the bottom of the well casing will only cause resuspension of settled solids from the formation and require longer purging times for turbidity equilibration. Measure well depth after sampling is completed. The water level measurement should be taken from a permanent reference point which is surveyed relative to ground elevation.

D. Pump Type

The use of low-flow (e.g., 0.1-0.5 L/min) pumps is suggested for purging and sampling all types of analytes. All pumps have some limitation and these should be investigated with respect to application at a particular site. Bailers are inappropriate devices for low-flow sampling.

1) General Considerations

There are no unusual requirements for ground-water sampling devices when using low-flow, minimal drawdown techniques. The major concern is that the device give consistent results and minimal disturbance of the sample across a range of *low* flow rates (i.e., < 0.5 L/min). Clearly, pumping rates that cause minimal to no drawdown in one well could easily cause *significant* drawdown in another well finished in a less transmissive formation. In this sense, the pump should not cause undue pressure or temperature changes or physical disturbance on the water sample over a reasonable sampling range. Consistency in operation is critical to meet accuracy and precision goals.

2) Advantages and Disadvantages of Sampling Devices

A variety of sampling devices are available for low-flow (minimal drawdown) purging and sampling and include peristaltic pumps, bladder pumps, electrical submersible pumps, and gas-driven pumps. Devices which lend themselves to both dedication and consistent operation at definable low-flow rates are preferred. It is desirable that the pump be easily adjustable and operate reliably at these lower flow rates. The peristaltic pump is limited to shallow applications and can cause degassing resulting in alteration of pH, alkalinity, and some volatiles loss. Gas-driven pumps should be of a type that does not allow the gas to be in direct contact with the sampled fluid.

Clearly, bailers and other *grab* type samplers are ill-suited for low-flow sampling since they will cause repeated disturbance and mixing of *stagnant* water in the casing and the *dynamic* water in the screened interval. Similarly, the use of inertial lift foot-valve type samplers may cause too much disturbance at the point of sampling. Use of these devices also tends to introduce uncontrolled and unacceptable operator variability.

Summaries of advantages and disadvantages of various sampling devices are listed in Herzog et al. (1991), U. S. EPA (1992), Parker (1994) and Thurnblad (1994).

E. Pump Installation

Dedicated sampling devices (left in the well) capable of pumping and sampling are preferred over <u>any</u> other type of device. Any portable sampling device should be slowly and carefully lowered to the middle of the screened interval or slightly above the middle (e.g., 1-1.5 m below the top of a 3 m screen). This is to minimize excessive mixing of the stagnant water in the casing above the screen with the screened interval zone water, and to minimize resuspension of solids which will have collected at the bottom of the well. These two disturbance effects have been shown to directly affect the time required for purging. There also appears to be a direct correlation between size of portable sampling devices relative to the well bore and resulting purge volumes and times. The key is to minimize disturbance of water and solids in the well casing.

F. Filtration

Decisions to filter samples should be dictated by sampling objectives rather than as a *fix* for poor sampling practices, and field-filtering of certain constituents should not be the default. Consideration should be given as to what the application of field-filtration is trying to accomplish. For assessment of truly dissolved (as opposed to operationally *dissolved* [i.e., samples filtered with 0.45 µm filters]) concentrations of major ions and trace metals, 0.1 µm filters are recommended although 0.45 µm filters are normally used for most regulatory programs. Alkalinity samples must also be filtered if significant particulate calcium carbonate is suspected, since this material is likely to impact alkalinity titration results (although filtration itself may alter the CO_2 composition of the sample and, therefore, affect the results).

Although filtration may be appropriate, filtration of a sample may cause a number of unintended changes to occur (e.g. oxidation, aeration) possibly leading to filtration-induced artifacts during sample analysis and uncertainty in the results. Some of these unintended changes may be unavoidable but the factors leading to them must be recognized. Deleterious effects can be minimized by consistent application of certain filtration guidelines. Guidelines should address selection of filter type, media, pore size, etc. in order to identify and minimize potential sources of uncertainty when filtering samples.

In-line filtration is recommended because it provides better consistency through less sample handling, and minimizes sample exposure to the atmosphere. In-line filters are available in both disposable (barrel filters) and non-disposable (in-line filter holder, flat membrane filters) formats and various filter pore sizes (0.1-5.0 µm). Disposable filter cartridges have the advantage of greater sediment handling capacity when compared to traditional membrane filters. Filters must be pre-rinsed following manufacturer's recommendations. If there are no recommendations for rinsing, pass through a minimum of 1 L of ground water following purging and prior to sampling. Once filtration has begun, a filter cake may develop as particles larger than the pore size accumulate on the filter membrane. The result is that the effective pore diameter of the membrane is reduced and particles smaller than the stated pore size are excluded from the filtrate. Possible corrective measures include prefiltering (with larger pore size filters), minimizing particle loads to begin with, and reducing sample volume.

G. Monitoring of Water Level and Water Quality Indicator Parameters

Check water level periodically to monitor drawdown in the well as a guide to flow rate adjustment. The goal is minimal drawdown (<0.1 m) during purging. This goal may be difficult to achieve under some circumstances due to geologic heterogeneities within the screened interval, and may require adjustment based on site-specific conditions and personal experience. In-line water quality indicator parameters should be continuously monitored during purging. The water quality

indicator parameters monitored can include pH, redox potential, conductivity, dissolved oxygen (DO) and turbidity. The last three parameters are often most sensitive. Pumping rate, drawdown, and the time or volume required to obtain stabilization of parameter readings can be used as a future guide to purge the well. Measurements should be taken every three to five minutes if the above suggested rates are used. Stabilization is achieved after all parameters have stabilized for three successive readings. In lieu of measuring all five parameters, a minimum subset would include pH, conductivity, and turbidity or DO. Three successive readings should be within ± 0.1 for pH, ± 3% for conductivity, ± 10 mv for redox potential, and ± 10% for turbidity and DO. Stabilized purge indicator parameter trends are generally obvious and follow either an exponential or asymptotic change to stable values during purging. Dissolved oxygen and turbidity usually require the longest time for stabilization. The above stabilization guidelines are provided for rough estimates based on experience.

H. Sampling, Sample Containers, Preservation and Decontamination

Upon parameter stabilization, sampling can be initiated. If an in-line device is used to monitor water quality parameters, it should be disconnected or bypassed during sample collection. Sampling flow rate may remain at established purge rate or may be adjusted slightly to minimize aeration, bubble formation, turbulent filling of sample bottles, or loss of volatiles due to extended residence time in tubing. Typically, flow rates less than 0.5 L/min are appropriate. The same device should be used for sampling as was used for purging. Sampling should occur in a progression from least to most contaminated well, if this is known. Generally, volatile (e.g., solvents and fuel constituents) and gas sensitive (e.g., Fe^{2+}, CH_4, H_2S/HS^-, alkalinity) parameters should be sampled first. The sequence in which samples for most inorganic parameters are collected is immaterial unless filtered (dissolved) samples are desired. Filtering should be done last and in-line filters should be used as discussed above. During both well purging and sampling, proper protective clothing and equipment must be used based upon the type and level of contaminants present.

The appropriate sample container will be prepared in advance of actual sample collection for the analytes of interest and include sample preservative where necessary. Water samples should be collected directly into this container from the pump tubing.

Immediately after a sample bottle has been filled, it must be preserved as specified in the site (QAPP). Sample preservation requirements are based on the analyses being performed (use site QAPP, FSP, RCRA guidance document [U. S. EPA, 1992] or EPA SW-846 [U. S. EPA, 1982]). It may be advisable to add preservatives to sample bottles in a controlled setting prior to entering the field in order to reduce the chances of improperly preserving sample bottles or introducing field contaminants into a sample bottle while adding the preservatives.

The preservatives should be transferred from the chemical bottle to the sample container using a disposable polyethylene pipet and the disposable pipet should be used only once and then discarded.

After a sample container has been filled with ground water, a Teflon™ (or tin)-lined cap is screwed on tightly to prevent the container from leaking. A sample label is filled out as specified in the FSP. The samples should be stored inverted at 4°C.

Specific decontamination protocols for sampling devices are dependent to some extent on the type of device used and the type of contaminants encountered. Refer to the site QAPP and FSP for specific requirements.

I. Blanks

The following blanks should be collected:

(1) field blank: one field blank should be collected from each source water (distilled/deionized water) used for sampling equipment decontamination or for assisting well development procedures.

(2) equipment blank: one equipment blank should be taken prior to the commencement of field work, from each set of sampling equipment to be used for that day. Refer to site QAPP or FSP for specific requirements.

(3) trip blank: a trip blank is required to accompany each volatile sample shipment. These blanks are prepared in the laboratory by filling a 40-mL volatile organic analysis (VOA) bottle with distilled/deionized water.

V. Low-Permeability Formations and Fractured Rock

The overall sampling program goals or sampling objectives will drive how the sampling points are located, installed, and choice of sampling device. Likewise, site-specific hydrogeologic factors will affect these decisions. Sites with very low permeability formations or fractures causing discrete flow channels may require a unique monitoring approach. Unlike water supply wells, wells installed for ground-water quality assessment and restoration programs are often installed in low water-yielding settings (e.g., clays, silts). Alternative types of sampling points and sampling methods are often needed in these types of environments, because low-permeability settings may require extremely low-flow purging (<0.1 L/min) and may be technology-limited. Where devices are not readily available to pump at such low flow rates, the primary consideration is to avoid dewatering of

the well screen. This may require repeated recovery of the water during purging while leaving the pump in place within the well screen.

Use of low-flow techniques may be impractical in these settings, depending upon the water recharge rates. The sampler and the end-user of data collected from such wells need to understand the limitations of the data collected; i.e., a strong potential for underestimation of actual contaminant concentrations for volatile organics, potential false negatives for filtered metals and potential false positives for unfiltered metals. It is suggested that comparisons be made between samples recovered using low-flow purging techniques and samples recovered using passive sampling techniques (i.e., two sets of samples). Passive sample collection would essentially entail acquisition of the sample with no or very little purging using a dedicated sampling system installed within the screened interval or a passive sample collection device.

A. Low-Permeability Formations (<0.1 L/min recharge)

1. Low-Flow Purging and Sampling with Pumps

a. "portable or non-dedicated mode" - Lower the pump (one capable of pumping at <0.1 L/min) to mid-screen or slightly above and set in place for minimum of 48 hours (to lessen purge volume requirements). After 48 hours, use procedures listed in Part IV above regarding monitoring water quality parameters for stabilization, etc., but do not dewater the screen. If excessive drawdown and slow recovery is a problem, then alternate approaches such as those listed below may be better.

b. "dedicated mode" - Set the pump as above at least a week prior to sampling; that is, operate in a dedicated pump mode. With this approach significant reductions in purge volume should be realized. Water quality parameters should stabilize quite rapidly due to less disturbance of the sampling zone.

2. Passive Sample Collection

Passive sampling collection requires insertion of the device into the screened interval for a sufficient time period to allow flow and sample equilibration before extraction for analysis. Conceptually, the extraction of water from low yielding formations seems more akin to the collection of water from the unsaturated zone and passive sampling techniques may be more appropriate in terms of obtaining "representative" samples. Satisfying usual sample volume requirements is typically a problem with this approach and some latitude will be needed on the part of regulatory entities to achieve sampling objectives.

B. Fractured Rock

In fractured rock formations, a low-flow to zero purging approach using pumps in conjunction with packers to isolate the sampling zone in the borehole is suggested. Passive multi-layer sampling devices may also provide the most "representative" samples. It is imperative in these settings to identify flow paths or water-producing fractures prior to sampling using tools such as borehole flowmeters and/or other geophysical tools.

After identification of water-bearing fractures, install packer(s) and pump assembly for sample collection using low-flow sampling in "dedicated mode" or use a passive sampling device which can isolate the identified water-bearing fractures.

VI. Documentation

The usual practices for documenting the sampling event should be used for low-flow purging and sampling techniques. This should include, at a minimum: information on the conduct of purging operations (flow-rate, drawdown, water-quality parameter values, volumes extracted and times for measurements), field instrument calibration data, water sampling forms and chain of custody forms. See Figures 2 and 3 and "Ground Water Sampling Workshop -- A Workshop Summary" (U. S. EPA, 1995) for example forms and other documentation suggestions and information. This information coupled with laboratory analytical data and validation data are needed to judge the "useability" of the sampling data.

VII. Notice

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Figure 2. **Ground Water Sampling Log**

Project _____ **Site** _____ **Well No.** _____ **Date** _____
Well Depth _____ **Screen Length** _____ **Well Diameter** _____ **Casing Type** _____
Sampling Device _____ **Tubing type** _____ **Water Level** _____
Measuring Point _____ **Other Infor** _____

_____

Sampling Personnel _____

Time	pH	Temp	Cond.	Dis.O_2	Turb.	[ ]Conc			Notes

Type of Samples Collected

_____

Information: 2 in = 617 ml/ft, 4 in = 2470 ml/ft: $Vol_{cyl} = \pi r^2 h$, $Vol_{sphere} = 4/3\pi r^3$

Figure 3. **Ground Water Sampling Log** (with automatic data logging for most water quality parameters)

Project _____ **Site** _____ **Well No.** _____ **Date** _____
Well Depth _____ **Screen Length** _____ **Well Diameter** _____ **Casing Type** _____
Sampling Device _____ **Tubing type** _____ **Water Level** _____
Measuring Point _____ **Other Infor** _____

_____

Sampling Personnel _____

Time	Pump Rate	Turbidity	Alkalinity	[ ] Conc	Notes

Type of Samples Collected

_____

Information: 2 in = 617 ml/ft, 4 in = 2470 ml/ft: $Vol_{cyl} = \pi r^2 h$, $Vol_{sphere} = 4/3\pi r^3$

APPENDIX C

NYSDOH Indoor Air Quality Questionnaire and Building Inventory

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NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name _____ Date/Time Prepared _____

Preparer's Affiliation _____ Phone No._____

Purpose of Investigation_____

1. OCCUPANT:

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y / N

Last Name: _____First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors_____ Building age_____

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

_____

_____

_____

Airflow near source

_____

_____

_____

Outdoor air infiltration

_____

_____

_____

Infiltration into air ducts

_____

_____

_____

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: _____(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

_____

_____

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: _____

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other_____
Air conditioning:	Central Air	Window units	Open Windows	None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

_____

_____

_____

_____

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	_____
1st Floor	_____
2nd Floor	_____
3rd Floor	_____
4th Floor	_____

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / N

b. Does the garage have a separate heating unit? Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA Please specify_____

d. Has the building ever had a fire? Y / N When?_____

e. Is a kerosene or unvented gas space heater present? Y / N Where? _____

f. Is there a workshop or hobby/craft area? Y / N Where & Type? _____

g. Is there smoking in the building? Y / N How frequently? _____

h. Have cleaning products been used recently? Y / N When & Type? _____

i. Have cosmetic products been used recently? Y / N When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / N Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / N Where & When? _____

l. Have air fresheners been used recently? Y / N When & Type? _____

m. Is there a kitchen exhaust fan? Y / N If yes, where vented?_____

n. Is there a bathroom exhaust fan? Y / N If yes, where vented?_____

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When & Type?_____

Are there odors in the building? Y / N
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply:	Public Water	Drilled Well	Driven Well	Dug Well	Other: _____
Sewage Disposal:	Public Sewer	Septic Tank	Leach Field	Dry Well	Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

First Floor:

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: _____

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y / N

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

APPENDIX D

Health and Safety Plan (HASP)

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434-440 RIVERDALE AVENUE
YONKERS, NEW YORK 10705
NYSDEC P-SITE#360197

REMEDIAL INVESTIGATION WORK PLAN

HEALTH & SAFETY PLAN

SUBMITTED TO:

New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor,
Albany, NY 12233-7014

PREPARED FOR:

New York State Department of Environmental Conservation
Division of Environmental Remediation
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PWGC Project Number: FAY2101

AUGUST 2023

REMEDIAL INVESTIGATION WORK PLAN

HEALTH & SAFETY PLAN
434-440 RIVERDALE AVENUE, YONKERS, NEW YORK

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1.0 STATEMENT OF COMMITMENT

On-site employees have the potential to be exposed to chemical contaminants of concern identified within the soil/fill during the planned activities to be performed as part of this scope of work. P.W. Grosser Consulting, Inc. (PWGC's) policy is to minimize the possibility of work-related exposure through awareness and qualified supervision, health and safety training, use of appropriate personal protective equipment (PPE), and the following activity specific safety protocols contained in this Health and Safety Plan (HASP). PWGC has established a guidance program to implement this policy in a manner that protects personnel to the maximum reasonable extent.

This Health and Safety Plan (HASP) has been prepared to ensure that workers are not exposed to chemical, biological, and physical hazards during the planned Remedial Investigation (RI) to be performed at 434-440 Riverdale Avenue, Yonkers, New York. PWGC's policy is to minimize the possibility of work-related exposure through awareness and qualified supervision, health and safety training, use of appropriate personal protective equipment, and the following activity specific safety protocols contained in this HASP. PWGC has established a guidance program to implement this policy in a manner that protects personnel to the maximum reasonable extent.

This HASP, which applies to persons present at the site actually or potentially exposed to safety or health hazards, describes emergency response procedures for actual and potential physical, biological and chemical hazards. This HASP is also intended to inform and guide personnel entering the work area. Persons are to acknowledge that they understand the potential hazards and the contents of this Health and Safety policy.

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2.0 INTRODUCTION

This document describes the health and safety guidelines developed by PWGC at the request of the New York State Department of Environmental Conservation (NYSDEC) for the proposed site remedial investigation to be performed at the site to protect on-site personnel, visitors, and the public from exposure to hazardous materials or wastes in accordance with the Occupational Safety and Health Administration (OSHA) 29 code of federal regulations (CFR) Part 1910.120 Hazardous Waste Operations and Emergency Response Final rule, this HASP, including the attachments, addresses safety and health hazards relating to each phase of site operations and is based on the best information available. The HASP may be revised by PWGC at the request of the NYSDECupon receipt of new information regarding site conditions. Changes will be documented by written amendments.

2.1. Site Safety Plan Acceptance, Acknowledgement, and Amendments

The environmental site safety officer is responsible for informing personnel entering the work area of the contents of this plan and ensuring that each person signs the safety plan acknowledging the on-site hazards and procedures required to minimize exposure to adverse effects of these hazards. A copy of the Site Safety Plan Acknowledgement Form is in **Appendix A**.

Site conditions may warrant an amendment to the HASP. Amendments to the HASP are acknowledged by completing Site Safety Amendment Form in **Appendix B**.

2.2. Safety Meetings

The environmental site safety officer will hold safety (tailgate or tool box) meetings to ensure that on-site personnel understand the site conditions and operating procedures and to address safety questions and concerns. Meeting minutes and attendance will be recorded. Project staff will discuss and remedy health and safety issues at these meetings.

2.3. Key Personnel – Roles and Responsibilities

The following key personnel are planned for this project:

- Environmental Project Manager
- Environmental Site Safety Officer

The environmental project manager is responsible for overall project administration and, with guidance from the environmental site safety officer, for supervising the implementation of this HASP. The site safety officer will conduct (tailgate or tool box) safety meetings at the project site and oversee daily safety issues. Each subcontractor and supplier (defined as an OSHA employer) is also responsible for the health and safety of its employees. If there is any dispute about health and safety or project activities, on-site personnel will attempt to resolve the issue. If the issue cannot be resolved at the site, then the environmental project manager will be consulted.

The environmental site safety officer is responsible for the following:

1. Educating personnel about information in this HASP and other safety requirements to be observed during site operations, including, but not limited to, designation of work zones and levels of protection.
2. Coordinating site safety decisions with the environmental project manager.

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3. Monitoring the condition and status of known on-site hazards specified in this HASP.
4. Maintaining the work zone entry/exit log and site entry/exit log.
5. Maintaining records of safety problems, corrective measures and documentation of chemical exposures (the environmental site safety officer will document these conditions in a bound notebook and maintain a copy of the notebook on-site).

The person who observes safety concerns and potential hazards that have not been addressed in the safety meetings should immediately report their observations/concerns to the environmental site safety officer or appropriate key personnel.

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3.0 SITE BACKGROUND AND SCOPE OF WORK

The Site is located at 434 Riverdale Avenue, Yonkers, New York. The Site is located within the City of Yonkers and Westchester County. The Site is identified as Tax Map parcel number 1.-132-14.16. The Site is an irregularly shaped parcel located on the northeast corner of the intersection of Riverdale Avenue and St. Andrews Place. The Site is located in a mixed-use commercial and residential area. The Site is currently improved with a commercial building housing several businesses. The northernmost commercial space, 434 Riverdale Avenue, was occupied by a dry cleaner from approximately 2000 through 2014.

The space has remained unoccupied since that time; however, it has been rented to a business and used solely for storing used household appliances. The former dry-cleaning equipment was historically located toward the front of the space, nearest to Riverdale Avenue. There are no records or accounts of where the former drycleaning waste was disposed of.

According to an initial Site Characterization Work Plan prepared by Eastern, the Site was developed with the existing one-story building sometime prior to 1942. Historic uses of the Site include the following: dry cleaning operations, a laundromat, pharmacies, a 99-cent store, grocery stores, restaurants, offices, nail salons, a stationary store, a housewares shop, a peddler, and a cleaning service. The northern portion of the Site (434 Riverdale Avenue) operated as a dry cleaner for at least 14 years, from 2000-2014. NYSDEC has designated the Site as a potential site (P-Site), indicating that the available information suggests the presence of hazardous waste at the Site and that a site characterization is needed. An Administrative Settlement (ACO) between Fay Realty and NYSDEC was executed in July 2020 and filed as Index # CO3-20191223-299. Requirements contained within the ACO included the preparation of a SCWP and payment of past and future costs incurred by NYSDEC in connection with the Site.

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4.0 POTENTIAL HAZARDS OF THE SITE

This section presents an assessment of the chemical, biological, and physical hazards that may be encountered. Additional information can be found in **Appendix C – Material Safety Data Sheets.**

4.1. Chemical Hazards

The Site Characterization at the subject site and other historic investigations throughout the five boroughs of New York City have indicated the likely presence of historic urban fill material, which contains slightly elevated concentrations of VOCs, SVOCs and metals. Historic site usage indicative of the likely presence of these contaminants was also identified in the Site Characterization Report. These compounds may present an occupational exposure hazard during Site operations, if disturbed. Soil disturbance activities are anticipated to include the advancement of soil borings and the installation of temporary monitoring wells and soil vapor sampling implants during the site investigation.

The chemicals identified above may have an effect on the central nervous system, respiratory system and may cause chronic liver and kidney damage. Acute exposure symptoms may include headache, dizziness, nausea, diarrhea and skin and eye irritation. Specific information on the chemicals identified at the Site can be found on the Material Safety Data Sheets (MSDS) in **Appendix C**.

4.1.1. Additional Chemical Hazards

There is the potential to encounter solvents related to VOCs, including chlorinated solvents, and SVOCs. Additionally, metals are commonly found in subsurface soils and soil vapor. For these reasons, specific information regarding these chemicals can be found in the Material Safety Data Sheets in **Appendix C.**

4.2. Biological Hazards

During the project, there is potential for workers to encounter biological hazards such as animals, insects and plants.

4.2.1. Animals

The Site is in a predominantly developed area. It is possible that dogs, cats, rats, and mice may be present. Workers shall use discretion and avoid all contact with animals.

4.2.2. Insects

Insects, such as mosquitoes, ticks, bees and wasps may be present during certain times of the year. Workers will be encouraged to wear appropriate repellents and PPE, if deemed necessary, when working in areas where insects are expected to be present.

4.3. Physical Hazards

During the project, there is potential for workers to come into contact with physical hazards such as heat stress, cold stress, noise, fire and explosions.

4.3.1. Temperature Extremes

Heat stress is a significant potential hazard, which is greatly exacerbated with the use of PPE in hot environments. The potential hazards of working in hot environments include dehydration, cramps, heat rash, heat exhaustion, and heat stroke.

At certain times of the year, workers may be exposed to the hazards of working in cold environments. Potential hazards in cold environments include frostbite, trench foot or immersion foot, hypothermia as well as slippery surfaces, brittle equipment, and poor judgment.

4.3.2. Steam, Heat and Splashing

Exposure to steam/heat/splashing hazards can occur during steam cleaning activities. Splashing can also occur during well development and sampling activities. Exposure to steam/heat/splashing can result in scalding/burns, eye injury, and puncture wounds.

4.3.3. Noise

Noise is a potential hazard associated with the operation of heavy equipment, drill rigs, pumps and engines. Workers will wear hearing protection while in the work zone when these types of machinery are operating.

4.3.4. Fire and Explosion

When conducting excavation or drilling activities, the opportunity of encountering fire and explosion hazards may exist from encountering underground utilities, from the use of diesel engine equipment, propane, liquefied petroleum gas and other potential ignition sources. During dry periods there is an increased chance of forest and brush fires starting at the job site. If these conditions occur no smoking will be permitted at the site and all operations involving potential ignition sources will be monitored continuously (fire watch).

4.3.5. Manual Lifting/Material Handling

Manual lifting of heavy objects may be required. Failure to follow proper lifting technique can result in back injuries and strains. Back injuries are a serious concern as they are the most common work place injury, often resulting in lost or restricted work time, and long treatment and recovery periods.

4.3.6. Slips, Trips and Falls

Working in and around the site will pose slip, trip and fall hazards due to slippery surfaces that may be oil covered, or from rough terrain, surfaces that are steep inclines, surfaced debris, or surfaces which are wet from rain or ice. Falls may result in twisted ankles, broken bones, head trauma or back injuries.

4.3.7. Heavy Equipment Operation

Drilling equipment will be utilized for the installation of soil borings and groundwater monitoring wells and an excavator/backhoe may be used to excavate where required. Working with or near heavy equipment poses many potential hazards, including electrocution, fire/explosion, being struck by or against, or pinched/caught/crushed by, and can result in serious physical harm.

4.3.8. Electrocution

Encountering underground utilities may pose electrical hazards to workers. Additionally, overhead electrical lines can be a concern during drilling operations. Potential adverse effects of electrical hazards include burns and electrocution, which could result in death.

5.0 PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment (PPE) shall be selected in accordance with OSHA 29 CFR 1910.120(c), (g), and 1910.132. Protective equipment shall be NIOSH approved; head protection shall conform to 1910.135; eye and face protection shall conform to 1910.133; and foot protection shall conform to 1910.136. **It is anticipated that work will be performed in Level D PPE.**

5.1. Level D

Level D PPE consists of:

- standard work uniform, coveralls, or tyvek, as needed;
- steel toe work boots;
- hard hat;
- gloves, as needed;
- safety glasses; and
- hearing protection.

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6.0 AIR MONITORING

Air monitoring will be performed for protection for on-site workers and the downwind community (i.e., off-site receptors including residences, businesses, and on-site workers not directly involved in the remedial investigation work) from potential airborne contaminant releases resulting from remedial activities at the site. Air monitoring will be used to help to confirm that the remedial investigation work will not spread contamination off-site through the air. The primary concerns for this site are dust particulates and VOCs. Site monitoring with a photo-ionization detector (PID) and particulate dust/aerosol meter will be performed during any invasive activities.

Real-time monitoring for dust and VOCs will be conducted both within the work area, and along the site perimeter, during intrusive activities such as excavation and drilling activities.

Detailed information on the types, frequency and location of real-time monitoring and community air monitoring requirements are provided in the Community Air Monitoring Plan prepared for this project.

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7.0 TRAINING & MEDICAL SURVEILLANCE

Site workers that have the potential of coming in contact with site contaminants will have the following training and medical surveillance.

7.1. Medical Surveillance

Site field personnel directly involved with site activities whom may come in contact with site contaminants are required to have passed a complete medical surveillance examination in accordance with 29 CFR 1910.120(f).

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8.0 CONTINGENCY PLAN/EMERGENCY RESPONSE PLAN

Site personnel should be prepared in the event of an emergency. Emergencies can take many forms: illnesses, injuries, chemical exposure, fires, explosions, spills, leaks, releases of harmful contaminants, or sudden changes in the weather.

Emergency telephone numbers and a map to the hospital (**Figure 1**) will be maintained in the field office. Site personnel should be familiar with the emergency procedures, and the locations of site safety, first aid, and communication equipment.

8.1. Emergency Equipment On-Site

Private telephones: Site personnel.
Emergency Alarms: On-site vehicle horns.
First aid kits: On-site, in vehicles or office.

8.2. Emergency Telephone Numbers

Nearest Hospital:

NYC Health + Hospitals/Woodhull
3424 Kossuth Avenue
Bronx, New York 10467
1-718-519-5000

Table 6-1 – Emergency Telephone Numbers

Contact	Firm or Agency	Telephone Number
Police	-	911
Fire	-	911
Ambulance	-	911
Environmental Project Manager	Michael Gaul PWGC	(516)-852-7140
Environmental Health & Safety Officer	TBD PWGC	TBD
NYSDEC Site Contact	Mark Domaracki	(518) 402-9832
New York Poison Control	-	(800)-222-1222
Center for Disease Control	-	(800)-311-3435

8.3. Personnel Responsibilities During and Emergency

The environmental project manager is primarily responsible for responding to and correcting any emergency situations associated with environmental safety. However, in the absence of the environmental project manager, the environmental site safety officer shall act as the environmental project manager's on-site designee and perform the following tasks:

- Take appropriate measures to protect personnel; and
- Determine the cause of incident and make recommendations to prevent recurrence.

8.4. Medical Emergencies

A person who becomes ill or injured, first aid will be administered while waiting for an ambulance or paramedics. A Field Accident Report (**Appendix D**) will be filled out for any injury.

A person transporting an injured/exposed person to a clinic or hospital for treatment will take the directions to the hospital and information on the chemical(s) to which they may have been exposed.

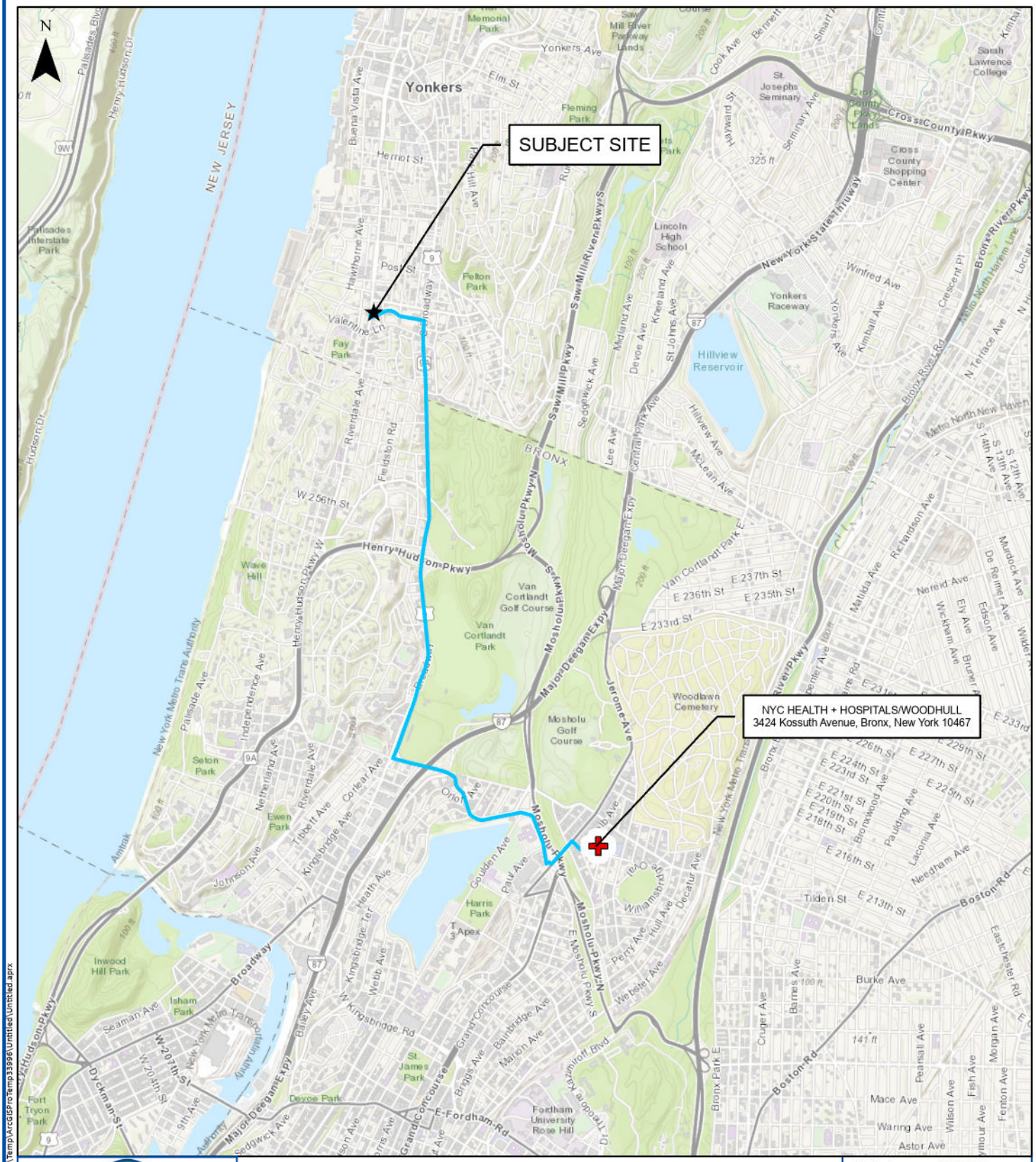
8.5. Fire or Explosion

In the event of a fire or explosion, the local fire department will be summoned immediately. The site safety officer or his designated alternate will advise the fire commander of the location, nature and identification of the hazardous materials on-site. If it is safe to do so, site personnel may use firefighting equipment available on site, or, remove or isolate flammable or other hazardous materials that may contribute to the fire.

8.6. Evacuation Routes

Evacuation routes established by work area locations for each site will be reviewed prior to commencing site operations. As the work areas change, the evacuation routes will be altered accordingly, and the new route will be reviewed.

FIGURES



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HOSPITAL ROUTE MAP

434-440 RIVERDALE AVE
YONKERS, NEW YORK

0 ½ 1 1½ 2 Miles

Project:	FAY 2101
Date:	8/1/2023
Designed by:	MG
Drawn by:	JM
Approved by:	MG
Figure No:	1

Document Path: C:\Users\jmacharie\AppData\Local\Temp\ArcGISProTemp33996\Untitled\Untitled.aprx

APPENDIX A

SITE SAFETY PLAN ACKNOWLEDGEMENT FORM

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SITE SAFETY PLAN ACKNOWLEDGEMENT FORM

I have been informed and understand the procedures set forth in the HASP and amendments:

Printed Name	Signature	Representing	Date

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APPENDIX B

SITE SAFETY AMENDMENT FORM

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SITE SAFETY AMENDMENT FORM

Site Safety Plan Amendment #

_____

Site Name:

_____

Reason for Amendment:

_____
_____
_____
_____
_____

Alternative Procedures:

_____
_____
_____
_____
_____

Required Changes in PPE:

_____
_____
_____
_____
_____

_____ _____

Project Superintendent Date

_____ _____

Health & Safety Consultant Date

_____ _____

Site Safety Officer Date

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APPENDIX C

MATERIAL SAFETY DATA SHEETS

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SAFETY DATA SHEET

Creation Date 03-Feb-2010 **Revision Date** 24-Dec-2021 **Revision Number** 3

1. Identification

Product Name **Trichloroethylene**

Cat No. : **T340-4; T341-4; T341-20; T341-500; T403-4**

CAS No 79-01-6
Synonyms Trichloroethene (Stabilized/Technical/Electronic/Certified ACS)

Recommended Use Laboratory chemicals.
Uses advised against .

Details of the supplier of the safety data sheet

Company
Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Emergency Telephone Number CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 001-703-527-3887

2. Hazard(s) identification

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Skin Sensitization	Category 1
Germ Cell Mutagenicity	Category 2
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Central nervous system (CNS).	
Specific target organ toxicity - (repeated exposure)	Category 2
Target Organs - Kidney, Liver, Heart, spleen, Blood.	

Label Elements

Signal Word

Danger

Hazard Statements
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
May cause drowsiness or dizziness
Suspected of causing genetic defects
May cause cancer
May cause damage to organs through prolonged or repeated exposure

Precautionary Statements
Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Contaminated work clothing should not be allowed out of the workplace
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wear protective gloves/protective clothing/eye protection/face protection
Response
IF exposed or concerned: Get medical attention/advice
Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Skin
IF ON SKIN: Wash with plenty of soap and water
Take off contaminated clothing and wash before reuse
If skin irritation or rash occurs: Get medical advice/attention
Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed
Disposal
Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HNOC)
Harmful to aquatic life with long lasting effects
WARNING. Cancer and Reproductive Harm - https://www.p65warnings.ca.gov/.

3. Composition/Information on Ingredients

Component	CAS No	Weight %
Trichloroethylene	79-01-6	>95

4. First-aid measures

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Eye Contact	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
Ingestion	Do NOT induce vomiting. Call a physician or poison control center immediately.
Most important symptoms and effects	May cause allergic skin reaction. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing
Notes to Physician	Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media	Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.
Unsuitable Extinguishing Media	No information available
Flash Point	No information available
Method -	No information available
Autoignition Temperature	410 °C / 770 °F
Explosion Limits	
Upper	44.8 vol %
Lower	8 vol %
Oxidizing Properties	Not oxidising
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical
Thermal decomposition can lead to release of irritating gases and vapors. Containers may explode when heated. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products
Chlorine. Phosgene. Carbon monoxide (CO). Carbon dioxide (CO_2). Hydrogen chloride gas.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA

Health	Flammability	Instability	Physical hazards
2	1	0	N/A

6. Accidental release measures

Personal Precautions	Ensure adequate ventilation. Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.
Environmental Precautions	Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Up Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7. Handling and storage

Handling Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.

Storage. Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from light. Do not store in aluminum containers. Incompatible Materials. Strong oxidizing agents. Strong bases. Amines. Alkali metals. Metals. .

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Trichloroethylene	TWA: 10 ppm STEL: 25 ppm	(Vacated) TWA: 50 ppm (Vacated) TWA: 270 mg/m³ Ceiling: 200 ppm (Vacated) STEL: 200 ppm (Vacated) STEL: 1080 mg/m³ TWA: 100 ppm	IDLH: 1000 ppm	TWA: 10 ppm STEL: 25 ppm

Legend

ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures Use only under a chemical fume hood. Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	Characteristic
Odor Threshold	No information available
pH	No information available
Melting Point/Range	-85 °C / -121 °F
Boiling Point/Range	87 °C / 188.6 °F
Flash Point	No information available
Evaporation Rate	0.69 (Carbon Tetrachloride = 1.0)

Flammability (solid,gas)	Not applicable
Flammability or explosive limits	
Upper	44.8 vol %
Lower	8 vol %
Vapor Pressure	77.3 mbar @ 20 °C
Vapor Density	4.5 (Air = 1.0)
Specific Gravity	1.460
Solubility	Insoluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	410 °C / 770 °F
Decomposition Temperature	> 120°C
Viscosity	0.55 mPa.s (25°C)
Molecular Formula	C2 H Cl3
Molecular Weight	131.39

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Light sensitive.

Conditions to Avoid Incompatible products. Excess heat. Exposure to light. Exposure to moist air or water.

Incompatible Materials Strong oxidizing agents, Strong bases, Amines, Alkali metals, Metals,

Hazardous Decomposition Products Chlorine, Phosgene, Carbon monoxide (CO), Carbon dioxide (CO_2), Hydrogen chloride gas

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Trichloroethylene	LD50 = 4920 mg/kg (Rat)	LD50 = 29000 mg/kg (Rabbit)	LC50 = 26 mg/L (Rat) 4 h

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Irritating to eyes and skin

Sensitization May cause sensitization by skin contact

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Trichloroethylene	79-01-6	Group 1	Known	A2	X	A2

IARC (International Agency for Research on Cancer)

IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 2A - Probably Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program)

NTP: (National Toxicity Program)
Known - Known Carcinogen
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

ACGIH: (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen
ACGIH: (American Conference of Governmental Industrial Hygienists)

Mutagenic Effects Mutagenic effects have occurred in humans.

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Central nervous system (CNS)
STOT - repeated exposure Kidney Liver Heart spleen Blood

Aspiration hazard No information available

Symptoms / effects,both acute and delayed Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not empty into drains. The product contains following substances which are hazardous for the environment. Contains a substance which is:. Harmful to aquatic organisms. Toxic to aquatic organisms.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Trichloroethylene	EC50: = 175 mg/L, 96h (Pseudokirchneriella subcapitata) EC50: = 450 mg/L, 96h (Desmodesmus subspicatus)	LC50: 31.4 - 71.8 mg/L, 96h flow-through (Pimephales promelas) LC50: 39 - 54 mg/L, 96h static (Lepomis macrochirus)	EC50 = 0.81 mg/L 24 h EC50 = 115 mg/L 10 min EC50 = 190 mg/L 15 min EC50 = 235 mg/L 24 h EC50 = 410 mg/L 24 h EC50 = 975 mg/L 5 min	EC50: = 2.2 mg/L, 48h (Daphnia magna)

Persistence and Degradability Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its volatility.

Component	log Pow
Trichloroethylene	2.4

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Trichloroethylene - 79-01-6	U228	-

14. Transport information

DOT

UN-No UN1710
Proper Shipping Name TRICHLOROETHYLENE
Hazard Class 6.1

Packing Group III

TDG

UN-No UN1710
Proper Shipping Name TRICHLOROETHYLENE
Hazard Class 6.1
Packing Group III

IATA

UN-No UN1710
Proper Shipping Name TRICHLOROETHYLENE
Hazard Class 6.1
Packing Group III

IMDG/IMO

UN-No UN1710
Proper Shipping Name TRICHLOROETHYLENE
Hazard Class 6.1
Packing Group III

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Trichloroethylene	79-01-6	X	ACTIVE	R;S

Legend:
TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)
X - Listed
'-' - Not Listed
R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

TSCA 12(b) - Notices of Export

Component	CAS No	**TSCA 12(b)** - Notices of Export
Trichloroethylene	79-01-6	Section 5 Section 6

International Inventories
Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Trichloroethylene	79-01-6	X	-	201-167-4	X	X	X	X	X	X

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313

Component	CAS No	Weight %	SARA 313 - Threshold Values %
Trichloroethylene	79-01-6	>95	0.1

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Trichloroethylene	X	100 lb	X	X

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors

Trichloroethylene	X		-

OSHA - Occupational Safety and Health Administration: Not applicable

CERCLA: This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Trichloroethylene	100 lb 1 lb	-

California Proposition 65: This product contains the following Proposition 65 chemicals.

Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
Trichloroethylene	79-01-6	Carcinogen Developmental Male Reproductive	14 µg/day 50 µg/day	Developmental Carcinogen

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Trichloroethylene	X	X	X	X	X

U.S. Department of Transportation

Reportable Quantity (RQ):	Y
DOT Marine Pollutant	N
DOT Severe Marine Pollutant	N

U.S. Department of Homeland Security: This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade: No information available

Authorisation/Restrictions according to EU REACH

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Trichloroethylene	Carcinogenic Category 1B Article 57 Application date: October 21, 2014 Sunset date: April 21, 2016 Exemption - None	Use restricted. See item 28. (see link for restriction details) Use restricted. See item 75. (see link for restriction details)	SVHC Candidate list - 201-167-4 - Carcinogenic, Article 57a

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

https://echa.europa.eu/authorisation-list
https://echa.europa.eu/substances-restricted-under-reach
https://echa.europa.eu/candidate-list-table

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Trichloroethylene	79-01-6	Listed	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive	Seveso III Directive	Rotterdam	Basel Convention

		(2012/18/EC) - Qualifying Quantities for Major Accident Notification	(2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Convention (PIC)	(Hazardous Waste)
Trichloroethylene	79-01-6	Not applicable	Not applicable	Not applicable	Annex I - Y45

16. Other information

Prepared By
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date 03-Feb-2010
Revision Date 24-Dec-2021
Print Date 24-Dec-2021
Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS

SAFETY DATA SHEET

Creation Date 22-Sep-2009 **Revision Date** 24-Dec-2021 **Revision Number** 4

1. Identification

Product Name **cis-1,2-Dichloroethylene**

Cat No. : **AC113380000; AC113380025; AC113380100; AC113380500**

Synonyms cis-Acetylene dichloride.

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company
Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

Emergency Telephone Number For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
CHEMTREC Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

2. Hazard(s) identification

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids	Category 2
Acute oral toxicity	Category 4
Acute Inhalation Toxicity - Vapors	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Respiratory system.	

Label Elements

Signal Word
Danger

Hazard Statements
Highly flammable liquid and vapor
Harmful if swallowed

Harmful if inhaled
Causes serious eye irritation
Causes skin irritation
May cause respiratory irritation

Precautionary Statements
Prevention
Wear protective gloves/protective clothing/eye protection/face protection
Use only outdoors or in a well-ventilated area
Avoid breathing dust/fume/gas/mist/vapors/spray
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Take precautionary measures against static discharge
Do not eat, drink or smoke when using this product
Response
Call a POISON CENTER or doctor/physician if you feel unwell
Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell
Skin
IF ON SKIN: Wash with plenty of soap and water
Take off contaminated clothing and wash before reuse
If skin irritation occurs: Get medical advice/attention
Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
Ingestion
Rinse mouth
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Fire
Explosion risk in case of fire
Fight fire with normal precautions from a reasonable distance
Evacuate area
Storage
Store in a well-ventilated place. Keep cool
Store in a closed container
Store locked up
Disposal
Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HNOC)
None identified

3. Composition/Information on Ingredients

Component	CAS No	Weight %
cis-1,2-Dichloroethylene	156-59-2	97

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.

Inhalation Remove to fresh air. Get medical attention. If not breathing, give artificial respiration.

Ingestion Do NOT induce vomiting. Get medical attention.

Most important symptoms and effects Difficulty in breathing. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO_2). Dry chemical. Water mist may be used to cool closed containers. Chemical foam. Water mist may be used to cool closed containers.

Unsuitable Extinguishing Media No information available

Flash Point 6 °C / 42.8 °F

Method - No information available

Autoignition Temperature 440 °C / 824 °F

Explosion Limits

Upper	12.80%
Lower	9.70%
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical
Flammable. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Vapors may form explosive mixtures with air.

Hazardous Combustion Products
Carbon monoxide (CO). Carbon dioxide (CO_2). Hydrogen chloride gas.
Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
2	3	0	N/A

6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Remove all sources of ignition. Take precautionary measures against static discharges. Avoid contact with skin, eyes or clothing.

Environmental Precautions See Section 12 for additional Ecological Information. Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

7. Handling and storage

Handling

Ensure adequate ventilation. Wear personal protective equipment/face protection. Use spark-proof tools and explosion-proof equipment. Use only non-sparking tools. Avoid contact with skin, eyes or clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

Storage.

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks and flame. Flammables area. Keep container tightly closed in a dry and well-ventilated place. Incompatible Materials. Bases.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
cis-1,2-Dichloroethylene	TWA: 200 ppm			TWA: 200 ppm

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection

No protective equipment is needed under normal use conditions.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	aromatic
Odor Threshold	No information available
pH	No information available
Melting Point/Range	-80 °C / -112 °F
Boiling Point/Range	60 °C / 140 °F @ 760 mmHg
Flash Point	6 °C / 42.8 °F
Evaporation Rate	No information available
Flammability (solid,gas)	Not applicable
Flammability or explosive limits	
Upper	12.80%
Lower	9.70%
Vapor Pressure	201 mmHg @ 25 °C
Vapor Density	3.34 (Air = 1.0)
Specific Gravity	1.280
Solubility	No information available
Partition coefficient; n-octanol/water	No data available

Autoignition Temperature	440 °C / 824 °F
Decomposition Temperature	No information available
Viscosity	No information available
Molecular Formula	C2 H2 Cl2
Molecular Weight	96.94

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Keep away from open flames, hot surfaces and sources of ignition. Exposure to air. Exposure to light. Incompatible products. Exposure to moist air or water.

Incompatible Materials Bases

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO_2), Hydrogen chloride gas

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Component Information

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Irritating to eyes, respiratory system and skin

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
cis-1,2-Dichloroethylene	156-59-2	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Respiratory system

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and delayed Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Do not empty into drains. Do not flush into surface water or sanitary sewer system. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
cis-1,2-Dichloroethylene	Not listed	Not listed	EC50 = 721 mg/L 5 min EC50 = 905 mg/L 30 min	Not listed

Persistence and Degradability Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its volatility.

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN-No UN1150
Proper Shipping Name 1,2-DICHLOROETHYLENE
Hazard Class 3
Packing Group II

TDG

UN-No UN1150
Proper Shipping Name 1,2-DICHLOROETHYLENE
Hazard Class 3
Packing Group II

IATA

UN-No UN1150
Proper Shipping Name 1,2-DICHLOROETHYLENE
Hazard Class 3
Packing Group II

IMDG/IMO

UN-No UN1150
Proper Shipping Name 1,2-DICHLOROETHYLENE
Hazard Class 3
Packing Group II

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
cis-1,2-Dichloroethylene	156-59-2	X	ACTIVE	-

Legend:
TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)
X - Listed
'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
cis-1,2-Dichloroethylene	156-59-2	-	X	205-859-7	-	X	X	X	X	KE-10124

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and Health Administration Not applicable

CERCLA

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
cis-1,2-Dichloroethylene	X	-	X	-	-

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
cis-1,2-Dichloroethylene	156-59-2	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
cis-1,2-Dichloroethylene	156-59-2	Not applicable	Not applicable	Not applicable	Annex I - Y45

16. Other information

Prepared By	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com
Creation Date	22-Sep-2009
Revision Date	24-Dec-2021
Print Date	24-Dec-2021
Revision Summary	This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

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End of SDS

SAFETY DATA SHEET

Creation Date 22-Sep-2009 **Revision Date** 24-Dec-2021 **Revision Number** 7

1. Identification

Product Name **Vinylidene chloride, stabilized**

Cat No. : **AC172290000; AC172290010; AC172290025; AC172290250**

CAS No 75-35-4
Synonyms 1,1-Dichloroethylene

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

Emergency Telephone Number For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
CHEMTREC Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids	Category 1
Acute oral toxicity	Category 4
Acute Inhalation Toxicity - Vapors	Category 4
Serious Eye Damage/Eye Irritation	Category 2
Carcinogenicity	Category 2
Specific target organ toxicity - (repeated exposure)	Category 2
Target Organs - Nasal Cavities, Liver.	

Label Elements

Signal Word
Danger

Hazard Statements
Extremely flammable liquid and vapor

Causes serious eye irritation
Suspected of causing cancer
May cause damage to organs through prolonged or repeated exposure
Harmful if swallowed or if inhaled

Precautionary Statements
Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Wear eye/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Response
IF exposed or concerned: Get medical attention/advice
Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Skin
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
Ingestion
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
Fire
In case of fire: Use CO2, dry chemical, or foam for extinction
Storage
Store locked up
Store in a well-ventilated place. Keep cool
Disposal
Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HNOC)
Toxic to aquatic life with long lasting effects
WARNING. Cancer - https://www.p65warnings.ca.gov/.

3. Composition/Information on Ingredients

Component	CAS No	Weight %
Vinylidene chloride	75-35-4	>95
4-Methoxyphenol	150-76-5	0.02

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention.

Ingestion Do NOT induce vomiting. Get medical attention.

Most important symptoms and effects Difficulty in breathing. . Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO_2). Dry chemical. Water mist may be used to cool closed containers. Chemical foam. Water mist may be used to cool closed containers.

Unsuitable Extinguishing Media No information available

Flash Point -25 °C / -13 °F

Method - No information available

Autoignition Temperature 520 °C / 968 °F

Explosion Limits

Upper	16.5%
Lower	8.4%
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical
Extremely flammable. Vapors may travel to source of ignition and flash back. Vapors may form explosive mixture with air. Containers may explode when heated. Vapors may form explosive mixtures with air.

Hazardous Combustion Products
Carbon monoxide (CO). Carbon dioxide (CO_2). Formaldehyde. peroxides. Hydrogen chloride gas.

Protective Equipment and Precautions for Firefighters
Vapors are heavier than air and may spread along floors. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
2	4	1	N/A

6. Accidental release measures

Personal Precautions Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information. Avoid release to the environment. Collect spillage.

Methods for Containment and Clean Up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Do not let this chemical enter the environment.

7. Handling and storage

Handling

Ensure adequate ventilation. Wear personal protective equipment/face protection. Avoid contact with skin and eyes. Take precautionary measures against static discharges. Do not ingest. If swallowed then seek immediate medical assistance. Handle product only in closed system or provide appropriate exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Use only non-sparking tools. Do not subject to grinding/shock/friction. Avoid breathing dust/fume/gas/mist/vapors/spray. Keep away from open flames, hot surfaces and sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

Storage.

Refrigerator/flammables. Keep away from heat, sparks and flame. Protect from light. May form explosive peroxides on prolonged storage. Keep under nitrogen. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Strong oxidizing agents. Strong bases. Finely powdered metals. oxygen. Peroxides. Metals. copper. Finely powdered metals. Acids.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Vinylidene chloride	TWA: 5 ppm	(Vacated) TWA: 1 ppm (Vacated) TWA: 4 mg/m³		TWA: 5 ppm
4-Methoxyphenol	TWA: 5 mg/m³	(Vacated) TWA: 5 mg/m³	TWA: 5 mg/m³	TWA: 5 mg/m³

Legend

ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures

Use explosion-proof electrical/ventilating/lighting equipment. Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	aromatic
Odor Threshold	No information available
pH	7 2.5 g/l aq.sol
Melting Point/Range	-122 °C / -187.6 °F
Boiling Point/Range	31.2 - 32 °C / 88.2 - 89.6 °F @ 760 mmHg
Flash Point	-25 °C / -13 °F
Evaporation Rate	No information available

Flammability (solid,gas)	Not applicable
Flammability or explosive limits	
Upper	16.5%
Lower	8.4%
Vapor Pressure	665 mbar @ 20 °C
Vapor Density	3.4 (Air = 1.0)
Specific Gravity	1.218
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	520 °C / 968 °F
Decomposition Temperature	No information available
Viscosity	.377 mPa.s at 15 °C
Molecular Formula	C2 H2 Cl2
Molecular Weight	96.94

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability May form explosive peroxides. Hazardous polymerization may occur upon depletion of inhibitor. Moisture sensitive. Air sensitive. Light sensitive.

Conditions to Avoid Keep away from open flames, hot surfaces and sources of ignition. Excess heat. Exposure to air. Exposure to light. Incompatible products. Exposure to moist air or water.

Incompatible Materials Strong oxidizing agents, Strong bases, Finely powdered metals, oxygen, Peroxides, Metals, copper, Finely powdered metals, Acids

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO_2), Formaldehyde, peroxides, Hydrogen chloride gas

Hazardous Polymerization Hazardous polymerization may occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Oral LD50 Category 4. ATE = 300 - 2000 mg/kg.

Vapor LC50 Category 4. ATE = 10 - 20 mg/l.

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Vinylidene chloride	LD50 = 1500 mg/kg (Rat)	Not listed	LC50 = 1.66 mg/L (Rat) 4 h
4-Methoxyphenol	1600 mg/kg (Rat)	LD50 > 2000 mg/kg (Rabbit)	Not listed

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation May cause skin, eye, and respiratory tract irritation

Sensitization No information available

Carcinogenicity Limited evidence of a carcinogenic effect. The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Vinylidene chloride	75-35-4	Group 2B	Not listed	Not listed	X	Not listed

4-Methoxyphenol	150-76-5	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects Ames test: positive.

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known
STOT - repeated exposure Nasal Cavities Liver

Aspiration hazard No information available

Symptoms / effects,both acute and delayed Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

12. Ecological information

Ecotoxicity

The product contains following substances which are hazardous for the environment. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Vinylidene chloride	Not listed	LC50: 161 - 179 mg/L, 96h static (Pimephales promelas) LC50: 57 - 91 mg/L, 96h static (Lepomis macrochirus) LC50: 85 - 117 mg/L, 96h flow-through (Pimephales promelas)	EC50 > 2000 mg/L 17 h	LC50: 9.0 - 14.0 mg/L, 48h Static (Daphnia magna) LC50: 62 - 110 mg/L, 48h Static (Daphnia magna)
4-Methoxyphenol	Not listed	LC50: = 28.5 mg/L, 96h flow-through (Oncorhynchus mykiss) LC50: = 84.3 mg/L, 96h flow-through (Pimephales promelas)	EC50 = 3.66 mg/L 5 min EC50 = 4.30 mg/L 15 min EC50 = 4.61 mg/L 30 min	Not listed

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its volatility.

Component	log Pow
Vinylidene chloride	2.02
4-Methoxyphenol	1.3

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Vinylidene chloride - 75-35-4	U078	-

14. Transport information

DOT

UN-No	UN1303
Proper Shipping Name	VINYLIDENE CHLORIDE, STABILIZED
Hazard Class	3
Packing Group	I

TDG

UN-No	UN1303
Proper Shipping Name	VINYLIDENE CHLORIDE, STABILIZED
Hazard Class	3
Packing Group	I

IATA

UN-No	UN1303
Proper Shipping Name	VINYLIDENE CHLORIDE, STABILIZED
Hazard Class	3
Packing Group	I

IMDG/IMO

UN-No	UN1303
Proper Shipping Name	VINYLIDENE CHLORIDE, STABILIZED
Hazard Class	3
Subsidiary Hazard Class	P
Packing Group	I

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Vinylidene chloride	75-35-4	X	ACTIVE	-
4-Methoxyphenol	150-76-5	X	ACTIVE	-

Legend:
TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)
X - Listed
'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories
Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Vinylidene chloride	75-35-4	X	-	200-864-0	X	X	X	X	X	KE-10122
4-Methoxyphenol	150-76-5	X	-	205-769-8	X	X	X	X	X	KE-23353

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313

Component	CAS No	Weight %	SARA 313 - Threshold Values %
Vinylidene chloride	75-35-4	>95	1.0

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Vinylidene chloride	X	100 lb	X	X

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Vinylidene chloride	X		-

OSHA - Occupational Safety and Health Administration: Not applicable

CERCLA: This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Vinylidene chloride	100 lb 1 lb	-

California Proposition 65: This product contains the following Proposition 65 chemicals.

Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
Vinylidene chloride	75-35-4	Carcinogen	0.88 µg/day	Carcinogen

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Vinylidene chloride	X	X	X	X	X
4-Methoxyphenol	X	X	X	-	X

U.S. Department of Transportation

Reportable Quantity (RQ): Y
DOT Marine Pollutant Y
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security: This product contains the following DHS chemicals:
Legend - STQs = Screening Threshold Quantities, APA = A placarded amount

Component	DHS Chemical Facility Anti-Terrorism Standard
Vinylidene chloride	Release STQs - 10000lb

Other International Regulations

Mexico - Grade: No information available

Authorisation/Restrictions according to EU REACH

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Vinylidene chloride	-	Use restricted. See item 38. (see link for restriction details) Use restricted. See item 75. (see link for restriction details)	-
4-Methoxyphenol	-	Use restricted. See item 75. (see link for restriction details)	-

https://echa.europa.eu/substances-restricted-under-reach

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic	Ozone Depletion	Restriction of

			Pollutant	Potential	Hazardous Substances (RoHS)
Vinylidene chloride	75-35-4	Listed	Not applicable	Not applicable	Not applicable
4-Methoxyphenol	150-76-5	Listed	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Vinylidene chloride	75-35-4	Not applicable	Not applicable	Not applicable	Annex I - Y45
4-Methoxyphenol	150-76-5	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information

Prepared By
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date 22-Sep-2009
Revision Date 24-Dec-2021
Print Date 24-Dec-2021
Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS

SAFETY DATA SHEET

Creation Date 24-Nov-2010 **Revision Date** 24-Dec-2021 **Revision Number** 4

1. Identification

Product Name **Carbon tetrachloride**

Cat No. : **AC148170000; AC148170010; AC148170025**

Synonyms Tetrachloromethane

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

Emergency Telephone Number For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
CHEMTREC Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity	Category 3
Acute dermal toxicity	Category 3
Acute Inhalation Toxicity - Vapors	Category 3
Carcinogenicity	Category 2
Specific target organ toxicity - (repeated exposure)	Category 1
Target Organs - Liver.	

Label Elements

Signal Word
Danger

Hazard Statements
Toxic if swallowed

Toxic in contact with skin
Toxic if inhaled
May cause cancer
Causes damage to organs through prolonged or repeated exposure

Precautionary Statements
Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Response
IF exposed or concerned: Get medical attention/advice
Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician
Skin
IF ON SKIN: Wash with plenty of soap and water
Call a POISON CENTER or doctor/physician if you feel unwell
Remove/Take off immediately all contaminated clothing
Wash contaminated clothing before reuse
Ingestion
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Rinse mouth
Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed
Disposal
Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HNOC)
Harmful to aquatic life with long lasting effects
Harms public health and the environment by destroying ozone in the upper atmosphere
WARNING. Cancer - https://www.p65warnings.ca.gov/.

3. Composition/Information on Ingredients

Component	CAS No	Weight %
Carbon tetrachloride	56-23-5	>95

4. First-aid measures

Eye Contact Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

Inhalation	Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. If not breathing, give artificial respiration.
Ingestion	Do NOT induce vomiting. Call a physician or poison control center immediately.
Most important symptoms and effects	Drowsiness. Dizziness. Difficulty in breathing. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting
Notes to Physician	Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media	Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.
Unsuitable Extinguishing Media	No information available
Flash Point	No information available
Method -	No information available
Autoignition Temperature	982 °C / 1799.6 °F
Explosion Limits	
Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical
Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products
Carbon monoxide (CO). Carbon dioxide (CO_2). Phosgene. Hydrogen chloride gas.
Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
3	0	0	N/A

6. Accidental release measures

Personal Precautions	Use personal protective equipment as required. Ensure adequate ventilation. Avoid contact with skin and eyes. Keep people away from and upwind of spill/leak.
Environmental Precautions	Do not flush into surface water or sanitary sewer system.
Methods for Containment and Clean Up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Do not let this chemical enter the environment.

7. Handling and storage

Handling	Ensure adequate ventilation. Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.
Storage.	Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible Materials. Strong oxidizing agents. Fluorine. Metals.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Carbon tetrachloride	TWA: 5 ppm STEL: 10 ppm Skin	(Vacated) TWA: 2 ppm (Vacated) TWA: 12.6 mg/m³ Ceiling: 25 ppm TWA: 10 ppm	IDLH: 200 ppm STEL: 2 ppm STEL: 12.6 mg/m³	TWA: 5 ppm STEL: 10 ppm

Legend

ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	No information available
Odor Threshold	No information available
pH	No information available
Melting Point/Range	-23 °C / -9.4 °F
Boiling Point/Range	76 °C / 168.8 °F
Flash Point	No information available
Evaporation Rate	No information available
Flammability (solid,gas)	Not applicable
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	121 mbar @ 20 °C
Vapor Density	No information available
Specific Gravity	1.594
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	982 °C / 1799.6 °F
Decomposition Temperature	> 100°C
Viscosity	0.97 mPa.s at 20 °C
Molecular Formula	C Cl4
Molecular Weight	153.82

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong oxidizing agents, Fluorine, Metals

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO_2), Phosgene, Hydrogen chloride gas

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Carbon tetrachloride	LD50 = 2350 mg/kg (Rat)	LD50 = 5070 mg/kg (Rat)	LC50 = 8000 ppm (Rat) 4 h

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. Limited evidence of a carcinogenic effect.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Carbon tetrachloride	56-23-5	Group 2B	Reasonably Anticipated	A2	X	A2

Mutagenic Effects Not mutagenic in AMES Test

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known

STOT - repeated exposure Liver

Aspiration hazard No information available

Symptoms / effects,both acute and delayed Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

The product contains following substances which are hazardous for the environment. Toxic to aquatic organisms, may cause

long-term adverse effects in the aquatic environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Carbon tetrachloride	Not listed	LC50: 36.3 - 47.3 mg/L, 96h flow-through (Pimephales promelas) LC50: 9.68 - 11.3 mg/L, 96h static (Pimephales promelas) LC50: 23 - 33 mg/L, 96h static (Lepomis macrochirus)	EC50 = 34 mg/L 10 min EC50 = 5.6 mg/L 5 min	EC50: = 29 mg/L, 48h (Daphnia magna)

Persistence and Degradability Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its volatility.

Component	log Pow
Carbon tetrachloride	2.75

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Carbon tetrachloride - 56-23-5	U211	-

14. Transport information

DOT

UN-No UN1846
Proper Shipping Name CARBON TETRACHLORIDE
Hazard Class 6.1
Packing Group II

TDG

UN-No UN1846
Proper Shipping Name CARBON TETRACHLORIDE
Hazard Class 6.1
Packing Group II

IATA

UN-No UN1846
Proper Shipping Name CARBON TETRACHLORIDE
Hazard Class 6.1
Packing Group II

IMDG/IMO

UN-No UN1846
Proper Shipping Name CARBON TETRACHLORIDE
Hazard Class 6.1
Packing Group II

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Carbon tetrachloride	56-23-5	X	ACTIVE	-

Legend:
TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed
'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories
Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Carbon tetrachloride	56-23-5	X	-	200-262-8	X	X	X	X	X	KE-04756

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313

Component	CAS No	Weight %	SARA 313 - Threshold Values %
Carbon tetrachloride	56-23-5	>95	0.1

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Carbon tetrachloride	X	10 lb	X	X

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Carbon tetrachloride	X	X	-

OSHA - Occupational Safety and Health Administration Not applicable

CERCLA This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Carbon tetrachloride	10 lb 1 lb	-

California Proposition 65 This product contains the following Proposition 65 chemicals.

Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
Carbon tetrachloride	56-23-5	Carcinogen	5 µg/day	Carcinogen

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Carbon tetrachloride	X	X	X	X	X

U.S. Department of Transportation
Reportable Quantity (RQ): Y
DOT Marine Pollutant Y
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Carbon tetrachloride	-	Use restricted. See item 75. (see link for restriction details)	-

https://echa.europa.eu/substances-restricted-under-reach

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Carbon tetrachloride	56-23-5	Listed	Not applicable	Annex I (Group IV substance) : ODP = 1.1 Annex B - Group II : ODP = 1.1	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Carbon tetrachloride	56-23-5	Not applicable	Not applicable	Not applicable	Annex I - Y45

16. Other information

Prepared By Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date 24-Nov-2010
Revision Date 24-Dec-2021
Print Date 24-Dec-2021
Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS

SAFETY DATA SHEET

Creation Date 10-Dec-2009 **Revision Date** 28-Dec-2021 **Revision Number** 6

1. Identification

Product Name **Tetrachloroethylene**

Cat No. : **AC445690000; ACR445690010; AC445690025; AC445691000**

CAS No 127-18-4
Synonyms Perchloroethylene

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

Emergency Telephone Number For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
CHEMTREC Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Skin Sensitization	Category 1
Carcinogenicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Central nervous system (CNS).	
Specific target organ toxicity - (repeated exposure)	Category 2
Target Organs - Kidney, Liver, Blood.	

Label Elements

Signal Word
Danger

Hazard Statements
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
May cause drowsiness or dizziness
May cause cancer
May cause damage to organs through prolonged or repeated exposure

Precautionary Statements
Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Contaminated work clothing should not be allowed out of the workplace
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wear protective gloves/protective clothing/eye protection/face protection
Response
IF exposed or concerned: Get medical attention/advice
Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Skin
IF ON SKIN: Wash with plenty of soap and water
Take off contaminated clothing and wash before reuse
If skin irritation or rash occurs: Get medical advice/attention
Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed
Disposal
Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HNOC)
Toxic to aquatic life with long lasting effects
WARNING. Cancer - https://www.p65warnings.ca.gov/.

3. Composition/Information on Ingredients

Component	CAS No	Weight %
Tetrachloroethylene	127-18-4	>95

4. First-aid measures

General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
Ingestion	Clean mouth with water and drink afterwards plenty of water.
Most important symptoms and effects	None reasonably foreseeable. May cause allergic skin reaction. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing
Notes to Physician	Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media	Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.
Unsuitable Extinguishing Media	No information available
Flash Point	No information available
Method -	No information available
Autoignition Temperature	No information available
Explosion Limits	
Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical
Thermal decomposition can lead to release of irritating gases and vapors. Containers may explode when heated.

Hazardous Combustion Products
Chlorine. Phosgene. Hydrogen chloride gas.
Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
2	0	0	N/A

6. Accidental release measures

Personal Precautions	Use personal protective equipment as required. Ensure adequate ventilation.
Environmental Precautions	Do not flush into surface water or sanitary sewer system.
Methods for Containment and Clean Up	Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7. Handling and storage

Handling	Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Ensure adequate ventilation. Avoid ingestion and inhalation.
Storage.	Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from sunlight. Incompatible Materials. Strong acids. Strong oxidizing agents. Strong bases. Metals. Zinc.

Amines. Aluminium.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Tetrachloroethylene	TWA: 25 ppm STEL: 100 ppm	(Vacated) TWA: 25 ppm (Vacated) TWA: 170 mg/m³ Ceiling: 200 ppm TWA: 100 ppm	IDLH: 150 ppm	TWA: 25 ppm STEL: 100 ppm

Legend

ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures Use only under a chemical fume hood. Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	Characteristic, sweet
Odor Threshold	No information available
pH	No information available
Melting Point/Range	-22 °C / -7.6 °F
Boiling Point/Range	120 - 122 °C / 248 - 251.6 °F @ 760 mmHg
Flash Point	No information available
Evaporation Rate	6.0 (Ether = 1.0)
Flammability (solid,gas)	Not applicable
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	18 mbar @ 20 °C
Vapor Density	No information available
Density	1.619
Specific Gravity	1.625
Solubility	0.15 g/L water (20°C)
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	> 150°C
Viscosity	0.89 mPa s at 20 °C
Molecular Formula	C2 Cl4

Molecular Weight 165.83

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat. Exposure to moist air or water.

Incompatible Materials Strong acids, Strong oxidizing agents, Strong bases, Metals, Zinc, Amines, Aluminium

Hazardous Decomposition Products Chlorine, Phosgene, Hydrogen chloride gas

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Tetrachloroethylene	LD50 = 2629 mg/kg (Rat)	LD50 > 10000 mg/kg (Rat)	LC50 = 27.8 mg/L (Rat) 4 h

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Irritating to eyes and skin

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Tetrachloroethylene	127-18-4	Group 2A	Reasonably Anticipated	A3	X	A3

IARC (International Agency for Research on Cancer)

NTP: (National Toxicity Program)

ACGIH: (American Conference of Governmental Industrial Hygienists)

Mexico - Occupational Exposure Limits - Carcinogens

IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 2A - Probably Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans
NTP: (National Toxicity Program)
Known - Known Carcinogen
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen
ACGIH: (American Conference of Governmental Industrial Hygienists)
Mexico - Occupational Exposure Limits - Carcinogens
A1 - Confirmed Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Confirmed Animal Carcinogen
A4 - Not Classifiable as a Human Carcinogen
A5 - Not Suspected as a Human Carcinogen

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Central nervous system (CNS)
STOT - repeated exposure Kidney Liver Blood

Aspiration hazard No information available

Symptoms / effects,both acute and delayed Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Endocrine Disruptor Information

Component	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Tetrachloroethylene	Group II Chemical	Not applicable	Not applicable

Other Adverse Effects Tumorigenic effects have been reported in experimental animals.

12. Ecological information

Ecotoxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Tetrachloroethylene	EC50: > 500 mg/L, 96h (Pseudokirchneriella subcapitata)	LC50: 12.4 - 14.4 mg/L, 96h flow-through (Pimephales promelas) LC50: 8.6 - 13.5 mg/L, 96h static (Pimephales promelas) LC50: 11.0 - 15.0 mg/L, 96h static (Lepomis macrochirus) LC50: 4.73 - 5.27 mg/L, 96h flow-through (Oncorhynchus mykiss)	EC50 = 100 mg/L 24 h EC50 = 112 mg/L 24 h EC50 = 120.0 mg/L 30 min	EC50: 6.1 - 9.0 mg/L, 48h Static (Daphnia magna)

Persistence and Degradability Insoluble in water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility . Is not likely mobile in the environment due its low water solubility. Will likely be mobile in the environment due to its volatility.

Component	log Pow
Tetrachloroethylene	2.88

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Tetrachloroethylene - 127-18-4	U210	-

14. Transport information

DOT

UN-No UN1897
Proper Shipping Name TETRACHLOROETHYLENE

Hazard Class 6.1
Packing Group III

TDG
UN-No UN1897
Proper Shipping Name TETRACHLOROETHYLENE
Hazard Class 6.1
Packing Group III

IATA
UN-No UN1897
Proper Shipping Name TETRACHLOROETHYLENE
Hazard Class 6.1
Packing Group III

IMDG/IMO
UN-No UN1897
Proper Shipping Name TETRACHLOROETHYLENE
Hazard Class 6.1
Packing Group III

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Tetrachloroethylene	127-18-4	X	ACTIVE	-

Legend:
TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)
X - Listed
'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories
Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Tetrachloroethylene	127-18-4	X	-	204-825-9	X	X	X	X	X	KE-33294

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313

Component	CAS No	Weight %	SARA 313 - Threshold Values %
Tetrachloroethylene	127-18-4	>95	0.1

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Tetrachloroethylene	-	-	X	X

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Tetrachloroethylene	X		-

OSHA - Occupational Safety and Health Administration: Not applicable

CERCLA: This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Tetrachloroethylene	100 lb 1 lb	-

California Proposition 65: This product contains the following Proposition 65 chemicals.

Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
Tetrachloroethylene	127-18-4	Carcinogen	14 µg/day	Carcinogen

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Tetrachloroethylene	X	X	X	X	X

U.S. Department of Transportation

Reportable Quantity (RQ): Y
DOT Marine Pollutant Y
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security: This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade: No information available

Authorisation/Restrictions according to EU REACH

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Tetrachloroethylene	-	Use restricted. See item 75. (see link for restriction details)	-

https://echa.europa.eu/substances-restricted-under-reach

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Tetrachloroethylene	127-18-4	Listed	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Tetrachloroethylene	127-18-4	Not applicable	Not applicable	Not applicable	Annex I - Y45

16. Other information

Prepared By: Regulatory Affairs
Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

Creation Date	10-Dec-2009
Revision Date	28-Dec-2021
Print Date	28-Dec-2021
Revision Summary	This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

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End of SDS

SAFETY DATA SHEET

Version 6.4
Revision Date 07/22/2022
Print Date 07/31/2023

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : 1,1,1-Trichloroethane

Product Number : 235571
Brand : Aldrich
Index-No. : 602-013-00-2
CAS-No. : 71-55-6

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Inhalation (Category 4), H332
Skin irritation (Category 2), H315

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal Word Warning

Hazard statement(s)
H315 Causes skin irritation.

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H332	Harmful if inhaled.

Precautionary statement(s)

P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P312	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms	:	'Chlorothene' Methylchloroform
Formula	:	$C_2H_3Cl_3$
Molecular weight	:	133.40 g/mol
CAS-No.	:	71-55-6
EC-No.	:	200-756-3
Index-No.	:	602-013-00-2

Component	Classification	Concentration
1,1,1-Trichloroethane		
	Acute Tox. 4; Aquatic Acute 3; Ozone 1; H332, H402, H420	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice
Consult a physician. Show this material safety data sheet to the doctor in attendance.Move out of dangerous area.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

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If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Carbon oxides
Hydrogen chloride gas

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.
For personal protection see section 8.

6.2 Environmental precautions
Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
For precautions see section 2.2.

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7.2 Conditions for safe storage, including any incompatibilities

Storage conditions
Keep container tightly closed in a dry and well-ventilated place.

Storage class
Storage class (TRGS 510): 6.1D: Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
1,1,1-Trichloroethane	71-55-6	TWA	350 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Not classifiable as a human carcinogen		
		STEL	450 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Not classifiable as a human carcinogen		
		C	350 ppm 1,900 mg/m3	USA. NIOSH Recommended Exposure Limits
		TWA	350 ppm 1,900 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		PEL	350 ppm 1,900 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		STEL	450 ppm 2,450 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		C	800 ppm	California permissible exposure limits for chemical contaminants (Title 8, Article 107)

Biological occupational exposure limits

Component	CAS-No.	Parameters	Value	Biological specimen	Basis
1,1,1-Trichloroethane	71-55-6	Methyl chloroform	20parts per million	In end-exhaled air	ACGIH - Biological Exposure Indices (BEI)
	Remarks	Prior to last shift of workweek			

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		Methyl chloroform	700 µg/l	Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift			

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a)	Appearance	Form: liquid, clear Color: colorless
b)	Odor	No data available
c)	Odor Threshold	No data available
d)	pH	No data available
e)	Melting point/freezing point	-34.99 °C (-30.98 °F)
f)	Initial boiling point and boiling range	72.0 - 75.0 °C 161.6 - 167.0 °F
g)	Flash point	()No data available

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h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	Upper explosion limit: 15 %(V) Lower explosion limit: 7.5 %(V)
k)	Vapor pressure	133.3 hPa at 20.0 °C (68.0 °F)
l)	Vapor density	No data available
m)	Density	1.34 g/cm3
	Relative density	No data available
n)	Water solubility	1.25 g/l at 23 °C (73 °F)
o)	Partition coefficient: n-octanol/water	log Pow: 2.49
p)	Autoignition temperature	537.0 °C (998.6 °F)
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available

9.2 Other safety information
No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions.
Contains the following stabilizer(s):
Low alkyl epoxide (0.05 %)

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
Strong oxidizing agents, Potassium, Magnesium, Sodium/sodium oxides, Zinc, Strong bases

10.6 Hazardous decomposition products
In the event of fire: see section 5

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - Rat - 9,600 mg/kg
Symptoms: Nausea, Vomiting, Risk of aspiration upon vomiting., Aspiration may cause pulmonary edema and pneumonitis.
Remarks: (RTECS)
Acute toxicity estimate Inhalation - 4 h - 19 mg/l - vapor(Calculation method)

Inhalation: absorption
Dermal: absorption

Skin corrosion/irritation
Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitization
Maximization Test - Guinea pig
Result: negative
(OECD Test Guideline 406)

Germ cell mutagenicity
Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Carcinogenicity
No data available

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

11.2 Additional Information

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Exposure to and/or consumption of alcohol may increase toxic effects., prolonged or repeated exposure can cause:, narcosis, Liver injury may occur., Kidney injury may occur.
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Systemic effects:

After absorption:

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Headache
Dizziness
Tiredness
narcosis
drop in blood pressure
Unconsciousness

After uptake of large quantities:

depressed respiration
cardiovascular disorders

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish	static test LC50 - Pimephales promelas (fathead minnow) - 52.8 mg/l - 96 h (US-EPA)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 530 mg/l - 48 h (US-EPA)
Toxicity to algae	static test EC50 - Pseudokirchneriella subcapitata (algae) - 41 mg/l - 72 h (OECD Test Guideline 201)
	static test NOEC - Pseudokirchneriella subcapitata (green algae) - 7.8 mg/l - 72 h (OECD Test Guideline 201)
	IC50 - Scenedesmus capricornutum (fresh water algae) - > 670 mg/l - 96 h Remarks: (Lit.)
Toxicity to bacteria	EC50 - Sewage sludge - 360 mg/l - 30 min (OECD Test Guideline 209)

12.2 Persistence and degradability

Biodegradability	Result: 0 % - Not readily biodegradable. (OECD Test Guideline 301C)

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties

No data available

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12.7 Other adverse effects

Biological effects:
Hazard for drinking water supplies.
Further information on ecology
Substance which may present a danger to the structure and/or the functioning of the stratospheric ozone layer according to EC Regulation No 2037/2000 (listed in Annex I, Group V).
Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information

DOT (US)
UN number: 2831 Class: 6.1 Packing group: III
Proper shipping name: 1,1,1-Trichloroethane
Reportable Quantity (RQ): 1000 lbs
Poison Inhalation Hazard: No

IMDG
UN number: 2831 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: 1,1,1-TRICHLOROETHANE

IATA
UN number: 2831 Class: 6.1 Packing group: III
Proper shipping name: 1,1,1-Trichloroethane

SECTION 15: Regulatory information

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
The following components are subject to reporting levels established by SARA Title III, Section 313:

	CAS-No.	Revision Date
1,1,1-Trichloroethane	71-55-6	2020-07-14

SARA 311/312 Hazards
Acute Health Hazard

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Massachusetts Right To Know Components

	CAS-No.	Revision Date
1,1,1-Trichloroethane	71-55-6	2020-07-14

Pennsylvania Right To Know Components

1,1,1-Trichloroethane	CAS-No.	Revision Date
	71-55-6	2020-07-14

New Jersey Right To Know Components

1,1,1-Trichloroethane	CAS-No.	Revision Date
	71-55-6	2020-07-14

SECTION 16: Other information

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Version: 6.4 Revision Date: 07/22/2022 Print Date: 07/31/2023

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SAFETY DATA SHEET

Creation Date 27-Jan-2010 **Revision Date** 24-Dec-2021 **Revision Number** 8

1. Identification

Product Name **Methylene chloride**

Cat No. : **D37-1; D37-4; D37-20; D37-200; D37-200LC; D37-500; D37FB-19; D37FB-50; D37FB-115; D37FB-200; D37POP-19; D37POPB-50; D37POPB-200; D37RB-19; D37RB-50; D37RB-115; D37RB-200; D37RS-19; D37RS-28; D37RS-50; D37RS-115; D37RS-200; D37SK-4; D37SK-4LC; D37SS-28; D37SS-50; D37SS-115; D37SS-200; D37SS-1350; D37RS1000ASME; NC1485726; D37RE200ASME; NC1568702; NC1641358; XXMECLDOW2000; XXMECLDOW200LI; NC1870181; D37ETSS1350; XXD37ET200LI; NC1948847; D37SS-19; NC2047457; NC1561768**

CAS No 75-09-2
Synonyms Dichloromethane; DCM

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use. This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

Details of the supplier of the safety data sheet

Company
Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Emergency Telephone Number
CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 001-703-527-3887

2. Hazard(s) identification

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Carcinogenicity	Category 1B

Specific target organ toxicity (single exposure) Target Organs - Central nervous system (CNS).	Category 3
Specific target organ toxicity - (repeated exposure) Target Organs - Liver, Kidney, Blood.	Category 2

Label Elements

Signal Word
Danger

Hazard Statements
Causes skin irritation
Causes serious eye irritation
May cause drowsiness or dizziness
May cause cancer
May cause damage to organs through prolonged or repeated exposure

Precautionary Statements
Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Wear eye/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Response
IF exposed or concerned: Get medical attention/advice
Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Skin
IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse
Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed
Disposal
Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HNOC)

Other hazards
Contains a known or suspected endocrine disruptor.
WARNING. Cancer - https://www.p65warnings.ca.gov/.

3. Composition/Information on Ingredients

Component	CAS No	Weight %
Methylene chloride	75-09-2	>99.5

4. First-aid measures

General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects . Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Causes central nervous system depression: Continued or high exposures by inhalation will cause anaesthetic effects. This may result in a loss of consciousness and could prove fatal: Causes formation of carbon monoxide in the blood. Carbon monoxide may cause adverse effects on the cardiovascular system and the central nervous system

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point No information available
Method - No information available

Autoignition Temperature 556 °C / 1032.8 °F

Explosion Limits
Upper 23 vol %
Lower 13 vol %
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical
Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products
Carbon monoxide (CO). Carbon dioxide (CO_2). Phosgene. Hydrogen chloride gas.
Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
2	1	0	N/A

6. Accidental release measures

Personal Precautions Use personal protective equipment as required. Ensure adequate ventilation.

Environmental Precautions Should not be released into the environment.

Methods for Containment and Clean Up Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7. Handling and storage

Handling Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Vapors are heavier than air and may spread along floors. Handle product only in closed system or provide appropriate exhaust ventilation. Reacts with aluminum and its alloys.

Storage. Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store in aluminum containers. Incompatible Materials. Strong oxidizing agents. Strong acids. Amines.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Methylene chloride	TWA: 50 ppm	(Vacated) TWA: 500 ppm (Vacated) STEL: 2000 ppm (Vacated) Ceiling: 1000 ppm TWA: 25 ppm STEL: 125 ppm	IDLH: 2300 ppm	TWA: 50 ppm

Legend

ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	sweet
Odor Threshold	No information available
pH	No information available
Melting Point/Range	-97 °C / -142.6 °F

Boiling Point/Range	39 °C / 102.2 °F
Flash Point	No information available
Evaporation Rate	No information available
Flammability (solid,gas)	Not applicable
Flammability or explosive limits	
Upper	23 vol %
Lower	13 vol %
Vapor Pressure	350 mbar @ 20°C
Vapor Density	2.93 (Air = 1.0)
Specific Gravity	1.33
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	556 °C / 1032.8 °F
Decomposition Temperature	No information available
Viscosity	0.42 mPas @ 25°C
Molecular Formula	C H2 Cl2
Molecular Weight	84.93

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions. Decomposes on exposure to light.

Conditions to Avoid Excess heat. Protect from direct sunlight.

Incompatible Materials Strong oxidizing agents, Strong acids, Amines

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO_2), Phosgene, Hydrogen chloride gas

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions Forms a detonable mixture with nitric acid.

11. Toxicological information

Acute Toxicity

Product Information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methylene chloride	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	53 mg/L (Rat) 6 h 76000 mg/m³ (Rat) 4 h

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Irritating to eyes and skin

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Methylene chloride	75-09-2	Group 2A	Reasonably Anticipated	A3	X	A3

IARC (International Agency for Research on Cancer)

NTP: (National Toxicity Program)

IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 2A - Probably Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans
NTP: (National Toxicity Program)

	Known - Known Carcinogen *Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen*
ACGIH: (American Conference of Governmental Industrial Hygienists)	*A1 - Known Human Carcinogen* *A2 - Suspected Human Carcinogen* *A3 - Animal Carcinogen*
	ACGIH: (American Conference of Governmental Industrial Hygienists)
Mexico - Occupational Exposure Limits - Carcinogens	*Mexico - Occupational Exposure Limits - Carcinogens* *A1 - Confirmed Human Carcinogen* *A2 - Suspected Human Carcinogen* *A3 - Confirmed Animal Carcinogen* *A4 - Not Classifiable as a Human Carcinogen* *A5 - Not Suspected as a Human Carcinogen*

Mutagenic Effects Mutagenic effects have occured in microorganisms.

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Central nervous system (CNS)
STOT - repeated exposure Liver Kidney Blood

Aspiration hazard No information available

Symptoms / effects,both acute and delayed Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Causes central nervous system depression: Continued or high exposures by inhalation will cause anaesthetic effects. This may result in a loss of consciousness and could prove fatal: Causes formation of carbon monoxide in the blood. Carbon monoxide may cause adverse effects on the cardiovascular system and the central nervous system

Endocrine Disruptor Information No information available

Other Adverse Effects Tumorigenic effects have been reported in experimental animals.

12. Ecological information

Ecotoxicity

.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Methylene chloride	EC50:>660 mg/L/96h	Pimephales promelas: LC50:193 mg/L/96h	EC50: 1 mg/L/24 h EC50: 2.88 mg/L/15 min	EC50: 140 mg/L/48h

Persistence and Degradability Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its volatility.

Component	log Pow
Methylene chloride	1.25

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Methylene chloride - 75-09-2	U080	-

14. Transport information

DOT

UN-No	UN1593
Proper Shipping Name	DICHLOROMETHANE
Hazard Class	6.1
Packing Group	III

TDG

UN-No	UN1593
Proper Shipping Name	DICHLOROMETHANE
Hazard Class	6.1
Packing Group	III

IATA

UN-No	UN1593
Proper Shipping Name	Dichloromethane
Hazard Class	6.1
Packing Group	III

IMDG/IMO

UN-No	UN1593
Proper Shipping Name	Dichloromethane
Hazard Class	6.1
Packing Group	III

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Methylene chloride	75-09-2	X	ACTIVE	R

Legend:
TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)
X - Listed
'-' - Not Listed
R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

Section 6(a) of the Toxic Substances Control Act (TSCA) This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT) Not applicable

TSCA 12(b) - Notices of Export Not applicable

Component	CAS No	**TSCA 12(b)** - Notices of Export
Methylene chloride	75-09-2	Section 6

International Inventories
Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Methylene chloride	75-09-2	X	-	200-838-9	X	X	X	X	X	KE-23893

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313

Component	CAS No	Weight %	SARA 313 - Threshold Values %
Methylene chloride	75-09-2	>99.5	0.1

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Methylene chloride	-	-	X	X

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Methylene chloride	X		-

OSHA - Occupational Safety and Health Administration

Component	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Methylene chloride	125 ppm STEL 12.5 ppm Action Level 25 ppm TWA	-

CERCLA This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Methylene chloride	1000 lb 1 lb	-

California Proposition 65 This product contains the following Proposition 65 chemicals.

Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
Methylene chloride	75-09-2	Carcinogen	200 µg/day 50 µg/day	Carcinogen

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Methylene chloride	X	X	X	X	X

U.S. Department of Transportation

Reportable Quantity (RQ): Y
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Methylene chloride	75-09-2	-	Use restricted. See item 59.	-

			(see link for restriction details) Use restricted. See item 75. (see link for restriction details)	

https://echa.europa.eu/substances-restricted-under-reach

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Methylene chloride	75-09-2	Listed	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Methylene chloride	75-09-2	Not applicable	Not applicable	Not applicable	Annex I - Y45

16. Other information

Prepared By
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date 27-Jan-2010
Revision Date 24-Dec-2021
Print Date 24-Dec-2021
Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS

SAFETY DATA SHEET

Version 8.7
Revision Date 03/06/2023
Print Date 06/10/2023

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Vinyl chloride

Product Number : 387622
Brand : Aldrich
Index-No. : 602-023-00-7
CAS-No. : 75-01-4

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable gases (Category 1), H220
Gases under pressure (Liquefied gas), H280
Carcinogenicity (Category 1A), H350

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal Word Danger

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Hazard statement(s)

H220	Extremely flammable gas.
H280	Contains gas under pressure; may explode if heated.
H350	May cause cancer.

Precautionary statement(s)

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P377	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P381	Eliminate all ignition sources if safe to do so.
P405	Store locked up.
P410 + P403	Protect from sunlight. Store in a well-ventilated place.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

May form explosive peroxides.

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms	:	Chloroethylene
Formula	:	C_2H_3Cl
Molecular weight	:	62.50 g/mol
CAS-No.	:	75-01-4
EC-No.	:	200-831-0
Index-No.	:	602-023-00-7

Component	Classification	Concentration
Vinyl chloride		
	Flam. Gas 1; Press. Gas Liquefied gas; Carc. 1A; H220, H280, H350	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Call in physician.

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In case of skin contact
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

In case of eye contact
After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed
After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media
For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture
Carbon oxides
Hydrogen chloride gas
Combustible.
Pay attention to flashback.
Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information
Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Do not breathe gas. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

6.2 Environmental precautions
Do not let product enter drains.

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6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Stop flow of gas, move leaking cylinder to open air if without risk.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Keep locked up or in an area accessible only to qualified or authorized persons. Keep away from combustible materials and sources of ignition.

Contents under pressure. Light sensitive.

Storage class

Storage class (TRGS 510): 2A: Gases

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Vinyl chloride	75-01-4	TWA	1 ppm	USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
		TWA	1 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Liver damage Lung cancer Confirmed human carcinogen		

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		STEL	5 ppm	USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
		TWA	1 ppm	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		STEL	5 ppm	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		See 1910.1017		
		Potential Occupational Carcinogen See Appendix A		

8.2 Exposure controls

Appropriate engineering controls
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Personal protective equipment

Eye/face protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Body Protection
Flame retardant antistatic protective clothing.

Respiratory protection
required when vapours/mists are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environmental exposure
Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a)	Appearance	Form: Liquefied gas Color: colorless
b)	Odor	odorless
c)	Odor Threshold	Not applicable
d)	pH	No data available
e)	Melting point/freezing point	Melting point/range: -153.8 °C (-244.8 °F) - lit.
f)	Initial boiling point and boiling range	-13.4 °C 7.9 °F - lit.
g)	Flash point	-62 °C (-80 °F) - closed cup
h)	Evaporation rate	No data available
i)	Flammability (solid,	No data available

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	gas)	
j)	Upper/lower flammability or explosive limits	Upper explosion limit: 29.3 %(V) Lower explosion limit: 3.8 %(V)
k)	Vapor pressure	No data available
l)	Vapor density	No data available
m)	Density	0.911 g/cm3 at 25 °C (77 °F) - lit.
	Relative density	No data available
n)	Water solubility	9.15 g/l at 20 °C (68 °F)
o)	Partition coefficient: n-octanol/water	log Pow: 1.58 at 22 °C (72 °F) - Bioaccumulation is not expected.
p)	Autoignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	none

9.2 Other safety information
No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions
Violent reactions possible with:
Strong oxidizing agents

10.4 Conditions to avoid
no information available

10.5 Incompatible materials
No data available

10.6 Hazardous decomposition products
In the event of fire: see section 5

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
Oral: No data available
LC50 Inhalation - Rat - 2 h - 390 mg/l - gas

Remarks: (ECHA)
Dermal: No data available

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
Test Type: In vitro mammalian cell gene mutation test
Test system: Chinese hamster lung cells
Metabolic activation: without metabolic activation
Result: negative
Remarks: (ECHA)
Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: positive

Test Type: dominant lethal test
Species: Mouse

Application Route: inhalation (gas)

Result: negative
Remarks: (ECHA)

Test Type: Micronucleus test
Species: Mouse

Application Route: inhalation (gas)
Method: OECD Test Guideline 474
Result: positive

Carcinogenicity
May cause cancer. Positive evidence from human epidemiological studies.

IARC:	1 - Group 1: Carcinogenic to humans (Vinyl chloride)
NTP:	Known - Known to be human carcinogen (Vinyl chloride)
OSHA:	OSHA specifically regulated carcinogen (Vinyl chloride)

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure

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No data available

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

11.2 Additional Information

Repeated dose toxicity - Rat - male and female - Oral - 13 Weeks - NOAEL (No observed adverse effect level) - 30 mg/kg

RTECS: KU9625000
burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Central nervous system -

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish	semi-static test LC50 - Danio rerio (zebra fish) - 210 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to bacteria	Remarks: (ECHA) (Vinyl chloride)

12.2 Persistence and degradability

Biodegradability	aerobic - Exposure time 28 d Result: 16 % - Not readily biodegradable. (OECD Test Guideline 301D)

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties
No data available

12.7 Other adverse effects
No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned

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containers like the product itself. Pressurised gas bottle: dispose of only in empty condition! See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14: Transport information

DOT (US)

UN number: 1086 Class: 2.1
Proper shipping name: Vinyl chloride, stabilized
Reportable Quantity (RQ): 1 lbs
Reportable Quantity (RQ): 1 lbs
Poison Inhalation Hazard: No

IMDG

UN number: 1086 Class: 2.1 EMS-No: F-D, S-U
Proper shipping name: VINYL CHLORIDE, STABILIZED

IATA

UN number: 1086 Class: 2.1
Proper shipping name: Vinyl chloride, stabilized
IATA Passenger: Not permitted for transport

SECTION 15: Regulatory information

SARA 302 Components

This material does not contain any components with a section 302 EHS TPQ.

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

	CAS-No.	Revision Date
Vinyl chloride	75-01-4	2007-07-01

SARA 311/312 Hazards

Fire Hazard, Sudden Release of Pressure Hazard, Acute Health Hazard, Chronic Health Hazard

Reportable Quantity : D043 lbs

Massachusetts Right To Know Components

	CAS-No.	Revision Date
Vinyl chloride	75-01-4	2007-07-01
Phenol	108-95-2	2007-07-01
hydroquinone	123-31-9	2007-03-01

Pennsylvania Right To Know Components

	CAS-No.	Revision Date
Vinyl chloride		

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	75-01-4	2007-07-01
Phenol	108-95-2	2007-07-01

California Prop. 65 Components

, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.Vinyl chloride	CAS-No. 75-01-4	Revision Date 2007-09-28

SECTION 16: Other information

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Version: 8.7 Revision Date: 03/06/2023 Print Date: 06/10/2023

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APPENDIX D

FIELD ACCIDENT REPORT

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INCIDENT / NEAR MISS INVESTIGATION AND REPORT - PAGE 1 OF 2			
TYPE OF INCIDENT - CHECK ALL THAT APPLY			
☒ INJURY/ILLNESS	☒ VEHICLE DAMAGE	☒ PROPERTY DAMAGE	☒ FIRE
☒ SPILL/RELEASE	☒ PERMIT EXCEEDENCE	☒ NEAR MISS	☒ OTHER
GENERAL INFORMATION			
PROJECT NAME:	DATE OF REPORT:	REPORT NO.:	
DATE OF INCIDENT:	TIME:	DAY OF WEEK:	
LOCATION OF INCIDENT:			
WEATHER CONDITIONS:	ADEQUATE LIGHTING AT SCENE? ☒ YES ☒ NO		
DESCRIBE WHAT HAPPENED (STEP BY STEP - USE ADDITIONAL PAGES IF NECESSARY)			
AFFECTED EMPLOYEE INFORMATION			
NAME:	EMPLOYEE: ☒ YES ☒ NO		
HOME ADDRESS:			
SOCIAL SECURITY NO.:	HOME PHONE NO.:		
JOB CLASSIFICATION:	YEARS IN JOB CLASSIFICATION:		
HOURS WORKED ON SHIFT PRIOR TO INCIDENT:	AGE:		
DID INCIDENT RELATE TO ROUTINE TASK FOR JOB CLASSIFICATION? ☒ YES ☒ NO			
INJURY/ILLNESS INFORMATION			
NATURE OF INJURY OR ILLNESS:			
OBJECT/EQUIPMENT/SUBSTANCE CAUSING HARM:			
FIRST AID PROVIDED? ☒ YES ☒ NO			
IF YES, WHERE WAS IT GIVEN: ☒ ON-SITE ☒ OFF-SITE			
IF YES, WHO PROVIDED FIRST AID:			
WILL THE INJURY/ILLNESS RESULT IN: ☒ RESTRICTED DUTY ☒ LOST TIME ☒ UNKNOWN			

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INCIDENT / NEAR MISS INVESTIGATION AND REPORT – PAGE 2 OF 2		
DATE OF INCIDENT:	DATE OF REPORT:	REPORT NUMBER:
INCIDENT COST: ESTIMATED: $_____ ACTUAL: $_____		
OSHA RECORDABLE(S): ☒ YES ☒ NO # DAYS AWAY FROM WORK _____	# RESTRICTED DAYS _____	
CAUSE ANALYSIS		
IMMEDIATE CAUSES – WHAT ACTIONS AND CONDITIONS CONTRIBUTED TO THIS EVENT?		
BASIC CAUSES – WHAT SPECIFIC PERSONAL OR JOB FACTORS CONTRIBUTED TO THIS EVENT?		
ACTION PLAN		
REMEDIAL ACTIONS – WHAT HAS AND OR SHOULD BE DONE TO CONTROL EACH OF THE CAUSES LISTED?		

ACTION	PERSON RESPONSIBLE	TARGET DATE	COMPLETION DATE

PERSONS PERFORMING INVESTIGATION		
INVESTIGATOR'S NAME: (PRINT)	SIGN:	DATE:
INVESTIGATOR'S NAME: (PRINT)	SIGN:	DATE:
INVESTIGATOR'S NAME: (PRINT)	SIGN:	DATE:
MANAGEMENT REVIEW		
PROJECT MANAGER: (PRINT)	SIGN:	DATE:
COMMENTS:		
H&S MANAGER: (PRINT)	SIGN:	DATE:
COMMENTS:		

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APPENDIX E

Community Air Monitoring Plan (CAMP)

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FAY REALTY INC.
434-440 RIVERDALE AVENUE
YONKERS, NEW YORK 10705
NYSDEC P-SITE: 360197

COMMUNITY AIR MONITORING PLAN

SUBMITTED TO:

New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor,
Albany, NY 12233-7014

PREPARED FOR:

Fay Realty Inc.
85 Nassau Drive
Great Neck, New York 11021

PREPARED BY:

P.W. Grosser Consulting
630 Johnson Ave., Suite 7
Bohemia, NY 11716
Phone: 631-589-6353

Jennifer Lewis, PG, Vice President — jenniferl@pwgrosser.com
Michael Gaul, Senior Project Manager — mgaul@pwgrosser.com
Evelyn Levine, Hydrogeologist — elevine@pwgrosser.com

PWGC Project Number: FAY2101

AUGUST 2023

COMMUNITY AIR MONITORING PLAN
434-440 RIVERDALE AVENUE, YONKERS, NEW YORK 10705

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1.0 INTRODUCTION

This Community Air Monitoring Plan (CAMP) provides measures for protection for on-site workers and the downwind community (i.e., off-site receptors including residences, businesses, and on-site workers not directly involved in the remedial investigation) from potential airborne contaminant releases resulting from remedial investigation activities performed at 432-434 Riverdale Avenue, Yonkers, New York.

The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that the remedial investigation or actions did not spread contamination off-site through the air. Based on previous investigations at the site, the primary concerns for this site are volatile organic compounds (VOCs) and dust particulates.

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2.0 REGULATORY REQUIREMENTS

This CAMP was established in accordance with the following requirements:

- 29 Code of Federal Regulations (CFR) 1910.120(h): This regulation specifies that air shall be monitored to identify and quantify levels of airborne hazardous substances and health hazards, and to determine the appropriate level of protection for workers.
- New York State Department of Health's (NYSDOH) Generic Community Air Monitoring Plan: This guidance specifies that a community air-monitoring program shall be implemented to protect the surrounding community and to confirm that the work does not spread contamination off-site through the air.
- New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER)-10, Appendix 1B – Fugitive Dust and Particulate Monitoring. This guidance provides a basis for developing and implementing a fugitive dust suppression and particulate monitoring program as an element of a site's health and safety program.

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3.0 AIR MONITORING

The following sections contain information describing the types, frequency, and location of air monitoring.

This section addresses the air monitoring that will be conducted within the work area, and along the site perimeter, during ground intrusive remedial investigation activities such as boring installation.

3.1. Volatile-Organic Vapor Monitoring, Response-Levels, and Actions

To establish ambient air background concentrations, air will be monitored at several locations around the site perimeter before investigation activities begin. These locations will be monitored periodically during the Site work during ground intrusive work to monitor for total VOCs. The monitoring work will be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. Air will be monitored for VOCs with a MiniRAE Lite Photoionization Detector (PID) or equivalent. The equipment will be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate.

If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.

If total organic vapor levels at the downwind perimeter of the work area persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level 200 feet downwind of the work area or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background.

If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shutdown. When work shutdown occurs, downwind air monitoring as directed by the Site Safety Officer will be implemented to ensure that vapor emission levels decrease.

3.2. Particulate Monitoring, Response-Levels, and Actions

To establish ambient air background concentrations, particulate concentrations will be monitored at several locations around the site perimeter before investigation activities begin. The particulate monitoring will be performed periodically using a dust meter capable of measuring particulate matter less than 10 micrometers in size (PM-10). Fugitive respirable dust will be monitored using a MiniRam Model PDM-3 aerosol monitor or equivalent. In addition, fugitive dust migration should be visually assessed during work activities.

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If the downwind PM-10 particulate level is 100 micrograms per cubic meter (µg/m³) greater than background (upwind perimeter) or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed.

Work will continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 µg/m³ above the upwind level and provided that no visible dust is migrating from the work area.

If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 µg/m³ above the upwind level, work will be stopped, and a re-evaluation of activities initiated. Work will resume if dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 µg/m³ of the upwind level and in preventing visible dust migration.

Readings will be recorded and be available for NYSDEC personnel to review.

3.3. Odor and Dust Control

3.3.1. Odor Control

Necessary means will be employed to prevent on and offsite odor nuisances. At a minimum, procedures will include limiting the area of exposed soil. If odors develop and cannot otherwise be controlled, additional means to eliminate odor nuisances will include: use of chemical odorants in spray or misting systems.

If nuisance odors are identified, work will be halted, and the source of odors will be identified and corrected. Work will not resume until nuisance odors have been abated. NYSDEC will be notified of odor complaint events. Implementation of odor controls will be the responsibility of the contractor.

3.3.2. Dust Control

Dust management during invasive onsite work will adjust to investigative activities as necessary. If nuisance dust emissions are identified, work will be halted, and the source of the dust will be identified and corrected. Work will not resume until nuisance dust emissions have been abated. NYSDEC will be notified of dust complaint events. Implementation of dust controls will be the responsibility of the contractor.

3.4. Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures

When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

- If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 part-per-million, monitoring should occur within the

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occupied structure(s). Depending upon the nature of contamination, chemical-specific colorimetric tubes of sufficient sensitivity may be necessary for comparing the exposure point concentrations with appropriate pre-determined response levels (response actions should also be pre-determined). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.

- If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 micrograms per cubic meter, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 micrograms per cubic meter or less at the monitoring point.
- Depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may also need to be monitored. Response levels and actions should be pre-determined, as necessary, for each site.

3.5. Special Requirements for Indoor Work With Co-Located Residences or Facilities

Unless a self-contained, negative-pressure enclosure with proper emission controls will encompass the work area, all individuals not directly involved with the planned work must be absent from the room in which the work will occur. Monitoring requirements shall be as stated above under "Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures" except that in this instance "nearby/occupied structures" would be adjacent occupied rooms. Additionally, the location of all exhaust vents in the room and their discharge points, as well as potential vapor pathways (openings, conduits, etc.) relative to adjoining rooms, should be understood and the monitoring locations established accordingly. In these situations, it is strongly recommended that exhaust fans or other engineering controls be used to create negative air pressure within the work area during remedial activities. Additionally, it is strongly recommended that the planned work be implemented during hours (e.g. weekends or evenings) when building occupancy is at a minimum.

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4.0 DATA QUALITY ASSURANCE

4.1. Calibration

Instrument calibration shall be documented in the designated field logbook. All instruments shall be calibrated in accordance with the manufacturer's instructions and specifications before each shift. Calibration checks may be used during the day to confirm instrument accuracy. Duplicate readings may be taken to confirm individual instrument response.

4.2. Operations

All instruments shall be operated in accordance with the manufacturer's specifications. Manufacturers' literature, including an operation manual for each piece of monitoring equipment will be maintained onsite.

4.3. Data Review

The Project Manager will interpret monitoring data based on regulatory requirements and their professional judgment. The Project Manager shall review the data to evaluate the potential for worker and community exposure, upgrades/downgrades in level of protection, comparison to direct reading instrumentation and changes in the integrated monitoring strategy.

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5.0 RECORD KEEPING

Copies of the CAMP monitoring logs for VOCs and dust particulates will be provided in the applicable report documenting the work activities conducted (daily reports). In the event that odor or dust suppression techniques are required, they will also be documented in the report. Daily reports will be submitted in a timely manner.

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APPENDIX F

NYSDEC Part 375 Remedial Programs, PFAS (April 2023)

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NEW YORK STATE OF OPPORTUNITY.

Department of Environmental Conservation

SAMPLING, ANALYSIS, AND ASSESSMENT OF PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

Under NYSDEC's Part 375 Remedial Programs

April 2023

www.dec.ny.gov

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ERRATA SHEET for

SAMPLING, ANALYSIS, AND ASSESSMENT OF PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) Under NYSDEC's Part 375 Remedial Programs Issued January 17, 2020

Citation and Page Number	Current Text	Corrected Text	Date
Title of Appendix I, page 32	Appendix H	Appendix I	2/25/2020
Document Cover, page 1	Guidelines for Sampling and Analysis of PFAS	Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs	9/15/2020
Data Assessment and Application to Site Cleanup Page 3	Until such time as Ambient Water Quality Standards (AWQS) and Soil Cleanup Objectives (SCOs) for PFOA and PFOS are published	Until such time as Soil Cleanup Objectives (SCOs) for PFOA and PFOS are published	3/28/2023
Water Sample Results Page 3	PFOA and PFOS should be further assessed and considered as potential contaminants of concern in groundwater or surface water if PFOA or PFOS is detected in any water sample at or above 10 ng/L (ppt) and is determined to be attributable to the site, either by a comparison of upgradient and downgradient levels, or the presence of soil source areas, as defined below.	NYSDEC has adopted ambient water quality guidance values for PFOA and PFOS. Groundwater samples should be compared to the human health criteria of 6.7 ng/l (ppt) for PFOA and 2.7 ng/l (ppt) for PFOS. These guidance values also include criteria for surface water for PFOS applicable for aquatic life, which may be applicable at some sites. Drinking water sample results should be compared to the NYS maximum contaminant level (MCL) of 10 ng/l (ppt).Analysis to determine if PFOA and PFOS concentrations are attributable to the site should include a comparison between upgradient and downgradient levels, and the presence of soil source areas, as defined below.	3/28/2023
Soil Sample Results Page 3	Soil cleanup objectives for PFOA and PFOS have been proposed in an upcoming revision to 6 NYCRR Part 375-6. Until SCOs are in effect, the following are to be used as guidance values:	NYSDEC will delay adding soil cleanup objectives for PFOA and PFOS to 6 NYCRR Part 375-6 until the PFAS rural soil background study has been completed. Until SCOs are in effect, the following are to be used as guidance values:	3/28/2023
Protection of Groundwater Page 3	PFOA (ppb) 1.1 PFOS (ppb) 3.7	PFOA (ppb) 0.8 PFOS (ppb) 1.0	3/28/2023

Citation and Page Number	Current Text	Corrected Text	Date
Footnote 2 Page 3	The movement of PFAS in the environment is being aggressively researched at this time; that research will eventually result in more accurate models for the behaviors of these chemicals. In the meantime, DEC has calculated the guidance value for the protection of groundwater using the same procedure used for all other chemicals, as described in Section 7.7 of the Technical Support Document (http://www.dec.ny.gov/docs/remediation_hudson_pdf/techsuppdoc.pdf).	The Protection of Groundwater values are based on the above referenced ambient groundwater guidance values. Details on that calculation are available in the following document, prepared for the February 2022 proposed changes to Part 375 (https://www.dec.ny.gov/docs/remediation_hudson_pdf/part375techsupport.pdf). The movement of PFAS in the environment is being aggressively researched at this time; that research will eventually result in more accurate models for the behaviors of these chemicals. In the meantime, DEC has calculated the guidance value for the protection of groundwater using the same procedure used for all other chemicals, as described in Section 7.7 of the Technical Support Document (http://www.dec.ny.gov/docs/remediation_hudson_pdf/techsuppdoc.pdf).	3/28/2023
Testing for Imported Soil Page 4	If the concentrations of PFOA and PFOS in leachate are at or above 10 ppt (the Maximum Contaminant Levels established for drinking water by the New York State Department of Health), then the soil is not acceptable.	If the concentrations of PFOA and PFOS in leachate are at or above the ambient water quality guidance values for groundwater, then the soil is not acceptable.	3/28/2023
Routine Analysis, page 9	"However, laboratories analyzing environmental samples…PFOA and PFOS in drinking water by EPA Method 537, 537.1 or ISO 25101."	"However, laboratories analyzing environmental samples…PFOA and PFOS in drinking water by EPA Method 537, 537.1, ISO 25101, or Method 533."	9/15/2020
Additional Analysis, page 9, new paragraph regarding soil parameters	None	"In cases where site-specific cleanup objectives for PFOA and PFOS are to be assessed, soil parameters, such as Total Organic Carbon (EPA Method 9060), soil pH (EPA Method 9045), clay content (percent), and cation exchange capacity (EPA Method 9081), should be included in the analysis to help evaluate factors affecting the leachability of PFAS in site soils."	9/15/2020

Citation and Page Number	Current Text	Corrected Text	Date
Data Assessment and Application to Site Cleanup Page 10	Until such time as Ambient Water Quality Standards (AWQS) and Soil Cleanup Objectives (SCOs) for PFAS are published, the extent of contaminated media potentially subject to remediation should be determined on a case-by-case basis using the procedures discussed below and the criteria in DER-10. Target levels for cleanup of PFAS in other media, including biota and sediment, have not yet been established by the DEC.	Until such time as Ambient Water Quality Standards (AWQS) and Soil Cleanup Objectives (SCOs) for PFOA and PFOS are published, the extent of contaminated media potentially subject to remediation should be determined on a case-by-case basis using the procedures discussed below and the criteria in DER-10. Preliminary target levels for cleanup of PFOA and PFOS in other media, including biota and sediment, have not yet been established by the DEC.	9/15/2020
Water Sample Results Page 10	PFAS should be further assessed and considered as a potential contaminant of concern in groundwater or surface water (…) If PFAS are identified as a contaminant of concern for a site, they should be assessed as part of the remedy selection process in accordance with Part 375 and DER-10.	PFOA and PFOS should be further assessed and considered as potential contaminants of concern in groundwater or surface water (…) If PFOA and/or PFOS are identified as contaminants of concern for a site, they should be assessed as part of the remedy selection process in accordance with Part 375 and DER-10.	9/15/2020

Citation and Page Number	Current Text	Corrected Text	Date
Soil Sample Results, page 10	"The extent of soil contamination for purposes of delineation and remedy selection should be determined by having certain soil samples tested by Synthetic Precipitation Leaching Procedure (SPLP) and the leachate analyzed for PFAS. Soil exhibiting SPLP results above 70 ppt for either PFOA or PFOS (individually or combined) are to be evaluated during the cleanup phase."	"Soil cleanup objectives for PFOA and PFOS will be proposed in an upcoming revision to 6 NYCRR Part 375-6. Until SCOs are in effect, the following are to be used as guidance values. " [Interim SCO Table] "PFOA and PFOS results for soil are to be compared against the guidance values listed above. These guidance values are to be used in determining whether PFOA and PFOS are contaminants of concern for the site and for determining remedial action objectives and cleanup requirements. Site-specific remedial objectives for protection of groundwater can also be presented for evaluation by DEC. Development of site-specific remedial objectives for protection of groundwater will require analysis of additional soil parameters relating to leachability. These additional analyses can include any or all the parameters listed above (soil pH, cation exchange capacity, etc.) and/or use of SPLP. As the understanding of PFAS transport improves, DEC welcomes proposals for site-specific remedial objectives for protection of groundwater. DEC will expect that those may be dependent on additional factors including soil pH, aqueous pH, % organic carbon, % Sand/Silt/Clay, soil cations: K, Ca, Mg, Na, Fe, Al, cation exchange capacity, and anion exchange capacity. Site-specific remedial objectives should also consider the dilution attenuation factor (DAF). The NJDEP publication on DAF can be used as a reference: https://www.nj.gov/dep/srp/guidance/rs/daf.pdf. "	9/15/2020

Citation and Page Number	Current Text	Corrected Text	Date
Testing for Imported Soil Page 11	Soil imported to a site for use in a soil cap, soil cover, or as backfill is to be tested for PFAS in general conformance with DER-10, Section 5.4(e) for the PFAS Analyte List (Appendix F) using the analytical procedures discussed below and the criteria in DER-10 associated with SVOCs. If PFOA or PFOS is detected in any sample at or above 1 µg/kg, then soil should be tested by SPLP and the leachate analyzed for PFAS. If the SPLP results exceed 10 ppt for either PFOA or PFOS (individually) then the source of backfill should be rejected, unless a site-specific exemption is provided by DER. SPLP leachate criteria is based on the Maximum Contaminant Levels proposed for drinking water by New York State's Department of Health, this value may be updated based on future Federal or State promulgated regulatory standards. Remedial parties have the option of analyzing samples concurrently for both PFAS in soil and in the SPLP leachate to minimize project delays. Category B deliverables should be submitted for backfill samples, though a DUSR is not required.	Testing for PFAS should be included any time a full TAL/TCL analyte list is required. Results for PFOA and PFOS should be compared to the applicable guidance values. If PFOA or PFOS is detected in any sample at or above the guidance values then the source of backfill should be rejected, unless a site-specific exemption is provided by DER based on SPLP testing, for example. If the concentrations of PFOA and PFOS in leachate are at or above 10 ppt (the Maximum Contaminant Levels established for drinking water by the New York State Department of Health), then the soil is not acceptable. PFOA, PFOS and 1,4-dioxane are all considered semi-volatile compounds, so composite samples are appropriate for these compounds when sampling in accordance with DER-10, Table 5.4(e)10. Category B deliverables should be submitted for backfill samples, though a DUSR is not required.	9/15/2020

Citation and Page Number	Current Text	Corrected Text	Date
Footnotes	None	[1] TOP Assay analysis of highly contaminated samples, such as those from an AFFF (aqueous film-forming foam) site, can result in incomplete oxidation of the samples and an underestimation of the total perfluoroalkyl substances. [2] The movement of PFAS in the environment is being aggressively researched at this time; that research will eventually result in more accurate models for the behaviors of these chemicals. In the meantime, DEC has calculated the soil cleanup objective for the protection of groundwater using the same procedure used for all other chemicals, as described in Section 7.7 of the Technical Support Document (http://www.dec.ny.gov/docs/remediation_hudson_pdf/techsuppdoc.pdf).	9/15/2020
Additional Analysis, page 9	In cases… soil parameters, such as Total Organic Carbon (EPA Method 9060), soil…	In cases… soil parameters, such as Total Organic Carbon (Lloyd Kahn), soil…	1/8/2021
Appendix A, General Guidelines, fourth bullet	List the ELAP-approved lab(s) to be used for analysis of samples	List the ELAP- certified lab(s) to be used for analysis of samples	1/8/2021
Appendix E, Laboratory Analysis and Containers	Drinking water samples collected using this protocol are intended to be analyzed for PFAS by ISO Method 25101.	Drinking water samples collected using this protocol are intended to be analyzed for PFAS by EPA Method 537, 537.1, 533, or ISO Method 25101	1/8/2021
Water Sample Results Page 9	"In addition, further assessment of water may be warranted if either of the following screening levels are met: a. any other individual PFAS (not PFOA or PFOS) is detected in water at or above 100 ng/L; or b. total concentration of PFAS (including PFOA and PFOS) is detected in water at or above 500 ng/L"	Deleted	6/15/2021

Citation and Page Number	Current Text	Corrected Text	Date
Routine Analysis, Page XX	Currently, New York State Department of Health's Environmental Laboratory Approval Program (ELAP)… criteria set forth in the DER's laboratory guidelines for PFAS in non-potable water and solids (Appendix H - Laboratory Guidelines for Analysis of PFAS in Non-Potable Water and Solids).	Deleted	5/31/2022
Analysis and Reporting, Page XX	As of October 2020, the United States Environmental Protection Agency (EPA) does not have a validated method for analysis of PFAS for media commonly analyzed under DER remedial programs (non-potable waters, solids). DER has developed the following guidelines to ensure consistency in analysis and reporting of PFAS.	Deleted	5/31/2022
Routine Analysis, Page XX	LC-MS/MS analysis for PFAS using methodologies based on EPA Method 537.1 is the procedure to use for environmental samples. Isotope dilution techniques should be utilized for the analysis of PFAS in all media.	EPA Method 1633 is the procedure to use for environmental samples.	
Soil Sample Results, Page XX	Soil cleanup objectives for PFOA and PFOS will be proposed in an upcoming revision to 6 NYCRR Part 375-6	Soil cleanup objectives for PFOA and PFOS have been proposed in an upcoming revision to 6 NYCRR Part 375-6	
Appendix A	"Include in the text… LC-MS/MS for PFAS using methodologies based on EPA Method 537.1"	"Include in the text ….EPA Method 1633"	
Appendix A	"Laboratory should have ELAP certification for PFOA and PFOS in drinking water by EPA Method 537, 537.1, EPA Method 533, or ISO 25101"	Deleted	
Appendix B	"Samples collected using this protocol are intended to be analyzed for PFAS using methodologies based on EPA Method 537.1"	"Samples collected using this protocol are intended to be analyzed for PFAS using EPA Method 1633"	

Citation and Page Number	Current Text	Corrected Text	Date
Appendix C	"Samples collected using this protocol are intended to be analyzed for PFAS using methodologies based on EPA Method 537.1"	"Samples collected using this protocol are intended to be analyzed for PFAS using EPA Method 1633"	
Appendix D	"Samples collected using this protocol are intended to be analyzed for PFAS using methodologies based on EPA Method 537.1"	"Samples collected using this protocol are intended to be analyzed for PFAS using EPA Method 1633"	
Appendix G		Updated to include all forty PFAS analytes in EPA Method 533	
Appendix H		Deleted	
Appendix I	Appendix I	Appendix H	
Appendix H	"These guidelines are intended to be used for the validation of PFAS analytical results for projects within the Division of Environmental Remediation (DER) as well as aid in the preparation of a data usability summary report."	"These guidelines are intended to be used for the validation of PFAS using EPA Method 1633 for projects within the Division of Environmental Remediation (DER)."	
Appendix H	"The holding time is 14 days…"	"The holding time is 28 days…"	
Appendix H, Initial Calibration	"The initial calibration should contain a minimum of five standards for linear fit…"	"The initial calibration should contain a minimum of six standards for linear fit…"	
Appendix H, Initial Calibration	Linear fit calibration curves should have an R^2 value greater than 0.990.	Deleted	
Appendix H, Initial Calibration Verification	Initial Calibration Verification Section	Deleted	
Appendix H	secondary Ion Monitoring Section	Deleted	
Appendix H	Branched and Linear Isomers Section	Deleted	

Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs

Objective

New York State Department of Environmental Conservation's Division of Environmental Remediation (DER) performs or oversees sampling of environmental media and subsequent analysis of PFAS as part of remedial programs implemented under 6 NYCRR Part 375. To ensure consistency in sampling, analysis, reporting, and assessment of PFAS, DER has developed this document which summarizes currently accepted procedures and updates previous DER technical guidance pertaining to PFAS.

Applicability

All work plans submitted to DEC pursuant to one of the remedial programs under Part 375 shall include PFAS sampling and analysis procedures that conform to the guidelines provided herein.

As part of a site investigation or remedial action compliance program, whenever samples of potentially affected media are collected and analyzed for the standard Target Analyte List/Target Compound List (TAL/TCL), PFAS analysis should also be performed. Potentially affected media can include soil, groundwater, surface water, and sediment. Based upon the potential for biota to be affected, biota sampling and analysis for PFAS may also be warranted as determined pursuant to a Fish and Wildlife Impact Analysis. Soil vapor sampling for PFAS is not required.

Field Sampling Procedures

DER-10 specifies technical guidance applicable to DER's remedial programs. Given the prevalence and use of PFAS, DER has developed "best management practices" specific to sampling for PFAS. As specified in DER-10 Chapter 2, quality assurance procedures are to be submitted with investigation work plans. Typically, these procedures are incorporated into a work plan, or submitted as a stand-alone document (e.g., a Quality Assurance Project Plan). Quality assurance guidelines for PFAS are listed in Appendix A - Quality Assurance Project Plan (QAPP) Guidelines for PFAS.

Field sampling for PFAS performed under DER remedial programs should follow the appropriate procedures outlined for soils, sediments, or other solids (Appendix B), non-potable groundwater (Appendix C), surface water (Appendix D), public or private water supply wells (Appendix E), and fish tissue (Appendix F).

QA/QC samples (e.g. duplicates, MS/MSD) should be collected as specified in DER-10, Section 2.3(c). For sampling equipment coming in contact with aqueous samples only, rinsate or equipment blanks should be collected. Equipment blanks should be collected at a minimum frequency of one per day per site or one per twenty samples, whichever is more frequent.

Analysis and Reporting

The investigation work plan should describe analysis and reporting procedures, including laboratory analytical procedures for the methods discussed below. As specified in DER-10 Section 2.2, laboratories should provide a full Category B deliverable. In addition, a Data Usability Summary Report (DUSR) should be prepared by an independent, third-party data validator. Electronic data submissions should meet the requirements provided at: https://www.dec.ny.gov/chemical/62440.html.

DER has developed a *PFAS Analyte List* (Appendix G) for remedial programs to understand the nature of contamination at sites. It is expected that reported results for PFAS will include, at a minimum, all the compounds listed. If lab and/or matrix specific issues are encountered for any analytes, the DER project manager, in consultation with the DER chemist, will make case-by-case decisions as to whether certain analytes may be temporarily or permanently discontinued from analysis at each site. As with other contaminants that are analyzed for at a site, the *PFAS Analyte List* may be refined for future sampling events based on investigative findings.

Routine Analysis

EPA Method 1633 is the procedure to use for environmental samples. Reporting limits for PFOA and PFOS in aqueous samples should not exceed 2 ng/L. Reporting limits for PFOA and PFOS in solid samples should not exceed 0.5 µg/kg. Reporting limits for all other PFAS in aqueous and solid media should be as close to these limits as possible. If laboratories indicate that they are not able to achieve these reporting limits for the entire *PFAS Analyte List*, site-specific decisions regarding acceptance of elevated reporting limits for specific PFAS can be made by the DER project manager in consultation with the DER chemist. Data review guidelines were developed by DER to ensure data comparability and usability (Appendix H - Data Review Guidelines for Analysis of PFAS in Non-Potable Water and Solids).

Additional Analysis

Additional laboratory methods for analysis of PFAS may be warranted at a site, such as the Synthetic Precipitation Leaching Procedure (SPLP) and Total Oxidizable Precursor Assay (TOP Assay).

In cases where site-specific cleanup objectives for PFOA and PFOS are to be assessed, soil parameters, such as Total Organic Carbon (Lloyd Kahn), soil pH (EPA Method 9045), clay content (percent), and cation exchange capacity (EPA Method 9081), should be included in the analysis to help evaluate factors affecting the leachability of PFAS in site soils.

SPLP is a technique used to determine the mobility of chemicals in liquids, soils and wastes, and may be useful in determining the need for addressing PFAS-containing material as part of the remedy. SPLP by EPA Method 1312 should be used unless otherwise specified by the DER project manager in consultation with the DER chemist.

Impacted materials can be made up of PFAS that are not analyzable by routine analytical methodology. A TOP Assay can be utilized to conceptualize the amount and type of oxidizable PFAS which could be liberated in the environment, which approximates the maximum concentration of perfluoroalkyl substances that could be generated if all polyfluoroalkyl substances were oxidized. For example, some polyfluoroalkyl substances may degrade or transform to form perfluoroalkyl substances (such as PFOA or PFOS), resulting in an increase in perfluoroalkyl substance concentrations as contaminated groundwater moves away from a source. The TOP Assay converts, through oxidation, polyfluoroalkyl substances (precursors) into perfluoroalkyl substances that can be detected by routine analytical methodology.[1]

[1] TOP Assay analysis of highly contaminated samples, such as those from an AFFF (aqueous film-forming foam) site, can result in incomplete oxidation of the samples and an underestimation of the total perfluoroalkyl substances.

Commercial laboratories have adopted methods which allow for the quantification of targeted PFAS in air and biota. The EPA's Office of Research and Development (ORD) is currently developing methods which allow for air emissions characterization of PFAS, including both targeted and non-targeted analysis of PFAS. Consult with the DER project manager and the DER chemist for assistance on analyzing biota/tissue and air samples.

Data Assessment and Application to Site Cleanup

Until such time as Soil Cleanup Objectives (SCOs) for PFOA and PFOS are published, the extent of contaminated media potentially subject to remediation should be determined on a case-by-case basis using the procedures discussed below and the criteria in DER-10. Preliminary target levels for cleanup of PFOA and PFOS in other media, including biota and sediment, have not yet been established by the DEC.

Water Sample Results

NYSDEC has adopted ambient water quality guidance values for PFOA and PFOS. Groundwater samples should be compared to the human health criteria of 6.7 ng/l (ppt) for PFOA and 2.7 ng/l (ppt) for PFOS. These human health criteria should also be applied to surface water that is used as a water supply. This guidance also includes criteria for surface water for PFOS applicable for aquatic life, which may be applicable at some sites. Drinking water sample results should be compared to the NYS maximum contaminant level (MCL) of 10 ng/l (ppt). Analysis to determine if PFOA and PFOS concentrations are attributable to the site should include a comparison between upgradient and downgradient levels, and the presence of soil source areas, as defined below.

If PFOA and/or PFOS are identified as contaminants of concern for a site, they should be assessed as part of the remedy selection process in accordance with Part 375 and DER-10.

Soil Sample Results

NYSDEC will delay adding soil cleanup objectives for PFOA and PFOS to 6 NYCRR Part 375-6 until the PFAS rural soil background study has been completed. Until SCOs are in effect, the following are to be used as guidance values:

Guidance Values for Anticipated Site Use	PFOA (ppb)	PFOS (ppb)
Unrestricted	0.66	0.88
Residential	6.6	8.8
Restricted Residential	33	44
Commercial	500	440
Industrial	600	440
Protection of Groundwater[2]	0.8	1.0

PFOA and PFOS results for soil are to be compared against the guidance values listed above. These guidance values are to be used in determining whether PFOA and PFOS are contaminants of concern for the site and for determining remedial action objectives and cleanup requirements. Site-specific remedial objectives for protection of groundwater can also be presented for evaluation by DEC. Development of site-specific remedial objectives for protection of groundwater will require analysis of additional soil parameters relating to leachability. These

[2] The Protection of Groundwater values are based on the above referenced ambient groundwater guidance values. Details on that calculation are available in the following document, prepared for the February 2022 proposed changes to Part 375 (https://www.dec.ny.gov/docs/remediation_hudson_pdf/part375techsupport.pdf). The movement of PFAS in the environment is being aggressively researched at this time; that research will eventually result in more accurate models for the behaviors of these chemicals. In the meantime, DEC has calculated the guidance value for the protection of groundwater using the same procedure used for all other chemicals, as described in Section 7.7 of the Technical Support Document (http://www.dec.ny.gov/docs/remediation_hudson_pdf/techsuppdoc.pdf).

additional analyses can include any or all the parameters listed above (soil pH, cation exchange capacity, etc.) and/or use of SPLP.

As the understanding of PFAS transport improves, DEC welcomes proposals for site-specific remedial objectives for protection of groundwater. DEC will expect that those may be dependent on additional factors including soil pH, aqueous pH, % organic carbon, % Sand/Silt/Clay, soil cations: K, Ca, Mg, Na, Fe, Al, cation exchange capacity, and anion exchange capacity. Site-specific remedial objectives should also consider the dilution attenuation factor (DAF). The NJDEP publication on DAF can be used as a reference: https://www.nj.gov/dep/srp/guidance/rs/daf.pdf.

Testing for Imported Soil

Testing for PFAS should be included any time a full TAL/TCL analyte list is required. Results for PFOA and PFOS should be compared to the applicable guidance values. If PFOA or PFOS is detected in any sample at or above the guidance values then the source of backfill should be rejected, unless a site-specific exemption is provided by DER based on SPLP testing, for example. If the concentrations of PFOA and PFOS in leachate are at or above the ambient water quality guidance values for groundwater, then the soil is not acceptable.

PFOA, PFOS and 1,4-dioxane are all considered semi-volatile compounds, so composite samples are appropriate for these compounds when sampling in accordance with DER-10, Table 5.4(e)10. Category B deliverables should be submitted for backfill samples, though a DUSR is not required.

Appendix A - Quality Assurance Project Plan (QAPP) Guidelines for PFAS

The following guidelines (general and PFAS-specific) can be used to assist with the development of a QAPP for projects within DER involving sampling and analysis of PFAS.

General Guidelines in Accordance with DER-10

- Document/work plan section title – Quality Assurance Project Plan
- Summarize project scope, goals, and objectives
- Provide project organization including names and resumes of the project manager, Quality Assurance Officer (QAO), field staff, and Data Validator
    - The QAO should not have another position on the project, such as project or task manager, that involves project productivity or profitability as a job performance criterion
- List the ELAP certified lab(s) to be used for analysis of samples
- Include a site map showing sample locations
- Provide detailed sampling procedures for each matrix
- Include Data Quality Usability Objectives
- List equipment decontamination procedures
- Include an "Analytical Methods/Quality Assurance Summary Table" specifying:
    - Matrix type
    - Number or frequency of samples to be collected per matrix
    - Number of field and trip blanks per matrix
    - Analytical parameters to be measured per matrix
    - Analytical methods to be used per matrix with minimum reporting limits
    - Number and type of matrix spike and matrix spike duplicate samples to be collected
    - Number and type of duplicate samples to be collected
    - Sample preservation to be used per analytical method and sample matrix
    - Sample container volume and type to be used per analytical method and sample matrix
    - Sample holding time to be used per analytical method and sample matrix
- Specify Category B laboratory data deliverables and preparation of a DUSR

Specific Guidelines for PFAS

- Include in the text that sampling for PFAS will take place
- Include in the text that PFAS will be analyzed by EPA Method 1633
- Include the list of PFAS compounds to be analyzed (*PFAS Analyte List*)
- Include the laboratory SOP for PFAS analysis
- List the minimum method-achievable Reporting Limits for PFAS
    - Reporting Limits should be less than or equal to:
        - Aqueous – 2 ng/L (ppt)
        - Solids – 0.5 µg/kg (ppb)
- Include the laboratory Method Detection Limits for the PFAS compounds to be analyzed
-
- Include detailed sampling procedures
    - Precautions to be taken
    - Pump and equipment types
    - Decontamination procedures
    - Approved materials only to be used
- Specify that regular ice only will be used for sample shipment
- Specify that equipment blanks should be collected at a minimum frequency of 1 per day per site for each matrix

Appendix B - Sampling Protocols for PFAS in Soils, Sediments and Solids

General

The objective of this protocol is to give general guidelines for the collection of soil, sediment and other solid samples for PFAS analysis. The sampling procedure used should be consistent with Sampling Guidelines and Protocols – Technological Background and Quality Control/Quality Assurance for NYS DEC Spill Response Program – March 1991 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/sgpsect5.pdf), with the following limitations.

Laboratory Analysis and Containers

Samples collected using this protocol are intended to be analyzed for PFAS using EPA Method 1633.

The preferred material for containers is high density polyethylene (HDPE). Pre-cleaned sample containers, coolers, sample labels, and a chain of custody form will be provided by the laboratory.

Equipment

Acceptable materials for sampling include stainless steel, HDPE, PVC, silicone, acetate, and polypropylene. Additional materials may be acceptable if pre-approved by New York State Department of Environmental Conservation's Division of Environmental Remediation.

No sampling equipment components or sample containers should come in to contact with aluminum foil, low density polyethylene, glass, or polytetrafluoroethylene (PTFE, Teflon™) materials including sample bottle cap liners with a PTFE layer.

A list of acceptable equipment is provided below, but other equipment may be considered appropriate based on sampling conditions.

- stainless steel spoon
- stainless steel bowl
- steel hand auger or shovel without any coatings

Equipment Decontamination

Standard two step decontamination using detergent (Alconox is acceptable) and clean, PFAS-free water will be performed for sampling equipment. All sources of water used for equipment decontamination should be verified in advance to be PFAS-free through laboratory analysis or certification.

Sampling Techniques

Sampling is often conducted in areas where a vegetative turf has been established. In these cases, a pre-cleaned trowel or shovel should be used to carefully remove the turf so that it may be replaced at the conclusion of sampling. Surface soil samples (e.g. 0 to 6 inches below surface) should then be collected using a pre-cleaned, stainless steel spoon. Shallow subsurface soil samples (e.g. 6 to ~36 inches below surface) may be collected by digging a hole using a pre-cleaned hand auger or shovel. When the desired subsurface depth is reached, a pre-cleaned hand auger or spoon shall be used to obtain the sample.

When the sample is obtained, it should be deposited into a stainless steel bowl for mixing prior to filling the sample containers. The soil should be placed directly into the bowl and mixed thoroughly by rolling the material into the middle until the material is homogenized. At this point the material within the bowl can be placed into the laboratory provided container.

Sample Identification and Logging

A label shall be attached to each sample container with a unique identification. Each sample shall be included on the chain of custody (COC).

Quality Assurance/Quality Control

- Immediately place samples in a cooler maintained at 4 ± 2º Celsius using ice
- Collect one field duplicate for every sample batch, minimum 1 duplicate per 20 samples. The duplicate shall consist of an additional sample at a given location
- Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, minimum 1 MS/MSD per 20 samples. The MS/MSD shall consist of an additional two samples at a given location and identified on the COC
- Request appropriate data deliverable (Category B) and an electronic data deliverable

Documentation

A soil log or sample log shall document the location of the sample/borehole, depth of the sample, sampling equipment, duplicate sample, visual description of the material, and any other observations or notes determined to be appropriate. Additionally, care should be performed to limit contact with PFAS containing materials (e.g. waterproof field books, food packaging) during the sampling process.

Personal Protection Equipment (PPE)

For most sampling Level D PPE is anticipated to be appropriate. The sampler should wear nitrile gloves while conducting field work and handling sample containers.

Field staff shall consider the clothing to be worn during sampling activities. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFAS materials should be avoided. All clothing worn by sampling personnel should have been laundered multiple times.

Appropriate rain gear (PVC, polyurethane, or rubber rain gear are acceptable), bug spray, and sunscreen should be used that does not contain PFAS. Well washed cotton coveralls may be used as an alternative to bug spray and/or sunscreen.

PPE that contains PFAS is acceptable when site conditions warrant additional protection for the samplers and no other materials can be used to be protective. Documentation of such use should be provided in the field notes.

Appendix C - Sampling Protocols for PFAS in Monitoring Wells

General

The objective of this protocol is to give general guidelines for the collection of groundwater samples for PFAS analysis. The sampling procedure used should be consistent with Sampling Guidelines and Protocols – Technological Background and Quality Control/Quality Assurance for NYS DEC Spill Response Program – March 1991 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/sgpsect5.pdf), with the following limitations.

Laboratory Analysis and Container

Samples collected using this protocol are intended to be analyzed for PFAS using EPA Method 1633.

The preferred material for containers is high density polyethylene (HDPE). Pre-cleaned sample containers, coolers, sample labels, and a chain of custody form will be provided by the laboratory.

Equipment

Acceptable materials for sampling include: stainless steel, HDPE, PVC, silicone, acetate, and polypropylene. Additional materials may be acceptable if pre-approved by New York State Department of Environmental Conservation's Division of Environmental Remediation.

No sampling equipment components or sample containers should come in contact with aluminum foil, low density polyethylene, glass, or polytetrafluoroethylene (PTFE, Teflon™) materials including plumbers tape and sample bottle cap liners with a PTFE layer.

A list of acceptable equipment is provided below, but other equipment may be considered appropriate based on sampling conditions.

- stainless steel inertia pump with HDPE tubing
- peristaltic pump equipped with HDPE tubing and silicone tubing
- stainless steel bailer with stainless steel ball
- bladder pump (identified as PFAS-free) with HDPE tubing

Equipment Decontamination

Standard two step decontamination using detergent (Alconox is acceptable) and clean, PFAS-free water will be performed for sampling equipment. All sources of water used for equipment decontamination should be verified in advance to be PFAS-free through laboratory analysis or certification.

Sampling Techniques

Monitoring wells should be purged in accordance with the sampling procedure (standard/volume purge or low flow purge) identified in the site work plan, which will determine the appropriate time to collect the sample. If sampling using standard purge techniques, additional purging may be needed to reduce turbidity levels, so samples contain a limited amount of sediment within the sample containers. Sample containers that contain sediment may cause issues at the laboratory, which may result in elevated reporting limits and other issues during the sample preparation that can compromise data usability. Sampling personnel should don new nitrile gloves prior to sample collection due to the potential to contact PFAS containing items (not related to the sampling equipment) during the purging activities.

Sample Identification and Logging

A label shall be attached to each sample container with a unique identification. Each sample shall be included on the chain of custody (COC).

Quality Assurance/Quality Control

- Immediately place samples in a cooler maintained at 4 ± 2º Celsius using ice
- Collect one field duplicate for every sample batch, minimum 1 duplicate per 20 samples. The duplicate shall consist of an additional sample at a given location
- Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, minimum 1 MS/MSD per 20 samples. The MS/MSD shall consist of an additional two samples at a given location and identified on the COC
- Collect one equipment blank per day per site and minimum 1 equipment blank per 20 samples. The equipment blank shall test the new and decontaminated sampling equipment utilized to obtain a sample for residual PFAS contamination. This sample is obtained by using laboratory provided PFAS-free water and passing the water over or through the sampling device and into laboratory provided sample containers
- Additional equipment blank samples may be collected to assess other equipment that is utilized at the monitoring well
- Request appropriate data deliverable (Category B) and an electronic data deliverable

Documentation

A purge log shall document the location of the sample, sampling equipment, groundwater parameters, duplicate sample, visual description of the material, and any other observations or notes determined to be appropriate. Additionally, care should be performed to limit contact with PFAS containing materials (e.g. waterproof field books, food packaging) during the sampling process.

Personal Protection Equipment (PPE)

For most sampling Level D PPE is anticipated to be appropriate. The sampler should wear nitrile gloves while conducting field work and handling sample containers.

Field staff shall consider the clothing to be worn during sampling activities. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFAS materials should be avoided. All clothing worn by sampling personnel should have been laundered multiple times.

Appropriate rain gear (PVC, polyurethane, or rubber rain gear are acceptable), bug spray, and sunscreen should be used that does not contain PFAS. Well washed cotton coveralls may be used as an alternative to bug spray and/or sunscreen.

PPE that contains PFAS is acceptable when site conditions warrant additional protection for the samplers and no other materials can be used to be protective. Documentation of such use should be provided in the field notes.

Appendix D - Sampling Protocols for PFAS in Surface Water

General

The objective of this protocol is to give general guidelines for the collection of surface water samples for PFAS analysis. The sampling procedure used should be consistent with Sampling Guidelines and Protocols – Technological Background and Quality Control/Quality Assurance for NYS DEC Spill Response Program – March 1991 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/sgpsect5.pdf), with the following limitations.

Laboratory Analysis and Container

Samples collected using this protocol are intended to be analyzed for PFAS using EPA Method 1633.

The preferred material for containers is high density polyethylene (HDPE). Pre-cleaned sample containers, coolers, sample labels, and a chain of custody form will be provided by the laboratory.

Equipment

Acceptable materials for sampling include: stainless steel, HDPE, PVC, silicone, acetate, and polypropylene. Additional materials may be acceptable if pre-approved by New York State Department of Environmental Conservation's Division of Environmental Remediation.

No sampling equipment components or sample containers should come in contact with aluminum foil, low density polyethylene, glass, or polytetrafluoroethylene (PTFE, Teflon™) materials including sample bottle cap liners with a PTFE layer.

A list of acceptable equipment is provided below, but other equipment may be considered appropriate based on sampling conditions.

- stainless steel cup

Equipment Decontamination

Standard two step decontamination using detergent (Alconox is acceptable) and clean, PFAS-free water will be performed for sampling equipment. All sources of water used for equipment decontamination should be verified in advance to be PFAS-free through laboratory analysis or certification.

Sampling Techniques

Where conditions permit, (e.g. creek or pond) sampling devices (e.g. stainless steel cup) should be rinsed with site medium to be sampled prior to collection of the sample. At this point the sample can be collected and poured into the sample container.

If site conditions permit, samples can be collected directly into the laboratory container.

Sample Identification and Logging

A label shall be attached to each sample container with a unique identification. Each sample shall be included on the chain of custody (COC).

Quality Assurance/Quality Control

- Immediately place samples in a cooler maintained at 4 ± 2º Celsius using ice
- Collect one field duplicate for every sample batch, minimum 1 duplicate per 20 samples. The duplicate shall consist of an additional sample at a given location
- Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, minimum 1 MS/MSD per 20 samples. The MS/MSD shall consist of an additional two samples at a given location and identified on the COC
- Collect one equipment blank per day per site and minimum 1 equipment blank per 20 samples. The equipment blank shall test the new and decontaminated sampling equipment utilized to obtain a sample for residual PFAS contamination. This sample is obtained by using laboratory provided PFAS-free water and passing the water over or through the sampling device and into laboratory provided sample containers
- Request appropriate data deliverable (Category B) and an electronic data deliverable

Documentation

A sample log shall document the location of the sample, sampling equipment, duplicate sample, visual description of the material, and any other observations or notes determined to be appropriate. Additionally, care should be performed to limit contact with PFAS containing materials (e.g. waterproof field books, food packaging) during the sampling process.

Personal Protection Equipment (PPE)

For most sampling Level D PPE is anticipated to be appropriate. The sampler should wear nitrile gloves while conducting field work and handling sample containers.

Field staff shall consider the clothing to be worn during sampling activities. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFAS materials should be avoided. All clothing worn by sampling personnel should have been laundered multiple times.

Appropriate rain gear (PVC, polyurethane, or rubber rain gear are acceptable), bug spray, and sunscreen should be used that does not contain PFAS. Well washed cotton coveralls may be used as an alternative to bug spray and/or sunscreen.

PPE that contains PFAS is acceptable when site conditions warrant additional protection for the samplers and no other materials can be used to be protective. Documentation of such use should be provided in the field notes.

Appendix E - Sampling Protocols for PFAS in Private Water Supply Wells

General

The objective of this protocol is to give general guidelines for the collection of water samples from private water supply wells (with a functioning pump) for PFAS analysis. The sampling procedure used should be consistent with Sampling Guidelines and Protocols – Technological Background and Quality Control/Quality Assurance for NYS DEC Spill Response Program – March 1991 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/sgpsect5.pdf), with the following limitations.

Laboratory Analysis and Container

Drinking water samples collected using this protocol are intended to be analyzed for PFAS by EPA Method 537, 537.1, 533, or ISO Method 25101. The preferred material for containers is high density polyethylene (HDPE). Pre-cleaned sample containers, coolers, sample labels, and a chain of custody form will be provided by the laboratory.

Equipment

Acceptable materials for sampling include stainless steel, HDPE, PVC, silicone, acetate, and polypropylene. Additional materials may be acceptable if pre-approved by New York State Department of Environmental Conservation's Division of Environmental Remediation.

No sampling equipment components or sample containers should come in contact with aluminum foil, low density polyethylene, glass, or polytetrafluoroethylene (PTFE, Teflon™) materials (e.g. plumbers tape), including sample bottle cap liners with a PTFE layer.

Equipment Decontamination

Standard two step decontamination using detergent (Alconox is acceptable) and clean, PFAS-free water will be performed for sampling equipment. All sources of water used for equipment decontamination should be verified in advance to be PFAS-free through laboratory analysis or certification.

Sampling Techniques

Locate and assess the pressure tank and determine if any filter units are present within the building. Establish the sample location as close to the well pump as possible, which is typically the spigot at the pressure tank. Ensure sampling equipment is kept clean during sampling as access to the pressure tank spigot, which is likely located close to the ground, may be obstructed and may hinder sample collection.

Prior to sampling, a faucet downstream of the pressure tank (e.g., washroom sink) should be run until the well pump comes on and a decrease in water temperature is noted which indicates that the water is coming from the well. If the homeowner is amenable, staff should run the water longer to purge the well (15+ minutes) to provide a sample representative of the water in the formation rather than standing water in the well and piping system including the pressure tank. At this point a new pair of nitrile gloves should be donned and the sample can be collected from the sample point at the pressure tank.

Sample Identification and Logging

A label shall be attached to each sample container with a unique identification. Each sample shall be included on the chain of custody (COC).

Quality Assurance/Quality Control

- Immediately place samples in a cooler maintained at 4 ± 2º Celsius using ice
- Collect one field duplicate for every sample batch, minimum 1 duplicate per 20 samples. The duplicate shall consist of an additional sample at a given location
- Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, minimum 1 MS/MSD per 20 samples. The MS/MSD shall consist of an additional two samples at a given location and identified on the COC
- If equipment was used, collect one equipment blank per day per site and a minimum 1 equipment blank per 20 samples. The equipment blank shall test the new and decontaminated sampling equipment utilized to obtain a sample for residual PFAS contamination. This sample is obtained by using laboratory provided PFAS-free water and passing the water over or through the sampling device and into laboratory provided sample containers.
- A field reagent blank (FRB) should be collected at a rate of one per 20 samples. The lab will provide a FRB bottle containing PFAS free water and one empty FRB bottle. In the field, pour the water from the one bottle into the empty FRB bottle and label appropriately.
- Request appropriate data deliverable (Category B) and an electronic data deliverable
- For sampling events where multiple private wells (homes or sites) are to be sampled per day, it is acceptable to collect QC samples at a rate of one per 20 across multiple sites or days.

Documentation

A sample log shall document the location of the private well, sample point location, owner contact information, sampling equipment, purge duration, duplicate sample, visual description of the material, and any other observations or notes determined to be appropriate and available (e.g. well construction, pump type and location, yield, installation date). Additionally, care should be performed to limit contact with PFAS containing materials (e.g. waterproof field books, food packaging) during the sampling process.

Personal Protection Equipment (PPE)

For most sampling Level D PPE is anticipated to be appropriate. The sampler should wear nitrile gloves while conducting field work and handling sample containers.

Field staff shall consider the clothing to be worn during sampling activities. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFAS materials should be avoided. All clothing worn by sampling personnel should have been laundered multiple times.

Appendix F - Sampling Protocols for PFAS in Fish

This appendix contains a copy of the current SOP developed by the Division of Fish and Wildlife (DFW) entitled "General Fish Handling Procedures for Contaminant Analysis" (Ver. 8). This SOP should be followed when collecting fish for contaminant analysis. Note, however, that the Bureau of Ecosystem Health will not be supplying bags or tags. All supplies are the responsibility of the collector

Procedure Name: General Fish Handling Procedures for Contaminant Analysis

Number: FW-005

Purpose: This procedure describes data collection, fish processing and delivery of fish collected for contaminant monitoring. It contains the chain of custody and collection record forms that should be used for the collections.

Organization: Environmental Monitoring Section
Bureau of Ecosystem Health
Division of Fish and Wildlife (DFW)
New York State Department of Environmental Conservation (NYSDEC)
625 Broadway
Albany, New York 12233-4756

Version: 8

Previous Version Date: 21 March 2018

Summary of Changes to this Version: Updated bureau name to Bureau of Ecosystem Health. Added direction to list the names of all field crew on the collection record. Minor formatting changes on chain of custody and collection records.

Originator or Revised by: Wayne Richter, Jesse Becker

Date: 26 April 2019

Quality Assurance Officer and Approval Date: Jesse Becker, 26 April 2019

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

GENERAL FISH HANDLING PROCEDURES FOR CONTAMINANT ANALYSES

A. Original copies of all continuity of evidence (i.e., Chain of Custody) and collection record forms must accompany delivery of fish to the lab. A copy shall be directed to the Project Leader or as appropriate, Wayne Richter. All necessary forms will be supplied by the Bureau of Ecosystem Health. Because some samples may be used in legal cases, it is critical that each section is filled out completely. Each Chain of Custody form has three main sections:

   1. The top box is to be filled out **and signed** by the person responsible for the fish collection (e.g., crew leader, field biologist, researcher). This person is responsible for delivery of the samples to DEC facilities or personnel (e.g., regional office or biologist).

   2. The second section is to be filled out **and signed** by the person responsible for the collections while being stored at DEC, before delivery to the analytical lab. This may be the same person as in (1), but it is still required that they complete the section. Also important is the **range of identification numbers** (i.e., tag numbers) included in the sample batch.

   3. Finally, the bottom box is to record any transfers between DEC personnel and facilities. Each subsequent transfer should be **identified, signed, and dated**, until laboratory personnel take possession of the fish.

B. The following data are required on each **Fish Collection Record** form:

   1. Project and Site Name.

   2. DEC Region.

   3. All personnel (and affiliation) involved in the collection.

   4. Method of collection (gill net, hook and line, etc.)

   5. Preservation Method.

C. The following data are to be taken on each fish collected and recorded on the **Fish Collection Record** form:

   1. Tag number - Each specimen is to be individually jaw tagged at time of collection with a unique number. Make sure the tag is turned out so that the number can be read without opening the bag. Use tags in sequential order. For small fish or composite samples place the tag inside the bag with the samples. The Bureau of Ecosystem Health can supply the tags.

   2. Species identification (please be explicit enough to enable assigning genus and species). Group fish by species when processing.

   3. Date collected.

   4. Sample location (waterway and nearest prominent identifiable landmark).

   5. Total length (nearest mm or smallest sub-unit on measuring instrument) and weight (nearest g or

smallest sub-unit of weight on weighing instrument). Take all measures as soon as possible with calibrated, protected instruments (e.g. from wind and upsets) and prior to freezing.

6. Sex - fish may be cut enough to allow sexing or other internal investigation, but do not eviscerate. Make any incision on the right side of the belly flap or exactly down the midline so that a left-side fillet can be removed.

D. General data collection recommendations:

1. It is helpful to use an ID or tag number that will be unique. It is best to use metal striped bass or other uniquely numbered metal tags. If uniquely numbered tags are unavailable, values based on the region, water body and year are likely to be unique: for example, R7CAY11001 for Region 7, Cayuga Lake, 2011, fish 1. If the fish are just numbered 1 through 20, we have to give them new numbers for our database, making it more difficult to trace your fish to their analytical results and creating an additional possibility for errors.

2. Process and record fish of the same species sequentially. Recording mistakes are less likely when all fish from a species are processed together. Starting with the bigger fish species helps avoid missing an individual.

3. If using Bureau of Ecosystem Health supplied tags or other numbered tags, use tags in sequence so that fish are recorded with sequential Tag Numbers. This makes data entry and login at the lab and use of the data in the future easier and reduces keypunch errors.

4. Record length and weight as soon as possible after collection and before freezing. Other data are recorded in the field upon collection. An age determination of each fish is optional, but if done, it is recorded in the appropriate “Age” column.

5. For composite samples of small fish, record the number of fish in the composite in the Remarks column. Record the length and weight of each individual in a composite. All fish in a composite sample should be of the same species and members of a composite should be visually matched for size.

6. Please submit photocopies of topographic maps or good quality navigation charts indicating sampling locations. GPS coordinates can be entered in the Location column of the collection record form in addition to or instead for providing a map. These records are of immense help to us (and hopefully you) in providing documented location records which are not dependent on memory and/or the same collection crew. In addition, they may be helpful for contaminant source trackdown and remediation/control efforts of the Department.

7. When recording data on fish measurements, it will help to ensure correct data recording for the data recorder to call back the numbers to the person making the measurements.

E. Each fish is to be placed in its own individual plastic bag. For small fish to be analyzed as a composite, put all of the fish for one composite in the same bag but use a separate bag for each composite. It is important to individually bag the fish to avoid difficulties or cross contamination when processing the fish for chemical analysis. Be sure to include the fish’s tag number inside the bag, preferably attached to the fish with the tag number turned out so it can be read. Tie or otherwise secure the bag closed. **The Bureau of Ecosystem Health will supply the bags.** If necessary, food grade bags may be procured from a suitable vendor (e.g., grocery store). It is preferable to redundantly label each bag with a manila tag tied between the knot and the body of the bag. This tag should be labeled with the project name, collection location, tag number, collection date, and fish species. If scales are collected, the scale envelope should be labeled with

the same information.

F. Groups of fish, by species, are to be placed in one large plastic bag per sampling location. **The Bureau of Ecosystem Health will supply the larger bags.** Tie or otherwise secure the bag closed. Label the site bag with a manila tag tied between the knot and the body of the bag. The tag should contain: project, collection location, collection date, species and **tag number ranges**. Having this information on the manila tag enables lab staff to know what is in the bag without opening it.

G. Do not eviscerate, fillet or otherwise dissect the fish unless specifically asked to. If evisceration or dissection is specified, the fish must be cut along the exact midline or on the right side so that the left side fillet can be removed intact at the laboratory. If filleting is specified, the procedure for taking a standard fillet (SOP PREPLAB 4) must be followed, including removing scales.

H. Special procedures for PFAS: Unlike legacy contaminants such as PCBs, which are rarely found in day to day life, PFAS are widely used and frequently encountered. Practices that avoid sample contamination are therefore necessary. While no standard practices have been established for fish, procedures for water quality sampling can provide guidance. The following practices should be used for collections when fish are to be analyzed for PFAS:

No materials containing Teflon.
No Post-it notes.
No ice packs; only water ice or dry ice.
Any gloves worn must be powder free nitrile.
No Gore-Tex or similar materials (Gore-Tex is a PFC with PFOA used in its manufacture).
No stain repellent or waterproof treated clothing; these are likely to contain PFCs.
Avoid plastic materials, other than HDPE, including clipboards and waterproof notebooks.
Wash hands after handling any food containers or packages as these may contain PFCs.
Keep pre-wrapped food containers and wrappers isolated from fish handling.
Wear clothing washed at least six times since purchase.
Wear clothing washed without fabric softener.
Staff should avoid cosmetics, moisturizers, hand creams and similar products on the day of sampling as many of these products contain PFCs (Fujii et al. 2013). Sunscreen or insect repellent should not contain ingredients with “fluor” in their name. Apply any sunscreen or insect repellent well downwind from all materials. Hands must be washed after touching any of these products.

I. All fish must be kept at a temperature <45° F (<8° C) immediately following data processing. As soon as possible, freeze at -20° C ± 5° C. Due to occasional freezer failures, daily freezer temperature logs are required. The freezer should be locked or otherwise secured to maintain chain of custody.

J. In most cases, samples should be delivered to the Analytical Services Unit at the Hale Creek field station. Coordinate delivery with field station staff and send copies of the collection records, continuity of evidence forms and freezer temperature logs to the field station. For samples to be analyzed elsewhere, non-routine collections or other questions, contact Wayne Richter, Bureau of Ecosystem Health, NYSDEC, 625 Broadway, Albany, New York 12233-4756, 518-402-8974, or the project leader about sample transfer. Samples will then be directed to the analytical facility and personnel noted on specific project descriptions.

K. A recommended equipment list is at the end of this document.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF FISH AND WILDLIFE
FISH COLLECTION RECORD

Project and Site Name _____ DEC Region _____

Collections made by (include all crew) _____

Sampling Method: □Electrofishing □Gill netting □Trap netting □Trawling □Seining □Angling □Other _____

Preservation Method: □Freezing □Other _____ Notes (SWFDB survey number): _____

FOR LAB USE ONLY- LAB ENTRY NO.	COLLECTION OR TAG NO.	SPECIES	DATE TAKEN	LOCATION	AGE	SEX &/OR REPROD. CONDIT	LENGTH ( )	WEIGHT ( )	REMARKS

richter: revised 2011, 5/7/15, 10/4/16, 3/20/17; becker: 3/23/17, 4/26/19

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CHAIN OF CUSTODY

I, _____, of _____ collected the
(Print Name) (Print Business Address)

following on _____, 20____ from _____
(Date) (Water Body)

in the vicinity of _____
(Landmark, Village, Road, etc.)

Town of _____, in _____ County.

Item(s) _____

_____

Said sample(s) were in my possession and handled according to standard procedures provided to me prior to collection. The sample(s) were placed in the custody of a representative of the New York State Department of Environmental Conservation on _____, 20_____.

_____ _____
Signature Date

I, _____, received the above mentioned sample(s) on the date specified and assigned identification number(s) _____ to the sample(s). I have recorded pertinent data for the sample(s) on the attached collection records. The sample(s) remained in my custody until subsequently transferred, prepared or shipped at times and on dates as attested to below.

_____ _____
Signature Date

SECOND RECIPIENT (Print Name)	TIME & DATE	PURPOSE OF TRANSFER
SIGNATURE	UNIT	
THIRD RECIPIENT (Print Name)	TIME & DATE	PURPOSE OF TRANSFER
SIGNATURE	UNIT	
FOURTH RECIPIENT (Print Name)	TIME & DATE	PURPOSE OF TRANSFER
SIGNATURE	UNIT	
RECEIVED IN LABORATORY BY (Print Name)	TIME & DATE	REMARKS
SIGNATURE	UNIT	
LOGGED IN BY (Print Name)	TIME & DATE	ACCESSION NUMBERS
SIGNATURE	UNIT	

richter: revised 21 April 2014; becker: 23 March 2017, 26 April, 2019

NOTICE OF WARRANTY

By signature to the chain of custody (reverse), the signatory warrants that the information provided is truthful and accurate to the best of his/her ability. The signatory affirms that he/she is willing to testify to those facts provided and the circumstances surrounding the same. Nothing in this warranty or chain of custody negates responsibility nor liability of the signatories for the truthfulness and accuracy of the statements provided.

HANDLING INSTRUCTIONS

On day of collection, collector(s) name(s), address(es), date, geographic location of capture (attach a copy of topographic map or navigation chart), species, number kept of each species, and description of capture vicinity (proper noun, if possible) along with name of Town and County must be indicated on reverse.

Retain organisms in manila tagged plastic bags to avoid mixing capture locations. Note appropriate information on each bag tag.

Keep samples as cool as possible. Put on ice if fish cannot be frozen within 12 hours. If fish are held more than 24 hours without freezing, they will not be retained or analyzed.

Initial recipient (either DEC or designated agent) of samples from collector(s) is responsible for obtaining and recording information on the collection record forms which will accompany the chain of custody. This person will seal the container using packing tape and writing his signature, the time and the date across the tape onto the container with indelible marker. Any time a seal is broken, for whatever purpose, the incident must be recorded on the Chain of Custody (reason, time, and date) in the purpose of transfer block. Container then is resealed using new tape and rewriting signature, with time and date.

EQUIPMENT LIST

Scale or balance of appropriate capacity for the fish to be collected.

Fish measuring board.

Plastic bags of an appropriate size for the fish to be collected and for site bags.

Individually numbered metal tags for fish.

Manila tags to label bags.

Small envelops, approximately 2” x 3.5”, if fish scales are to be collected.

Knife for removing scales.

Chain of custody and fish collection forms.

Clipboard.

Pens or markers.

Paper towels.

Dish soap and brush.

Bucket.

Cooler.

Ice.

Duct tape.

Appendix G – PFAS Analyte List

Group	Chemical Name	Abbreviation	CAS Number
Perfluoroalkyl sulfonic acids	Perfluorobutanesulfonic acid	PFBS	375-73-5
	Perfluoropentanesulfonic acid	PFPeS	2706-91-4
	Perfluorohexanesulfonic acid	PFHxS	355-46-4
	Perfluoroheptanesulfonic acid	PFHpS	375-92-8
	Perfluorooctanesulfonic acid	PFOS	1763-23-1
	Perfluorononanesulfonic acid	PFNS	68259-12-1
	Perfluorodecanesulfonic acid	PFDS	335-77-3
	Perfluorododecanesulfonic acid	PFDoS	79780-39-5
Perfluoroalkyl carboxylic acids	Perfluorobutanoic acid	PFBA	375-22-4
	Perfluoropentanoic acid	PFPeA	2706-90-3
	Perfluorohexanoic acid	PFHxA	307-24-4
	Perfluoroheptanoic acid	PFHpA	375-85-9
	Perfluorooctanoic acid	PFOA	335-67-1
	Perfluorononanoic acid	PFNA	375-95-1
	Perfluorodecanoic acid	PFDA	335-76-2
	Perfluoroundecanoic acid	PFUnA	2058-94-8
	Perfluorododecanoic acid	PFDoA	307-55-1
	Perfluorotridecanoic acid	PFTrDA	72629-94-8
	Perfluorotetradecanoic acid	PFTeDA	376-06-7
Per- and Polyfluoroether carboxylic acids	Hexafluoropropylene oxide dimer acid	HFPO-DA	13252-13-6
	4,8-Dioxa-3H-perfluorononanoic acid	ADONA	919005-14-4
	Perfluoro-3-methoxypropanoic acid	PFMPA	377-73-1
	Perfluoro-4-methoxybutanoic acid	PFMBA	863090-89-5
	Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	151772-58-6
Fluorotelomer sulfonic acids	4:2 Fluorotelomer sulfonic acid	4:2-FTS	757124-72-4
	6:2 Fluorotelomer sulfonic acid	6:2-FTS	27619-97-2
	8:2 Fluorotelomer sulfonic acid	8:2-FTS	39108-34-4
Fluorotelomer carboxylic acids	3:3 Fluorotelomer carboxylic acid	3:3 FTCA	356-02-5
	5:3 Fluorotelomer carboxylic acid	5:3 FTCA	914637-49-3
	7:3 Fluorotelomer carboxylic acid	7:3 FTCA	812-70-4
Perfluorooctane sulfonamides	Perfluorooctane sulfonamide	PFOSA	754-91-6
	N-methylperfluorooctane sulfonamide	NMeFOSA	31506-32-8
	N-ethylperfluorooctane sulfonamide	NEtFOSA	4151-50-2
Perfluorooctane sulfonamidoacetic acids	N-methylperfluorooctane sulfonamidoacetic acid	N-MeFOSAA	2355-31-9
	N-ethylperfluorooctane sulfonamidoacetic acid	N-EtFOSAA	2991-50-6
Perfluorooctane sulfonamide ethanols	N-methylperfluorooctane sulfonamidoethanol	MeFOSE	24448-09-7
	N-ethylperfluorooctane sulfonamidoethanol	EtFOSE	1691-99-2

Group	Chemical Name	Abbreviation	CAS Number
Ether sulfonic acids	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (F-53B Major)	9Cl-PF3ONS	756426-58-1
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor)	11Cl-PF3OUdS	763051-92-9
	Perfluoro(2-ethoxyethane) sulfonic acid	PFEESA	113507-82-7

Appendix H - Data Review Guidelines for Analysis of PFAS in Non-Potable Water and Solids

General

These guidelines are intended to be used for the validation of PFAS using EPA Method 1633 for projects within the Division of Environmental Remediation (DER). Data reviewers should understand the methodology and techniques utilized in the analysis. Consultation with the end user of the data may be necessary to assist in determining data usability based on the data quality objectives in the Quality Assurance Project Plan. A familiarity with the laboratory's Standard Operating Procedure may also be needed to fully evaluate the data. If you have any questions, please contact DER's Quality Assurance Officer, Dana Barbarossa, at dana.barbarossa@dec.ny.gov.

Preservation and Holding Time

Samples should be preserved with ice to a temperature of less than 6°C upon arrival at the lab. The holding time is 28 days to extraction for aqueous and solid samples. The time from extraction to analysis for aqueous samples is 28 days and 40 days for solids.

Temperature greatly exceeds 6ºC upon arrival at the lab*	Use professional judgement to qualify detects and non-detects as estimated or rejected
Holding time exceeding 28 days to extraction	Use professional judgement to qualify detects and non-detects as estimated or rejected if holding time is grossly exceeded

*Samples that are delivered to the lab immediately after sampling may not meet the thermal preservation guidelines. Samples are considered acceptable if they arrive on ice or an attempt to chill the samples is observed.

Initial Calibration

The initial calibration should contain a minimum of six standards for linear fit and six standards for a quadratic fit. The relative standard deviation (RSD) for a quadratic fit calibration should be less than 20%.

The low-level calibration standard should be within 50% - 150% of the true value, and the mid-level calibration standard within 70% - 130% of the true value.

%RSD >20%	J flag detects and UJ non detects

Continuing Calibration Verification

Continuing calibration verification (CCV) checks should be analyzed at a frequency of one per ten field samples. If CCV recovery is very low, where detection of the analyte could be in question, ensure a low level CCV was analyzed and use to determine data quality.

CCV recovery <70 or >130%	J flag results

Blanks

There should be no detections in the method blanks above the reporting limits. Equipment blanks, field blanks, rinse blanks etc. should be evaluated in the same manner as method blanks. Use the most contaminated blank to evaluate the sample results.

Blank Result	Sample Result	Qualification
Any detection	<Reporting limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting limit	>Reporting limit and <10x blank result	J+ biased high

Field Duplicates

A blind field duplicate should be collected at rate of one per twenty samples. The relative percent difference (RPD) should be less than 30% for analyte concentrations greater than two times the reporting limit. Use the higher result for final reporting.

RPD >30%	Apply J qualifier to parent sample

Lab Control Spike

Lab control spikes should be analyzed with each extraction batch or one for every twenty samples. In the absence of lab derived criteria, use 70% - 130% recovery criteria to evaluate the data.

Recovery <70% or >130% (lab derived criteria can also be used)	Apply J qualifier to detects and UJ qualifier to non detects

Matrix Spike/Matrix Spike Duplicate

One matrix spike and matrix spike duplicate should be collected at a rate of one per twenty samples. Use professional judgement to reject results based on out of control MS/MSD recoveries.

Recovery <70% or >130% (lab derived criteria can also be used)	Apply J qualifier to detects and UJ qualifier to non detects of parent sample only
RPD >30%	Apply J qualifier to detects and UJ qualifier to non detects of parent sample only

Extracted Internal Standards (Isotope Dilution Analytes)

Problematic analytes (e.g. PFBA, PFPeA, fluorotelomer sulfonates) can have wider recoveries without qualification. Qualify corresponding native compounds with a J flag if outside of the range.

Recovery <50% or >150%	Apply J qualifier
Recovery <25% or >150% for poor responding analytes	Apply J qualifier
Isotope Dilution Analyte (IDA) Recovery <10%	Reject results

Signal to Noise Ratio

The signal to noise ratio for the quantifier ion should be at least 3:1. If the ratio is less than 3:1, the peak is discernable from the baseline noise and symmetrical, the result can be reported. If the peak appears to be baseline noise and/or the shape is irregular, qualify the result as tentatively identified.

Reporting Limits

If project-specific reporting limits were not met, please indicate that in the report along with the reason (e.g. over dilution, dilution for non-target analytes, high sediment in aqueous samples).

Peak Integrations

Target analyte peaks should be integrated properly and consistently when compared to standards. Ensure branched isomer peaks are included for PFAS where standards are available. Inconsistencies should be brought to the attention of the laboratory or identified in the data review summary report.

APPENDIX G

Resumes

P.W. GROSSER CONSULTING, INC • P.W. GROSSER CONSULTING ENGINEER & HYDROGEOLOGIST, PC
631.589.6353 • WWW.PWGROSSER.COM • PWGC.INFO@PWGROSSER.COM
BOHEMIA • MANHATTAN • SARATOGA SPRINGS • SYRACUSE • SHELTON, CT

Andrew Lockwood, PG, LEP

SR. VICE PRESIDENT

PROFESSIONAL EXPERIENCE
PWGC: 18 years
PRIOR: 17 years

AREAS OF EXPERTISE
Phase I and Phase II Environmental Site Assessments
PFAS and other emerging contaminants
Petroleum Spill site investigation/remediation
CERCLA sites
NYSDEC Brownfield Cleanup Program/Environmental Restoration Program
Environmental/Regulatory Compliance (Investigation/Remediation Mgmt.)
Radiological Characterization & Remediation
Chemical, Radiological/Mixed Waste Management & Disposal
Groundwater Treatment System (Planning, Design, O&M)
Client Representation & Regulatory Liaison
Environmental Program Mgmt. (Planning, Monitoring, Safety)

EDUCATION & TRAINING/CERTIFICATION
BA Geology, SUNY Potsdam, NY
Licensed Professional Geologist - NYS
Licensed Environmental Professional (LEP), State of Connecticut
"D&D of Research Reactors & Other Small Nuclear Facilities" Certificate (Argonne National Laboratory, 11/2001)
OSHA Health & Safety 40-hr, Supervision 8-hr
30-hr OSHA Construction Safety Training,2009

PROFILE

Mr. Lockwood specializes in planning and managing U.S. Environmental Protection Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and New York State Department of Environmental Conservation (NYSDEC) remedial investigations/Feasibility Studies, Phase I and Phase II ESAs, Brownfields Cleanup Program (BCP) projects, and nuclear facility decontamination & decommissioning (D&D). He has worked at numerous DOE and DOD facilities in more than a dozen states across the country managing remedial investigation/feasibility study projects involving the generation of radiological, hazardous, and mixed waste. They include multi-year projects that involved complex investigations, remediation, and waste management issues. Mr. Lockwood manages PWGCs environmental group, overseeing a staff of more than 20 professionals.

Mr. Lockwood has over 35 years of experience managing environmental investigation and remediation projects including CERCLA RI/FS sites, NYSDEC BCP sites, NYCDEP "E" sites, Municipal Landfill permitting and closure, and environmental investigations for real estate transactions. Mr. Lockwood's clients range from large governmental agencies to small real estate developers. He has performed work across the eastern United States under numerous federal, state, and local regulatory agencies.

NOTABLE PROJECTS

Suffolk County Fire Training Facility - Yaphank, NY—RI/FS (Ongoing)

Mr. Lockwood manages the ongoing RI/FS for the Suffolk County fire training facility in Yaphank, NY. The 28-acre site is in the NYSDEC's inactive hazardous waste site program. The site was listed as a NYS Class 2 Inactive Hazardous Waste Disposal Site in August 2017. The primary contaminants of concern are per and poly fluoroalkyl substances (PFAS). The presence of these compounds is the result of the use of the Aqueous Film Forming Foam (AFFF) at the site. Mr. Lockwood was responsible for the preparation of the Citizens Participation Plan, Records Search Report, RI Work Plan, Quality Assurance Project Plan and Health and Safety Plan. The RI field work included delineation of PFAS in soil on-site and in groundwater both on and off site. PWGC is currently preparing a feasibility study with alternatives to address both soil and groundwater contamination at the site.

Wertheim National Wildlife Refuge - Shirley, NY—POET System Design and O&M (Ongoing)

Three Point of Entry Treatment (POET) Systems were designed and installed at the refuge, one in a maintenance garage and two in residential buildings located within the refuge. The POET Systems were designed to remove per and poly fluoroalkyl substances (PFAS) that were detected in the groundwater supply wells servicing the three structures. Mr. Lockwood was responsible for the preparation of an Engineering Report and Operations and Maintenance Manuals for the systems. PWGC oversaw the installation

and start up testing of the systems and is performing the scheduled system sampling to ensure that the systems are functioning as designed.

Carmans River - Shirley, NY—Surface Water and Biota Monitoring (Completed)
Mr. Lockwood managed the investigation of per and poly fluoroalkyl substances (PFAS) in surface water and biota within the Carmans River and other water bodies within Suffolk County. Mr. Lockwood prepared a Biota Monitoring Work Plan/QAPP that included the collection of surface water and biota samples (eels, blue crabs, white perch, and clams) for PFAS analysis. He prepared a Biota Monitoring Report detailing the results of the investigation.

Project Manager- Building 650 Demolition (Completed)
Mr. Lockwood managed the D&D of the former hot laundry and equipment decontamination facility (Bldg. 650) at BNL between 2020 and 2021. The project involved overseeing demolition of radiologically contaminated above ground and below ground structures, preparation of project documents including a Remedial Action Work Plan, Sampling and Analysis Plan, and Completion Report. The project involved the disposition of complex waste streams and the completion of a as left radiological survey. Mr. Lockwood was responsible for completing the project on schedule and within the allocated budget.

Brookhaven National Laboratory - Upton, NY (Completed)
Mr. Lockwood served more than 10 years as Project Manager on various CERCLA projects for BNL Environmental Restoration Division (ERD). He has managed diverse projects for BNL's Groundwater, Surface, and Reactor Groups. On his most recent projects for the Reactor Group, Mr. Lockwood provided project management services on four remediation projects over a 3-year period with budgets totaling more than 15 million dollars. In addition, he has prepared or assisted in the preparation of site-specific project documents such as work plans, sampling and analysis plans, quality assurance project plans, health and safety plans, records of decision (ROD), completion reports, final status surveys, remedial investigations (RI) and feasibility studies (FS). He has prepared contract documents, including request for proposals (RFP's), scopes of work (SOWs), and contract specifications for both large- and small-scale procurements and has acted as the technical representative on multiple contracts, ensuring the contract scope is being completed.

Mr. Lockwood combines his technical background with his in-depth knowledge of BNL's protocols and procedures to prepare schedules and cost estimates for baseline and fiscal year budgeting and tracking, provide short-term assistance to help BNL complete Baseline Change Proposals, and long-term assistance to manage remedial projects.

Project Manager- Fan Houses and Stack Silencer D&D, Underground Utilities Removal, Perimeter Area Soil Remediation Projects
Mr. Lockwood managed multiple remediation projects at BNL between 2008 and 2011. Project involved overseeing demolition of radiologically contaminated above ground and below ground structures, preparation of project documents including Remedial Action Work Plans, Sampling and Analysis Plans, and Completion Reports. The projects involved the disposition of complex waste streams. He was the primary interface with regulatory agencies and DOE. Mr. Lockwood was responsible for completing the projects on schedule and within the allocated budget. All projects were successfully completed.

Brownfield Cleanup (BCP) and Environmental Restoration Program Projects (Ongoing)
Mr. Lockwood manages BCP and ERP projects for both private and municipal clients. He prepares applications, technical documents, and interfaces with NYSDEC project managers to ensure project schedule and scope meet NYSDEC's requirements for approval of incentives/reimbursements. These sites require preparation of BCP and ERP applications, technical work plans, RI reports, human health and ecological assessments, remedial alternatives reports (FS), citizens participation plans, public meetings, and completion reports. Under contract with the Suffolk County department of Health Services (SCDHS) and the Department of Public Works (DPW), Mr. Lockwood assists the County in managing the technical aspects of County owned sites in the NYSDEC Brownfields Cleanup and Environmental Restoration Programs. These sites include former United State Air Force Disposal Sites and former industrial and gasoline service station sites, which are currently vacant or unused because the redevelopment of the sites is hampered by historical site uses that contaminated soil and groundwater.

Jennifer Lewis, PG .

VICE PRESIDENT

PROFESSIONAL EXPERIENCE
PWGC: 17 years

AREAS OF EXPERTISE
NYSDEC Brownfield Cleanup Program Management
NYCOER Brownfield and "E" Designation Management
Work Plan/Report Preparation
Phase I & II Environmental Site Assessments
Underground Injection Structure Remediation
Underground Storage Tank Remediation
Water, Soil, Air Sampling
Data Management & Interpretation
Groundwater Remediation via Chemical Injection

EDUCATION & TRAINING/CERTIFICATION
MBA, CUNY Baruch, New York, NY
BS, Geology, SUNY Stony Brook, NY
AA, Liberal Arts, Suffolk County Community College, Selden, NY
Licensed Professional Geologist - NYS
OSHA Health & Safety 8-hr Supervisor, 40-hr HazWoper
Construction Management Certification
ASTM Training on Phase I and Phase II Environmental Site Assessments for Commercial Real Estate

PROFILE

As a Vice President, Ms. Lewis has assisted property buyers, sellers, and developers navigate potential environmental concerns, petroleum spills, the New York State (NYS) Brownfield Cleanup Program, the New York City (NYC) E-Designation Program/Voluntary Cleanup Program requirements during property transactions and site development. Ms. Lewis's roles on these projects has included planning, conducting, and reporting soil/groundwater investigations, air quality studies, and instituting remedial measures. Her clients, ranging from developers to attorneys to municipal agencies, benefit from her expertise in overseeing Phase I and II Environmental Site Assessments (ESAs), Remedial Investigations, cost to cure estimates for financial institutions, and Brownfields projects. Ms. Lewis coordinates with clients and attorneys to prepare plans for approval by federal, state, and local agencies (e.g., Remedial Action Plans, Health and Safety Plans, Investigation Work Plans, Interim Remedial Measures) and monitors each project's day-to-day progress to meet the client's objectives and regulatory requirements.

NOTABLE PROJECTS

Phase I & II Environmental Site Assessment

Ms. Lewis manages Phase I & II ESA preparation, implementation, and completion. For each project, she provides a customized scope of work and relevant documentation to provide clients with pertinent information. She performs Phase I & Phase II ESAs for private clients, environmental attorneys, municipalities, and lending institutions for use in property transactions according to ASTM Standards.

Brownfield Redevelopment

AvalonBay Communities, Inc. – Former Darby Drug Facility, Rockville Centre, NY – NYSDEC Brownfield Cleanup Program Implementation During Development

The Former Darby Drugs Distribution Center was a commercial warehouse formerly occupied by a textile company which was a source of PCE contamination to soil and groundwater beneath the site. The site was enrolled in the NYSDEC Brownfield Cleanup Program (BCP). Ms. Lewis implemented an Interim Remedial Measure which included a sophisticated soil excavation and dewatering program within a warehouse, chemical injections into the groundwater, and UIC remediation. Ms. Lewis then documented the Interim Remedial Measure effort and prepared an Alternatives Analysis and a Remedial Action Work Plan to provide a scope for additional remediation and a Final Engineering Report and a Site Management Plan to document the results of the remedial action and protective steps to follow for the future use of the site.

Brownfield Redevelopment

Coney Island Realty - NYSDEC BCP Site

During the Interim Remedial Measure Phase, Ms. Lewis coordinated the soil excavation, community air monitoring, and sampling activities. Ms. Lewis also prepared reports detailing the Supplemental Remedial Investigation and Interim Remedial Measure, as

well as the Remedial Action Work Plan to provide a scope for additional remediation and a Final Engineering Report and a Site Management Plan to document the results of the remedial action and protective steps to follow for the future use of the site. Ms. Lewis has continued overseeing the routine operation and maintenance of a soil vapor extraction system operating at the site.

Suffolk County Department of Public Works (SCDPW) - Suffolk County, NY
UIC Remediation
Ms. Lewis was responsible for maintaining a UIC structure database for SCDPW and conducting UIC investigations and remediations as part of the planned upgrade of SCDPW site sanitary upgrades. Ms. Lewis coordinated closely with SCPWS, SCDHS, and contractors to conduct this work efficiently and within budget.

Brookhaven National Laboratory - Upton, NY
OUIII Western South Boundary/OUI South Boundary Vertical Profiles and Monitoring Well Installation
Ms. Lewis provided sampling services and hydrogeologic oversight for multiple vertical profiles, as part of the on-site OUIII plume evaluation. Her responsibilities included the collection of groundwater samples during sampling. She was responsible for construction observation and documentation for 3 monitoring well installations. After installation, wells were developed by pumping and surging. Ms. Lewis documented field activities and verified the work that was performed in accordance with BNL's Standard Operating Procedures and Project Work Plans. She conducted daily tailgate safety meetings, completed BNL's daily field reports and reported to BNL's Project Manager at the completion of each day.

Pratt Institute – Brooklyn, NY
Well Installation
Ms. Lewis provided over-site for the installation of a geothermal test well. She generated boring logs, documented soil characteristics, and classified in accordance with USGS' Monthly/Quarterly Groundwater/Air Sampling.
Well Monitoring
Ms. Lewis performs routine monitoring and sampling of air and groundwater, and product removal if necessary, at various sites. In addition to the fieldwork at these sites, Ms. Lewis analyzes the data and prepares a site plan and a quarterly report detailing the results and future recommendations.

Brookhaven National Laboratory - Upton, NY
Environmental Protection Division: Groundwater Protection and Remediation
Ms. Lewis supervised the installation of multiple vertical profiles via geoprobe to monitor strontium-90, tritium, and volatile organic compound (VOC) plumes on site. Her responsibilities included the collection of groundwater samples during sampling. Ms. Lewis documented field activities and verified the work that was performed in accordance with BNL's Standard Operating Procedures and Project Work Plans. She conducted daily tailgate safety meetings, completed BNL's daily field reports and reported to BNL's Project Manager at the completion of each day.

Newark-Liberty International Airport
The Automotive Fueling Station at Newark-Liberty Airport is the site of a UST failure regulated by the NJDEP Site Remediation Program. Ms. Lewis performs routine groundwater monitoring and sampling as well as supplemental remedial activities at the site. Ms. Lewis is also responsible for coordinating field activities with regulators and assisting with preparation of periodic Status Reports. Field work and reporting is completed in accordance with NJDEP Technical Requirements for Site Investigation 7.26E.

New York City Housing Authority - New York City, NY
Sub-Surface Investigations
Ms. Lewis performs environmental assessments associated with site specific NYSDEC spill files in order to delineate petroleum and tetrachloroethene impacts. Specifically, collection of soil, groundwater, and sub-surface air samples, oversight of monitoring well installations, preparation and submittal of site assessment reports, and coordination with NYCHA staff and regulatory agencies.

NYCDEP/NYCOER "E" Designation Sites - New York City, NY
RAP & HASP enforcement, air monitoring for particulates and VOCs
Ms. Lewis's services focus on coordinating remedial investigations, preparation of Remedial Investigation Reports, preparing a Remedial Action Scope of Work that considers the contaminants identified at the site as well as the intended use and building design, coordinating the remediation, and documenting the results of the remediation. Ms. Lewis, with the assistance of the architect and mechanical engineer of record, has also prepared Remedial Action Work Plans and Installation Reports for Air and Noise "E"s.

Former Penetrex Remedial Investigation
Ms. Lewis oversaw a chemical injection at a former dry cleaning facility utilizing a Geoprobe® that drilled down to 50 feet below grade and pulled the rods up during the injection.

USEPA Superfund Site
Treatment System O&M
Ms. Lewis provided assistance with the remediation efforts of the down-gradient pond system and oversight of the down-gradient recovery well installation for the USEPA Superfund remediation project. Additional duties included sampling backfill material brought on-site and overseeing the backfilling and compaction of excavations. Allstate Insurance Company – NY Wide Residential/Commercial Fuel Oil Spills Oversight & Reporting - Ms. Lewis oversees fieldwork for projects such as petroleum spill remediation. She completes spill reports, and coordinates with contractors and the NYSDEC to ensure that the project stays on schedule, is compliant with regulatory guidelines, and meets the client's goals.

UIC Control Programs - Suffolk and Nassau Counties, NY
Remediation Oversight
Ms. Lewis has been overseeing the remediation activities of dry wells (Class V wells) at multiple sites for various clients throughout Suffolk and Nassau Counties. She performs endpoint sampling of storm drains and sanitary systems, coordinates and performs sampling in conjunction with the SCDHS and NCDH, and ensures proper soil and sediment removal during VacTruck operations.

Rechler Equity Partners - Melville, NY
250 Miller Place, Hicksville, NY
The subject site, a large commercial property and formerly used by a circuit board manufacturer and trucking company, had a history of chemical uses (i.e. chlorinated solvents, diesel fuel, and gasoline). To determine if subsurface soils had been impacted, PWGC conducted a Phase II investigation for a potential buyer. Ms. Lewis was present during the Phase II and oversaw the project's subsurface investigation-phase. She directed the Geoprobe® operator, and participated in the preparation of the Phase II investigation report. In addition, Ms. Lewis observed the follow-up investigation and remediation performed by the current property owner's consultant.

Franklin Hospital - Valley Stream, NY
Water Sampling
Ms. Lewis collected water samples from the dialysis treatment suite and from a sink in order to determine the source of a bacterial contamination.

Michael Gaul .

SENIOR PROJECT MANAGER

PROFESSIONAL EXPERIENCE
PWGC: 9 years

AREAS OF EXPERTISE
Environmental Due Diligence
NYCOER E-Designation Site Management
NYSDEC Brownfield Cleanup Program Site Management
Site Investigation Planning, Reporting, and Management
Soil, Groundwater, and Soil Vapor Sampling and Analysis
Petroleum Bulk Storage Regulations
Flood Resiliency Assessment
Wetland Delineation

EDUCATION & TRAINING/CERTIFICATION
MPA, Public Administration in Environmental Science and Policy, Columbia University, New York, NY
BS, Marine Biology (Minor: Environmental Studies), Stony Brook University, Stony Brook, NY
40-hr OSHA HAZWOPER + 8-hr Refresher
30-hr OSHA Construction Safety & Health
Methodology for Delineating Wetlands Certification (via Rutgers University)
NYCOER Turbo Training (Gold Certified)
NYSDEC 4-hr Erosion & Sediment Control Certification
ASTM Phase I ESA and TSA Training

AFFILIATION
New York City Brownfield Partnership
Brownfield Coalition of the Northeast
Commercial Real Estate Development Association (NAIOP)

PROFILE

Michael Gaul has extensive experience as a Senior Project Manager with a history of providing a variety of services for clients in connection with the management of environmental investigation and remediation projects, the evaluation of environmental fate and transport, and the performance of due diligence. Michael manages and evaluates environmental sampling data in connection with Phase II ESAs and remedial investigations performed within a variety of regulatory programs. He performs research and prepares deliverables to support client's strategic objectives. Michael manages projects ranging from Phase I ESAs to long-term remediation projects, including planning, scheduling and staffing coordination, work plan and report preparation and budget oversight. He provides proactive direction to team members to limit client liabilities and manage costs. Michael has an excellent record in timely completion and maintenance of project coordination, monitoring, and document preparation, while successfully maintaining communication between clients, government agencies, contractors, laboratories and other parties involved. Michael maintains and cultivates client relationships throughout the project life cycle, beginning with the preparation of proposals, through the preparation of work plans and reports, and continuing through budget management and project completion. Michael has a Master's degree in environmental science and policy from Columbia University.

NOTABLE PROJECTS

New York City Office of Environmental Remediation – On-Call Environmental Services Contract Management

Various Sites (New York, New York)

Michael has served as the primary point of contact for three years for the city and the project manager for each task order under two iterations of a municipal on-call contract. Michael managed a multi-member team that included engineers, geologists, planners, economists, computer scientists, environmental analytical labs, environmental contractors, and surveyors. Executed task orders under the contract included Phase I ESAs, Remedial Investigations, technical enhancement projects, community planning projects and soil chemical analytical projects.

Phase I/II Environmental Site Assessment

Various Properties (New York, New Jersey, Pennsylvania, Connecticut and Massachusetts)

Michael performed environmental due diligence services, inspections, and report generation for 100+ properties with historical usages including auto services, industrial manufacturing, industrial power generation, aggregate mining, asphalt production, furniture upholstering, commercial retail, and residential. Michael coordinated all FOIA requests, stakeholder interviews and

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historical research. Michael identified and investigated potential REC's and evaluated their potential impact on the property and its potential future development

NYSDEC Brownfield Cleanup Program (BCP)

Former Sears Auto Center (Bronx, New York) – BCP Project Management

Michael managed all remedial action aspects of the project. Specifically, he prepared the IRM Work Plan, Remedial Action Work Plan, and Final Engineering Report coordinated with regulatory agencies, developers, and contractors, managed field activities and construction schedules. He also facilitated the waste disposal approvals for the removal of both hazardous and non-hazardous waste, the registration, closure, and removal of multiple USTs, the procurement of an NYCDEP dewatering permit, and importation of clean backfill material. The site received its Certificate of Completion from the NYSDEC in 2022.

250 Mamaroneck Avenue (White Plains, New York) – BCP Project Management

Michael has managed all aspects of the project. Specifically, he prepared the Remedial Investigation Report, and Remedial Action Work Plan, coordinated with regulatory agencies, developers, and contractors, managed field activities and construction schedules. He also facilitated the waste disposal approvals for the removal of non-hazardous waste, and the procurement of a Westchester County dewatering permit. The site is currently in the remedial action phase.

399 Exterior Street (Bronx, New York) – BCP Project Management

Michael managed all aspects of the project. Specifically, he prepared the Remedial Investigation Work Plan, Remedial Investigation Report, IRM Work Plan, and Remedial Action Work Plan, coordinated with regulatory agencies, developers, and contractors, managed field activities and construction schedules. The site is currently in the remedial action phase.

Former Liberty Brass Site (Queens, New York) – BCP Remedial Investigation/Remedial Action Oversight/Long-Term O&M

Michael performed groundwater and soil sampling in accordance with the NYSDEC-approved work plan for the investigation of this former brass fittings factory site. Responsibilities included waste characterization sampling, groundwater sampling and groundwater contour mapping. Evaluated environmental fate and transport with regards to contaminants of concern and environmental media in play. Performed sampling activities following the QA/QC procedures detailed in the work plan. Michael assisted in the generation of the remedial action workplan, community monitoring plan and health and safety plan for the remedial action program. Michael also coordinated with laboratories, environmental contractors, regulatory agencies, and clients over the course of the implementation of the remedial action workplan to address and solve various issues including spills, tank closures, waste disposal, and gaining approval from NYSDEC for deviations for the NYSDEC-approved Remedial Action Work Plan. Michael also assisted in the generation of the Final Engineering Report and Site Management Plan and is currently in the process of managing the site through the long-term site management phase.

NYCOER E-Designation Program (E-Des)

Moxy Williamsburg (Brooklyn, New York) – E-Designation Site Project Management

Michael managed the site through the due diligence and E-Designation process from the Phase I ESA through the remediation. Michael drafted the Remedial Investigation Work Plan, Remedial Investigation Report, and Remedial Action Work Plan for the site. Responsibilities included development of a site-specific Community Air Monitoring Plan and Health and Safety Plan, management of the Remedial Investigation, coordination of waste characterization and multiple tank removals, development of a Remedial Action Plan and Construction Health and Safety Plan, and management of remedial action.

79-20 Queens Blvd (Queens, New York) – E-Designation Site Project Management

Michael managed the site through the due diligence and E-Designation process from the Phase I ESA through the remediation. Michael provided management services for the site which included reporting to the NYCOER, coordinating field efforts, coordination of waste characterization, and coordinating with contractors and planning for tank removal and spill closure.

130 North 6th Street (Brooklyn, New York) – E-Designation Site Project Management

Michael managed the site through the due diligence and E-Designation process including the preparation of a Phase I ESA, RAWP, and an RAR. Michael provided management services for the site which included reporting to the NYCOER, preparing VCP documentation, coordinating field efforts, coordination of waste characterization (including hazardous waste delineation), and coordinating with contractors, planning for the installation of a passive SSDS and a vapor barrier system, and applying for NYC Brownfield Incentive Grant funding.

207 North 8th Street (Brooklyn, New York) – E-Designation Site Project Management

Michael managed the site through the E-Designation process including preparation of the stipulation letter and coordination the implementation of the RAWP. Michael provided management services for the site which included reporting to the NYCOER, coordinating field efforts, coordination of waste characterization, and coordinating with contractors and planning for Clean Soil Bank material importation. He also coordinated for the closure of an open petroleum spill on the site. The site is currently in the remedial action phase.

129 Kent Avenue (Brooklyn, New York) – E-Designation Site Project Management
Michael prepared a remedial investigation work plan for the property and was responsible for directing and overseeing the investigation of a four lot, three building property in Williamsburg, Brooklyn, New York under NYCOER oversight within its E-Designation Program. Once the investigation was completed, he prepared a Remedial Investigation Report documenting the investigation. He then subsequently prepared two SRIWPs and two SRIRs related to the addition of three more lots into the property assemblage. This site is currently in the remedial action scoping phase.

1107 Broadway (Manhattan, New York) – E-Designation Site Remedial Action Oversight
Michael performed remedial oversight and air monitoring during on-site excavation to assure air pollution followed NYCOER requirements. Coordinated daily work scheduling with the construction manager and conducted site safety meetings. Oversaw the installation of a vapor barrier system within the excavation area. Michael was responsible for coordinating and reporting daily activities with the numerous contractors and regulators for the E-Designation site

Long Island City Taxi Site (Queens, New York) – E-Designation Site Remedial Action Oversight
Michael was responsible for oversight of remedial activities, community air monitoring, and the preparation of storm water pollution prevention plan inspection reports for the E-Designation site. Collaborated with the site manager and contractors to maintain the integrity of sixteen diversified soil classification grids while also facilitating in their systematic removal. Michael also oversaw the installation of a sub-slab depressurization system and a comprehensive site-wide vapor barrier system.

Phipps Houses Site (Manhattan, New York) – E-Designation Site Remedial Action Oversight
An affordable housing construction project in downtown Manhattan required constant air monitoring to ensure safety to the surrounding community. Michael performed air monitoring during all soil movement activity to screen for airborne particulates and volatile organic compounds along the perimeter of the site. To monitor the air quality surrounding the site, a pDR dust meter and a photoionization detector were used to regularly screen the site during all soil movement activity. Maintained the meters and analyzed the data, preparing daily reports for NYCOER. Michael also oversaw the identification, closure and removal of an unanticipated on-site underground storage tank

SUBSURFACE INVESTIGATION
Atlas White Metal Site (Brooklyn, New York)
Michael performed groundwater and soil sampling in accordance with the USEPA-approved work plan for the investigation of this lead smelting site. Responsibilities included soil boring logging, community air monitoring and groundwater sampling point installation. Performed sampling activities following the QA/QC procedures detailed in the QAPP. Michael also coordinated with laboratories, environmental contractors, regulatory agencies and clients to ensure timely completion of both the remedial investigation and the ensuing reporting. Michael evaluated the presence of metals in subsurface soils hotspots with respect to the potential for impact to groundwater as it relates to the evaluation of remediation strategies.

1916 Linden Boulevard (Brooklyn, New York)
Michael oversaw soil boring advancement and conducted sampling in accordance with the NYSDEC-approved work plan for the investigation of this commercial restaurant. Responsibilities included soil boring logging, oversight of a GPR survey and creation of geologic cross-sections depicting petroleum-hydrocarbon concentrations. Michael performed research and evaluated data to support the conclusion that the presence of petroleum hydrocarbons in subsurface soils on the property was attributable to an off-property site.

FRESHWATER AND TIDAL WETLAND ASSESSMENT
Various Properties, Long Island, New York City, Orange County, Sullivan County, and Delaware County, New York
Michael inspected 25+ properties for the presence of freshwater and/or tidal wetlands and delineated their boundaries if wetlands were identified. Properties were assessed following Army Corps of Engineers and/or NYSDEC wetlands delineation frameworks and were categorized via soil identification, plant identification and hydrologic indicators. Reports for each property were created to include a thorough property description, means and methods, findings and conclusions, and a figure displaying the delineation of a wetland boundary (if present).

FLOOD RESILIENCY ASSESSMENT
Various Multifamily Residential Buildings, Brooklyn and Queens, New York
This project centered on developing a thorough resiliency strategy for 10 multifamily residential buildings around New York City. Michael performed inspections to assess the current state of affairs, as well as to comprehend the impact it received from Hurricane Sandy. Prepared strategic reports detailing what changes the building could make to avoid further storm damage in the future. Included both hard and soft infrastructure modifications, information on associated policies and the development of detailed recommendation cost estimates. Each property contained its own specific circumstances to be assessed and challenges to be faced. Collaborated with HPD to streamline to submittal process and disbursement of much-need funds for the changes.

Matthew Sanchez .

FIELD HYDROGEOLOGIST

PROFESSIONAL EXPERIENCE
PWGC: 1 year
PRIOR: 2 years

AREAS OF EXPERTISE
Structural Analysis
Soil Classification
Rock/Mineral Identification
Cross-Section Analysis
Well Logging
Recording Data

EDUCATION & TRAINING/CERTIFICATION
BS, Biology, University of Wisconsin at Madison

PROFILE

Mr. Sanchez will be assisting in completing a variety of environmental projects. His responsibilities will include, but not be limited to, conducting oversight of environmental cleanup projects including brownfield and e-designation sites, leading field efforts for Phase II Environmental Site Assessments and Remedial Investigations, and assist with subsurface investigations and soil characterizations. He will continuously improve his skills in the areas of groundwater remediation, soil sampling, air quality sampling and Phase I & II site assessments.He has an excellent track record of timely completion of deliverables, monitoring, and document preparation, while successfully maintaining communication between multiple stakeholders.

NOTABLE PROJECTS

CITY OF WEST PALM BEACH – PUBLIC UTILITIES, LABORATORY SERVICES
Laboratory Technician

- Analyze water samples for the wastewater treatment facility's regulatory needs in areas of chemistry, physical qualities, nutrients, and microbiology. Ensuring quality in analysis and reporting. Identifying outliers results within historic trends.
- Maintained laboratory inventory, quarterly equipment calibration, and SOP revisions
- Requires strong analytical skills, good team communication, reputable data ethics, ability to problem solve, and working with large amounts of data.
- Experience with being auditing by 3rd party regulators for laboratory accreditation and conducting environmental management systems audits on other public utilities divisions within ISO 14000 framework

UNIVERSITY OF WISCONSIN AT MADISON, SPACE SCIENCE & ENGINEERING CENTER
Logistics and Building Services Assistant

- Delivered scientific engineering equipment worth hundreds of thousands of dollars
- Fielded questions regarding services provided by department scientists

ST. JOHN'S UNIVERSITY
Undergraduate Research Intern

- Assisted with organic precursor synthesis, PCR amplification, and chromatography
- Documented detailed records of chemicals, reactions, lab equipment, and safety measures