



A GALLAGHER BASSETT COMPANY

## **PERIODIC REVIEW REPORT**

**GREYSTON BAKERY SITE**

**NYSDEC VCP ID: V00361**

**104 Alexander Street**

**Yonkers, New York**

**October 18, 2018**

**WCD File: GY99143**

**Environmental & Construction Risk Management**

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## PERIODIC REVIEW REPORT

**October 18, 2018**

**WCD File: GY99143**

**Prepared By:**

**WCD Group  
24 Davis Avenue  
Poughkeepsie, New York 12603**

**Prepared For:**

**Greyston Foundation  
21 Park Avenue  
Yonkers, New York 10703**

The undersigned has reviewed this Periodic Review Report and certifies to Greyston Foundation and to the New York State Department of Environmental Conservation (NYSDEC) that the information provided in this document is accurate as of the date of issuance by this office.

The undersigned is a Qualified Environmental Professional as defined by 6NYCRR Part 375-1.2 (aj) and supporting documents. The undersigned possesses sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding the presence of releases or threatened releases to the surface or subsurface of the site or off-site areas, sufficient to meet the objectives and performance factors for the areas of practice identified in NYSDFC guidance document DFR-10.

Paul H. Ciminello

October 18, 2018



Qualified Environmental Professional

Date

Signature



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## **1.0 INTRODUCTION**

### **1.1 Purpose**

This Periodic Review Report (PRR), prepared by WCD Group LLC (WCD), details on-going site management activities at the Greyston Bakery Site (“Site”), which entered the New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Program (VCP) in November 2000 (VCP ID: V00361). The Site is located at 104 Alexander Street (formerly known as 104 Ashburton Avenue), City of Yonkers, Westchester County, New York.

### **1.2 Site Description**

The Site is an irregularly shaped 1.61-acre parcel, located on the northern side of Ashburton Avenue and the eastern side of Alexander Street. The Metro North railroad right-of-way abuts the Site to the east. A commercial bakery building, constructed circa 2002, is located on the northwestern portion of the Site and is surrounded by asphalt parking to the south and east. A one-story brick structure, containing a Metro-North substation, is located on the eastern portion of the Site. A Site Location Map and a Selected Site Features map are included in Appendix A.

## **2.0 BACKGROUND**

### **2.1 Site History**

A Combined Phase I & Phase II Environmental Site Assessment (ESA) was prepared by Ecosystems Strategies, Inc. (ESI) in October 1999. The ESA indicated that the Site and the eastern adjoining properties were developed as a manufactured gas plant from as early as the late 1800s until sometime in the 1930s. A portion of the Site was used for motor-oil storage from at least 1957 until sometime prior to 1989.

### **2.2 Prior Investigations and Remediation Activities**

#### **2.2.1 Prior Investigations**

A sampling event conducted by Malcolm Pirnie in 1995 documented elevated concentrations of volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs) in on-site groundwater. Subsequent investigation by ESI in 1999 included the sampling of five previously existing on-site monitoring wells (likely installed during the earlier 1995 investigation), which were found to contain elevated concentrations of VOCs and PAHs, but at significantly lower levels (the decline was attributed to natural attenuation over time). Groundwater was determined to flow the northeast to the southwest, towards the Hudson River.

Laboratory analysis of soil collected from eight borings in 1999 documented elevated levels of petroleum-related compounds throughout the Site, with peak concentrations detected in the central and northeastern portions. Dense non-aqueous phase liquid (DNAPL) and light non-aqueous phase liquid (LNAPL) petroleum products were detected in soil borings extended on the northeastern portion of the property.

### **2.2.2 Remediation Activities**

On-site remediation was conducted between 2002 and 2003 in accordance with the NYSDEC-approved Work Plan for Site Closure Activities (Work Plan), issued by ESI in June 2000 (revised October 18, 2000). Remedial services are documented in a Remediation Services Engineering Report (Engineering Report) issued by ESI in December 2003 (revised February 2004).

Remedial activities, performed under the Work Plan, are described below:

- Petroleum-contaminated soils were excavated and disposed off-site during the installation of a sub-grade hydraulic barrier and DNAPL collection system, and during the installation of site utilities. No deviations were made from the approved Work Plan.
- A DNAPL collection system was installed at the east-central portion of the Site to remove DNAPL from on-site saturated soils. The system consisted of a “funnel and gate” sub-grade hydraulic barrier, directing DNAPL to a collection chamber. The Work Plan provided for the installation of a LNAPL collection system; however, no LNAPL system was installed, due to the lack of LNAPL present during the installation of the DNAPL system. The DNAPL collection system was monitored for the presence of LNAPL per the requirements of the SMP.
- A vapor extraction system (VES) and vapor barrier were installed under the bakery building to collect vapors accumulating beneath the concrete slab and to discharge these vapors above the roofline. Several alterations of the VES design were made in consultation with the NYSDEC. In conjunction with the installation of the VES, indoor and outdoor air samples were collected, to document system effectiveness.
- A geo-composite clay liner (GCL) was installed on the portions of the Site not covered by building, asphalt, pavement, or sidewalk, to minimize contact with contaminated soils and to diminish the amount of rainwater percolating through on-site soils. The barrier that was proposed in the Work Plan was a geo-membrane of low-density polyethylene; however, a GCL was installed after consultation with the NYSDEC.
- A Site Management Plan (SMP; issued by ESI in November 2005) was developed for long-term management of remaining contamination, which includes plans for operation and maintenance (O&M). Institutional control/engineering control (IC/EC) requirements are not explicitly stated in the SMP but are specified in the Declaration of Covenants and Restrictions for the Site. IC/ECs and O&M requirements for the Site are detailed in Section 2.3, below.

## 2.3 Institutional and Engineering Controls

Institutional Controls (ICs) have been put into place to: (1) implement, maintain and monitor EC systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Site to restricted residential uses only. These ICs are as follows

- *Groundwater Use Restrictions*

A groundwater use restriction prohibits the use of the groundwater underlying the property without treatment rendering it safe for drinking water or industrial purposes. The objective of the groundwater use restriction is the protection of public health and the environment by restricting the use of contaminated groundwater. No uses of on-site groundwater exist and none are planned (the Site is serviced by the municipal water supply system). The groundwater use restriction is effective in preventing contact with the groundwater at the Site.

- *Land Use Restrictions*

No construction, use, or occupancy of the property can result in the disturbance or excavation of the property, which threatens the integrity of the soil cap, or which results in unacceptable human exposure to contaminated soils. However, if disturbance of the cap is necessary prior approval of the NYSDEC is required.

The owner of the property will maintain the cap by maintaining the landscaped cover or by capping the property with another material, with approval of the NYSDEC.

The property may only be utilized for commercial or industrial use without a written waiver from the NYSDEC.

- *Soil Management Plan*

In the case of a situation requiring excavation (i.e., repair of on-site utilities), the NYSDEC will be notified and appropriate health and safety and environmental protection measures will be instituted prior to the commencement of on-site activities. Protocols are provided in the SMP to address the management of any soils generated by potential future soil disturbances.

Engineering controls (ECs) have been put into place in order to manage remaining on-site contamination. The ECs for the Site include the cover system (asphalt pavement and GCL), the vapor mitigation system (vapor barrier and VES), and the DNAPL collection system.

The O&M plan is detailed in the SMP and includes the on-going monitoring of the condition of the cover system (Section 2.3.1), vapor mitigation system (Section 2.3.2), DNAPL collection system (Section 2.3.3), and on-site groundwater (Section 2.3.4), as required in the SMP. The most recent inspection was conducted on August 23, 2018, which included the NYSDEC-approved decommissioning of the DNAPL recovery well (see Section 2.3.3).

### **2.3.1 Cover System**

The cover system at the Site consist of the GCL, asphalt pavement, concrete-covered sidewalks, and/or concrete building slabs of no less than 3 inches in thickness.

No construction or maintenance activities resulting in the disturbance or excavation of on-site soils have occurred in this reporting period (April 2015 to October 2018).

The inspection of the cover system was completed on August 23, 2018. The cover system was observed to be in good condition at the time of the inspection and no significant cracks, vegetation between cracks, ponding of surface water or surface depressions were noted. This suggests that the remedial measures have been effective in preventing exposure to on-site contaminated soils. Photographs of cover system at the Site are presented as Appendix B.

### **2.3.2 Vapor Mitigation System**

Annual air emission sampling of the four active e discharge points (F-1 through F-4) of the VES was discontinued by NYSDEC on September 18, 2013. Generally, historical data indicates a steady decline in VOCs and no presence of PAHs in air emission samples from these discharge points.

All active rooftop fan units were observed to be operational and working properly at the time of the most recent site inspection. The VES monitoring point was observed to have been damaged during the August 23, 2018 site inspection and it was replaced on October 12, 2018 by personnel from Core Down Drilling. A VaporPin was installed next to the former VES monitoring point, which was sealed and abandoned. A sub-slab vacuum measurement of 1.373 inches of water column was recorded immediately after installation, indicating that the VES is operating effectively.

### **2.3.3 DNAPL Collection System**

#### **HISTORY OF DNAPL COLLECTION SYSTEM**

The DNAPL collection system consists of a funnel and gate sub-grade hydraulic barrier, directing DNAPL to a collection chamber. The DNAPL recovery well was installed in July 2003, consisting of an 18-inch diameter stainless steel casing set at a depth of 28 feet below ground surface (bgs). The well was equipped with a 10-foot length of 0.04-inch screen from approximately 13 to 23 feet bgs. The annular space was constructed of a 12-inch bentonite seal above gravel pack. A five-foot stainless steel sump was installed immediately below the well screen (approximately 23 to 28 feet bgs). A 4-inch diameter stainless steel recovery pipe was installed to the floor of the sump section to allow recovery of accumulating DNAPL using a vacuum truck.

Product removal from the DNAPL collection system was conducted in 2003 and 2006. No DNAPL was detected in 2004 and 2005 but was observed in 2006. DNAPL had not been observed in the recovery well since 2006. (Note: DNAPL was observed during installation and well development activities of monitoring well MW-3R, upgradient to the collection system, in December 2013. No DNAPL was observed at MW-3R during the August 2018 sampling event.)

DNAPL recovery well rehabilitation activities at the Site were conducted by Enviro Waste Oil Recovery, LLC under the oversight of ESI on August 18, 2015, which consisted of the removal of particles adhered to the well screen utilizing a pressure washer. Approximately 1,750 gallons of groundwater inside the recovery well were removed during rehabilitation activities. No DNAPL was measured in the recovery well before or after well rehabilitation activities.

The absence of DNAPL in both the rehabilitated recovery well and in the upgradient monitoring well MW-3R appeared to confirm the lack of on-site DNAPL in recoverable amounts at the respective well screen intervals, and NYSDEC approved the decommissioning of the recovery well in a letter dated October 14, 2015.

#### **DECOMMISSIONING OF DNAPL RECOVERY WELL**

The DNAPL recovery well was decommissioned on August 23, 2018 by personnel from Core Down Drilling (CDD), under supervision of WCD personnel. The well was decommissioned in accordance with NYSDEC Commissioner's Groundwater Monitoring Well Decommissioning Policy (CP-43) guidelines. CDD and WCD raised a concern regarding the structural integrity of a decommissioned 18-inch grout-filled well, since the well is located in an area of excessive vehicle traffic. CDD proposed a plan, as described in detail below, to seal the screened slots with grout, but fill the majority of void space with structural concrete. NYSDEC approved this procedure via a phone conversation on August 22, 2018.

The manhole covering the recovery well was removed to expose the well casing and recovery pipe. No DNAPL or LNAPL were measured in the recovery well prior to decommissioning. A moderate sheen was observed in the surface of the water collected in the recovery well.

Prior to well decommissioning, CDD pulled the 4-inch product recovery pump from the well using a Kubota L35 loader. The top section of 18-inch casing could not be removed. An approximately 14-inch diameter polyethylene pipe was placed down the center of the 18-inch recovery well. NYSDEC CP-43 approved grout mixture (94-pound bag of Portland cement to 3.9 pounds bentonite to 6.0-7.8 gallons of water to 1 pound of calcium chloride) was prepared and introduced at the bottom of the outer portion of the well (between the 14-inch and 18-inch pipes) under pressure, using a GS2000 grout pump and tremie pipe. The tremie pipe was lifted incrementally as the grout level rose. The outer portion was filled to approximately 11 feet bgs (approximately 2 feet above the screened interval) with this grout mixture.

Several attempts were made to uncover the gravel pack in the annular space (between the 18-inch casing and the borehole) in order to fill this space with grout. However, the top several feet of the annular space appeared to be sealed with concrete, and CDD could not penetrate deep enough to remove the concrete. Based on the amount of grout injected in the outer portion of the well, it is likely that a majority of the gravel pack was grouted.

The remainder of the well (the inner portion, within the 14-inch pipe, and above the grout mixture in the outer portion) was filled and sealed flush to grade with structural ready-mix concrete prepared on-site by Atlantic Mobile Concrete.



Displaced groundwater was pumped from the well simultaneous with grouting and containerized in 55-gallon DOT drums, which were disposed of off-site at EnviroWaste Oil Recovery in Mahopac, New York on August 24, 2018.

Documentation from the well decommissioning is present in Appendix C.

#### **2.3.4 Groundwater Monitoring**

Groundwater monitoring has been conducted to quantify groundwater quality as an indicator of the environmental conditions of the Site. No groundwater remediation has been conducted on-site. Three on-site monitoring wells (MW-1, MW-2, and MW-3) were installed in April 2005 following on-site construction and remedial activities. The locations of the wells are provided on the Selected Site Features Map provided in Appendix A. MW-3 was decommissioned and monitoring well MW-3R was installed (in the vicinity of former MW-3) in December 2013. Groundwater monitoring for MW-1, MW-2, and MW-3/MW-3R was generally conducted on a quarterly basis between May 2005 and December 2008, bi-annually in 2009, and once in 2010, 2013, and 2015.

The most recent groundwater sampling of monitoring wells MW-2 and MW-3R was conducted on August 23, 2018 (at the time of sampling, a concrete pad and HVAC equipment were observed to have been installed on top of well MW-1, rendering it inaccessible).

#### **AUGUST 2018 SAMPLING EVENT**

Field evidence of contamination observed during the August 2018 groundwater sampling event included moderate sheen and petroleum odors at MW-2 and MW-3R.

Groundwater samples were analyzed for VOCs and PAHs and results were compared to NYSDEC Division of Water Ambient Water Quality Standards and Guidance Values (AWQS), provided in Technical and Operational Guidance Series 1.1.1. A summary of groundwater laboratory results is located in Table 1 (VOCs) and Table 2 (PAHs), Appendix D. Laboratory results for the 2018 groundwater sampling events is provided as Appendix E.

##### *Laboratory Results for VOCs*

Elevated levels of benzene (530 µg/L, AWQS 1 µg/L) and ethyl benzene (330 µg/L, AWQS 5 µg/L) were detected in monitoring well MW-3R. Elevated levels of six additional VOCs (1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, isopropylbenzene, n-propylbenzene, o-xylene, and p-&m-xylene) were also detected in MW-3R. An elevated level of benzene (280 µg/L) and slightly elevated levels of two additional VOCs (isopropyl benzene and n-propylbenzene) were detected in monitoring well MW-2. Generally, these levels are consistent with previous sampling events. No other exceedances of VOCs were detected in MW-2 or MW-3R.

##### *Laboratory Results for PAHs*

Elevated concentrations of naphthalene (709 µg/L, AWQS 10 µg/L), acenaphthalene (117 µg/L, AWQS 20 µg/L), benzo(a)anthracene (0.0821 µg/L, AWQS 0.002 µg/L), and chrysene (0.0821 µg/L, AWQS 0.002 µg/L) were detected in monitoring well MW-3R. These levels represent an

approximately 200 percent increase in total PAHs from the previous sampling event (April 2015). No other exceedances of PAHs were detected in MW-3R.

Elevated levels of acenaphthene (36.8 µg/L), benzo(a)anthracene and chrysene were detected in monitoring well MW-2; no other exceedances of PAHs were detected at MW-2.

#### **HISTORICAL TRENDS**

A historical summary of VOCs and PAHs in groundwater is provided in Tables 1 and 2, Appendix D. Total concentration of VOCs and PAHs for all sampling events are evaluated and presented in graphical form in Appendix D to provide historical perspective to on-site contamination.

Total VOCs concentrations have generally decreased at MW-1 (572 µg/L in May 2005, 118 µg/L in August 2018), have remained relatively stable at MW-2, and have varied at MW-3/MW-3R throughout the 2005 to 2018 monitoring period (see Graphs 1, 2 and 3, Appendix D). The concentration of total VOCs at MW-3 (the upgradient well) was initially at a relatively low level (49 µg/L) and has generally increased throughout the monitoring period. A slight decrease in VOC concentrations was noted during the August 2018 sampling event (1,228 µg/L in April 2015, 1,050 µg/L in August 2018). Overall sampling data continue to suggest that an upgradient source of VOC contamination may be migrating onto the Site (see Graph 3, Appendix D).

Variable concentrations of PAHs have been detected at MW-1 throughout the 2005 to 2015 monitoring period. Total PAH concentrations at MW-1 increased steadily until August 2007, but then rapidly decreased and remained stable at a lower level through June 2009; a slight increase was observed during the December 2009 sampling event. A significant increase in PAH concentration was noted at MW-1 during the August 2010 sampling event, followed by a sharp decrease in April 2013 (see Graph 4, Appendix D). MW-1 could not be sampled during the most recent (August 2018) sampling event.

Total PAH concentrations at MW-2 have remained relatively stable throughout the 2005 to 2018 monitoring period with a noticeable decrease in June 2008 and an increase in April 2015 (see Graphs 5, Appendix D). [Note: The increase in total PAHs in MW-2 in April 2015 is due to the inclusion of 2-methylnaphthalene in the PAHs reported by the laboratory starting in April 2013.]

Total PAH concentrations at MW-3 have remained relatively stable throughout the 2005 to 2015 monitoring period (see Graph 6, Appendix D), with exception of a significant increase at MW-3/MW-3R in February 2006 and moderate increases in December 2013 and the current sampling event (August 2018).

#### **CONCLUSIONS**

Elevated concentrations of VOCs and PAHs in MW-3/MW-3R suggest that contamination is entering the Site from off-site areas to the east and/or northeast. Elevated levels of VOCs and PAHs indicate the continued presence of contamination and the need for the Site to operate under the provisions of the SMP and the Declaration of Covenants and Restrictions to maintain the remedial goal of redevelopment while protecting human health and the environment.

### **3.0 COMPLIANCE WITH ENGINEERING AND INSTITUTIONAL CONTROLS**

The Site is currently operating as a commercial bakery with a Metro-North railroad substation located to the southeast of the bakery. All of the requirements of the SMP, except as specified below, have been met during this period of review (April 2015 to August 2018).

Exceptions:

- The DNAPL recovery well was successfully decommissioned on August 23, 2018 in accordance with NYSDEC Commissioner's Groundwater Monitoring Well Decommissioning Policy (CP-43) guidelines, as approved by NYSDEC in a letter dated October 14, 2015. Therefore, all O&M elements in the SMP pertaining to the DNAPL recovery well will no longer be implemented
- A sub-slab measurement could not be obtained during the August 23, 2018 site inspection because the VES monitoring point had been damaged. Previous vacuum measurements from 2006 to 2015 had indicated that sufficient vacuum were being achieved). Subsequent replacement and testing of the monitoring point in October 2018 continued to document sufficient sub-slab vacuum levels.

The ICs and ECs (i.e., VES and cover layer) currently implemented at the Site are effective in protecting human health and the environment. The completed NYSDEC EC/ICs Certification Form is provided in Appendix F.

### **4.0 CONCLUSIONS**

The DNAPL recovery well was successfully decommissioned on August 23, 2018. Visual inspections of the cover system and VES confirm that the existing ECs are in good condition and are working properly. On-site contamination continues to be present in groundwater; however, monitoring of the cover system and VES indicates that remedial efforts have been sufficient in protecting human health and the environment during this reporting period (April 2015 to October 2018).

All ECs and ICs in place at the Site are in compliance with the SMP. Post-remediation groundwater monitoring will continue to be conducted on a triennial basis. The next sampling event is anticipated in October 2021.

The services summarized in this PRR were conducted in accordance with the approved NYSDEC Voluntary Cleanup Program SMP, and are considered by WCD to satisfy the requirements set forth in the SMP. A PRR will be submitted triennially for this Site, until reporting frequency is reduced or site management is determined to be no longer necessary, as determined in consultation with the NYSDEC. The next PRR is anticipated to be submitted in October 2021.

## **APPENDIX A**

### ***Figures***





**Figure 1: Site Location Map**

104 Alexander Street  
City of Yonkers  
Westchester County, New York

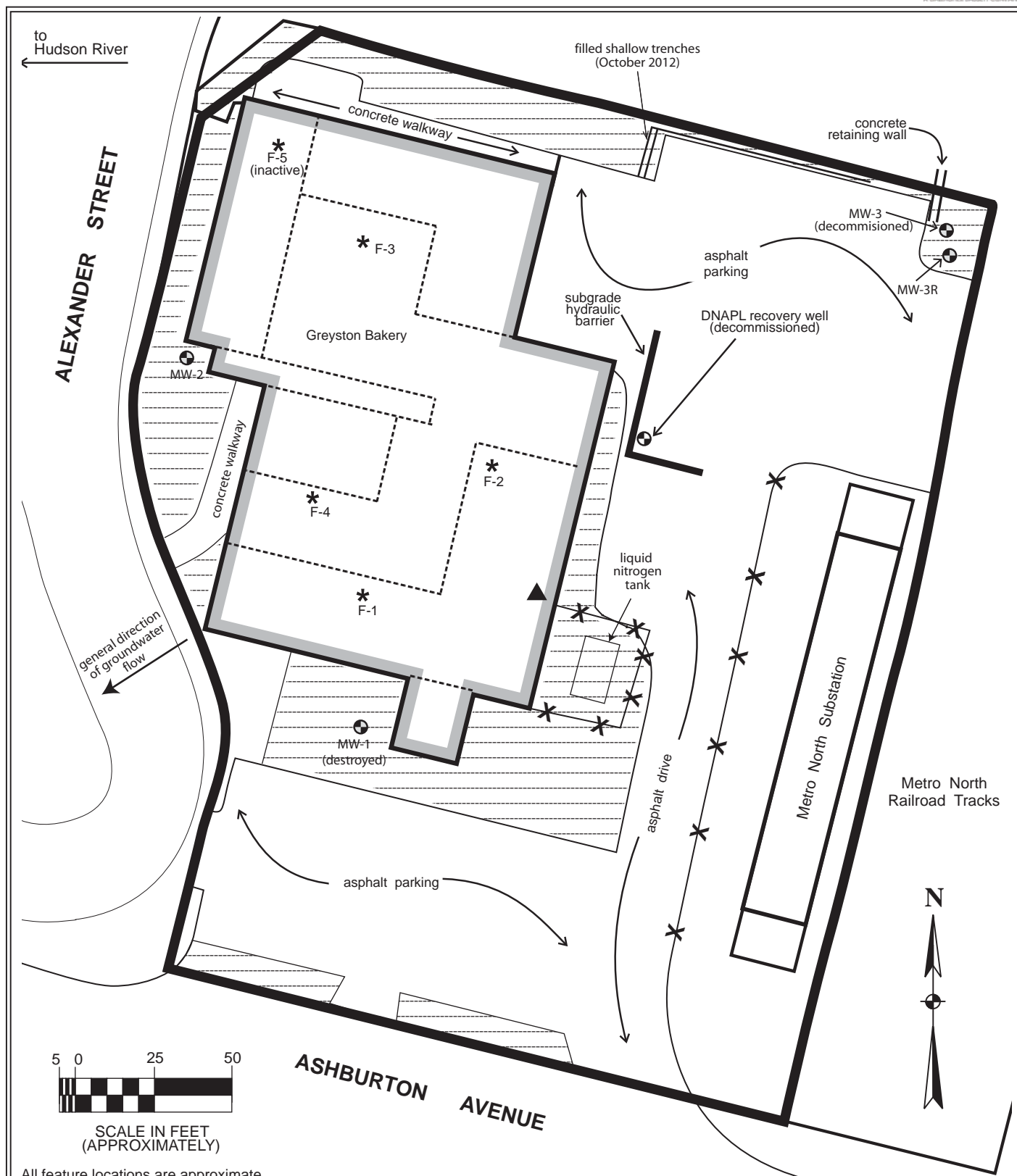
Legend:

— subject property border

WCD File: GY99143.74

October 2018

Appendix A



All feature locations are approximate.

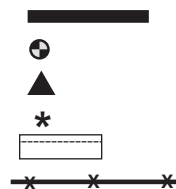
Map based on "Survey" by Roland K. Link, P.L.L.C. (June 17, 1999); and "Site Plan" by Cybul & Cybul A.I.A. Architects.

## Figure 2: Selected Site Features Map

104 Alexander Street  
City of Yonkers  
Westchester County, New York

### Legend:

subject property border  
monitoring wells  
VES monitoring point  
VES roof discharge point  
area of GCL barrier  
chain link fence



WCD File: GY99143.74

October 2018

Scale as shown

Appendix A

## **APPENDIX B**

### ***Photographs***





1. Lawn-covered area (underlain with GCL), south of building



2. Asphalt parking area/driveway, northeastern portion of Site





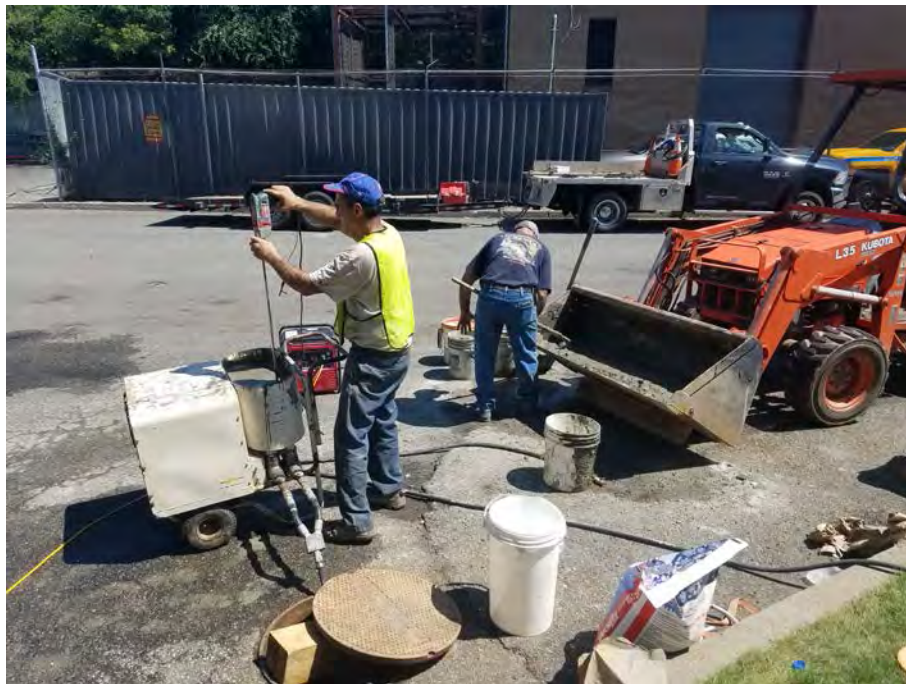
**3. Asphalt parking area, southern portion of Site**



**4. One of four active rooftop fan units for vapor mitigation system**



5. Removal of 4-inch diameter recovery pipe of the DNAPL recovery well



6. Decommissioning the DNAPL recovery well (mixing grout and grouting the outer portion of the well)





7. Decommissioning the DNAPL recovery well (pouring concrete into well void spaces for structural stability)



8. Decommissioned DNAPL recovery well



9. New VES monitoring point and old, abandoned VES monitoring point



10. Sub-slab vacuum measurement

## **APPENDIX C**

### ***DNAPL Well Decommissioning Forms***



FIGURE 3

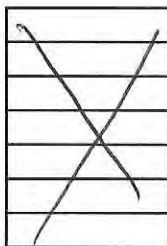
## WELL DECOMMISSIONING RECORD

Site Name: <u>GREYSTON BAKERY</u>	Well I.D.: <u>DNAPL recovery well</u>
Site Location: <u>104 Alexander St, Yonkers, NY</u>	Driller: <u>Andrew Bellucci (CDD)</u>
Drilling Co.: <u>Core Down Drilling (CDD)</u>	Inspector: <u>Claire Siegrist (WCD)</u>
	Date: <u>8/23/2018</u>

**DECOMMISSIONING DATA**  
(Fill in all that apply)

OVERDRILLING

Interval Drilled  
Drilling Method(s)  
Borehole Dia. (in.)  
Temporary Casing Installed? (y/n)  
Depth temporary casing installed  
Casing type/dia. (in.)  
Method of installing

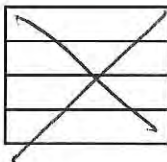
CASING PULLING

Method employed  
Casing retrieved (feet)  
Casing type/dia. (in.)

mechanically pulled  
28 ft  
4 inch steel  
inner recovery well

CASING PERFORATING

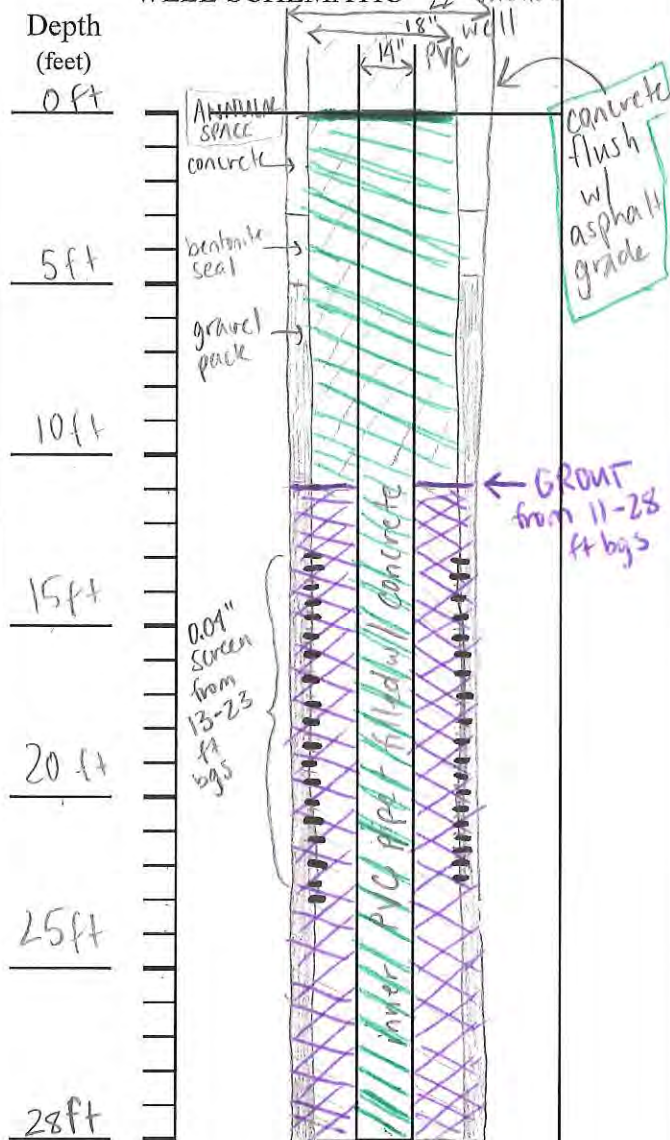
Equipment used  
Number of perforations/foot  
Size of perforations  
Interval perforated

GROUTING

Interval grouted (FBLs)  
# of batches prepared  
For each batch record: (per batch)  
Quantity of water used (gal.)  
Quantity of cement used (lbs.)  
Cement type  
Quantity of bentonite used (lbs.)  
Quantity of calcium chloride used (lbs.)  
Volume of grout prepared (gal.)  
Volume of grout used (gal.)

11-28 ft bgs  
10  
6.5-7  
94  
Portland  
3.9-4  
0.9-1.0  
10-15  
all

## WELL SCHEMATIC\* 22" bore hole



COMMENTS: Removed 4 inch inner steel casing (recovery well).  
Placed 14 inch inner PVC pipe down center of well - pressure  
grout outer portion (b/w inner 14" & 18" outer). Inner  
portion & top filled w/ 1.8 cubic yds of concrete.

\* Sketch in all relevant decommissioning data, including:  
interval overdrilled, interval grouted, casing left in hole,  
well stickup, etc.

Core Down Drilling  
Drilling Contractor

Department Representative

Groundwater pumped during grouting & concrete -  
containerized in 4 55 gallon drums. Manhole  
cover removed & well sealed w/ concrete to grade.

FIGURE 1

SITE NAME: GREYSTON BAKERY  
104 Alexander St, Yonkers, NY  
 MONITORING WELL FIELD INSPECTION LOG  
 NYSDEC WELL DECOMMISSIONING PROGRAM

SITE ID.: V00361 (VCP)  
 INSPECTOR: C. Sieganist  
 DATE/TIME: 8/23/18  
 WELL ID.: DNAPE recovery well

WELL VISIBLE? (If not, provide directions below) .....  
 WELL I.D. VISIBLE? .....  
 WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)....see map

YES	NO
X	
	X

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

SURFACE SEAL PRESENT? Manhole cover .....  
 SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) .....  
 PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

YES	NO
X	
X	
X	

HEADSPACE READING (ppm) AND INSTRUMENT USED Mini RAE 3000 PID .....  
 TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) .....  
 PROTECTIVE CASING MATERIAL TYPE: .....  
 MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

1.9 ppm  
flush mount, manhole cover  
steel

LOCK PRESENT? .....  
 LOCK FUNCTIONAL? .....  
 DID YOU REPLACE THE LOCK? .....  
 IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below) .....  
 WELL MEASURING POINT VISIBLE? .....

YES	NO
	X
	N/A
	N/A
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): from top of 18" casing .....  
 MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....  
 MEASURE WELL DIAMETER (Inches): .....  
 WELL CASING MATERIAL: .....  
 PHYSICAL CONDITION OF VISIBLE WELL CASING: .....  
 ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....  
 PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

28.48 ft  
1.43 ft  
18" / 4"  
steel (both)  
good  
N/A

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Well is located in parking lot/driveway at NE portion of Site (see SSF map)

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Well set in asphalt parking lot  
No restoration required - well is being decommissioned 8/23/18 per NYSDEC

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

Former on-site & eastern adjoining MGP; possible new source upgradient

REMARKS:

## **APPENDIX D**

### ***Groundwater Data Summary Tables and Graphs***



**Table 1: Summary of VOCs in Water - WCD File: GY99143**

All results provided in micrograms per liter (µg/L).

VOCs	Guidance Levels	Sample Identification															
		MW-1															
		May-05	Feb-06	May-06	Apr-07	Aug-07	Nov-07	Feb-08	Jun-08	Dec-08	Jun-09	Dec-09	Aug-10	Apr-13	Apr-15	Aug-18	
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
1,1,2,2-Tetrachloroethane	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
1,1,2-Trichloro-1,2,2-trifluoroethane(Freon 113)	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA
1,1,2-Trichloroethane	1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
1,1-Dichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
1,1-Dichloropropylene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
1,2,3-Trichlorobenzene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
1,2,3-Trichloropropane	0.04	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
1,2,3-Trimethylbenzene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA	NA	NA
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
1,2,4-Trimethylbenzene	5	7	NA	ND	ND	ND	5	ND	ND	6	3	3 (J)	4(J)	3.8 (J)	3.2	NA	
1,2-Dibromo-3-chloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
1,2-Dibromoethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
1,2-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
1,2-Dichloroethane	5	12	ND	ND	ND	ND	8	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
1,2-Dichloroethylene (total)	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA	NA	NA
1,2-Dichloropropane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
1,3,5-Trimethylbenzene	5	4	NA	ND	ND	ND	4	ND	ND	ND	ND	1 (J)	1(J)	1.1 (J)	0.54 (J)	NA	
1,3-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
1,3-Dichloropropane	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
1-Chlorohexane	5	NA	NA	ND	ND	ND	ND	ND	NA	NA	ND	NA	ND	NA	NA	NA	NA
2,2-Dichloropropane	5	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
2-Butanone	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA
2-Chlorotoluene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
4-Chlorotoluene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Acetone	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 (J)	2.8 (J)	NA	
Benzene	1	400	220	290	51	240	260	330	320	360	290	330	150	160	67	NA	
Bromobenzene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Bromochloromethane	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Bromodichloromethane	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Bromoform	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Carbon tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Cis-1,2-Dichloroethylene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA
Cis-1,3-Dichloropropylene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Cyclohexane	NE	NA	18	22	NA	ND	ND	ND	NA	NA	ND	NA	ND	NA	NA	NA	NA
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Dibromomethane	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Ethylbenzene	5	5	4.5	4.2	ND	ND	4	ND	ND	ND	3	3 (J)	2(J)	3.0 (J)	1.5	NA	
Hexachlorobutadiene	0.5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Isopropylbenzene	5	33	30	36	22	23	32	40	39	46	41	36	23	26	16	NA	
Methylene chloride	5	ND	ND	22	ND	ND	ND	ND	ND	ND	ND	NA	7(J, B)	6.2 (J, B)	ND	ND	NA
Methyl tert-butyl ether (MTBE)	10	22	17	22	ND	18	19	ND	22	30	15	20	15	9.2	5.2	NA	
Methylcyclohexane	NE	NA	15	14	NA	ND	ND	ND	NA	NA	ND	NA	ND	NA	NA	NA	NA
Naphthalene	10	63	NA	ND	ND	30	47	43	ND	32	14	18	47	24	12 (B)	NA	
n-Butylbenzene	5	7	NA	ND	7	ND	3	ND	ND	79	ND	2 (J)	35	1.5 (J)	ND	NA	
n-Propylbenzene	5	13	NA	ND	10	ND	12	ND	14	17	13	13	8	9.3	5.8	NA	
o-Xylene	5	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	2 (J)	2(J)	1.9 (J)	1.3	NA	
p-&m-Xylenes	5	3	1.4	1.1	ND	ND	ND	ND	ND	ND	ND	3 (J)	2(J)	2.0 (J)	1.2 (J)	NA	
p-Isopropyltoluene	5	3	NA	ND	ND	ND	2	ND	ND	ND	ND	1 (J)	2(J)	0.94 (J)	ND	NA	
sec-Butylbenzene	5	ND	NA	ND	7	ND	ND	ND	ND	ND	ND	1 (J)	ND	ND	0.54 (J)	NA	
Styrene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	NA	
tert-Butylbenzene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Tetrachloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Toluene	5	ND	1.4	1.7	ND	ND	ND	ND	24	ND	ND	ND	2(J)	1.2 (J)	0.68 (J)	NA	
trans-1,2-Dichloroethylene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA
trans-1,3-Dichloropropylene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Trichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Vinyl acetate	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Vinyl chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA
Total	NE	572	308.6	413	97	311	396	413	419	570	379	433	291	256	117.76	NA	

Notes:

Guidance levels based on NYSDEC Division of Water TOGS 1.1.1 (June 1998) and subsequent NYSDEC Memoranda.

Results in bold and highlighted yellow exceed above-referenced guidance levels.

Results highlighted blue indicate detected concentrations.

B = Analyte found in batch blank

J = Estimated concentration

NE = Not Established

NA = Not Analyzed

ND = Not Detected

**Table 1 (Cont'd): Summary of VOCs in Water - WCD File: GY99143**

All results provided in micrograms per liter (µg/L).

VOCs	Guidance Levels	MW-2														
		May-05	Feb-06	May-06	Apr-07	Aug-07	Nov-07	Feb-08	Jun-08	Dec-08	Jun-09	Dec-09	10-Aug	Apr-13	Apr-15	Aug-18
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane(Freon 113)	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
1,1,2-Trichloroethane	1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
1,1-Dichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
1,1-Dichloropropylene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	NA
1,2,3-Trichlorobenzene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
1,2,3-Trichloropropane	0.04	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
1,2,3-Trimethylbenzene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA	NA
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	1.2
1,2,4-Trimethylbenzene	5	ND	NA	ND	ND	ND	1	ND	ND	ND	1	ND	2(J)	ND	0.85	ND
1,2-Dibromo-3-chloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
1,2-Dibromoethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND	13	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
1,2-Dichloroethylene (total)	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA	NA
1,2-Dichloropropane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 (J)
1,3-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
1,3-Dichloropropane	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	NA
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
1-Chlorohexane	5	NA	NA	ND	ND	ND	ND	ND	NA	NA	ND	NA	ND	NA	NA	NA
2,2-Dichloropropane	5	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	NA
2-Butanone	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
2-Chlorotoluene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	NA
4-Chlorotoluene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	NA
Acetone	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Benzene	1	410	330	180	420	ND	440	410	38	480	380	490	350	290	330	280
Bromobenzene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Bromochloromethane	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Bromodichloromethane	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Bromoform	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	NA	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	NA	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	0.27 (J)
Cis-1,2-Dichloroethylene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Cis-1,3-Dichloropropylene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Cyclohexane	NE	NA	3	ND	NA	ND	ND	ND	NA	NA	ND	NA	ND	NA	NA	2.8
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Dibromomethane	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Ethylbenzene	5	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	1(J)	ND	0.72	0.63
Hexachlorobutadiene	0.5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Isopropylbenzene	5	21	19	13	20	23	15	25	ND	26	19	23	27	17	16	27
Methylene chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	6.4(J, B)	62 B	ND	ND
Methyl tert-butyl ether (MTBE)	10	13	16	15	16	15	17	25	2	26	13	20	11	8.6 J	6.3	4.7
Methylcyclohexane	NE	NA	4.2	3.3	NA	ND	ND	ND	NA	NA	ND	NA	ND	NA	NA	6
Naphthalene	10	19	NA	ND	16	8	10	15	ND	12	4	7 (J)	10	5.7 J	3.6 (B)	ND
n-Butylbenzene	5	ND	NA	ND	ND	ND	ND	ND	ND	51	1	ND	2(J)	28	ND	ND
n-Propylbenzene	5	ND	NA	ND	ND	ND	3	6	ND	ND	5	6 (J)	7	4.7 J	4.4	8.2
o-Xylene	5	ND	ND	ND	ND	ND	1	ND	ND	ND	1	2 (J)	2(J)	ND	1.2	2
p-&m-Xylenes	5	ND	2.3	1.3	ND	ND	3	ND	ND	ND	2	4 (J)	3(J)	2.3 J	1.9	2.7
p-Isopropyltoluene	5	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	NA	2(J)	ND	ND	ND
sec-Butylbenzene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.48 (J)	0.65
Styrene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	1(J)	ND	0.44 (J)	0.67
trans-1,2-Dichloroethylene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
trans-1,3-Dichloropropylene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Trichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Vinyl acetate	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	ND
Vinyl chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Total	NE	463	376.8	212.6	472	59	494	481	43	595	426	552	424.4	418.3	365.89	337.12

Notes:

Guidance levels based on NYSDEC Division of Water TOGS 1.1.1 (June 1998) and subsequent NYSDEC Memoranda.

Results in bold and highlighted yellow exceed above-referenced guidance levels.

Results highlighted blue indicate detected concentrations.

B = Analyte found in batch blank

J = Estimated concentration

NE = Not Established

NA = Not Analyzed

ND = Not Detected

**Table 1 (Cont'd): Summary of VOCs in Water - WCD File: GY99143**

All results provided in micrograms per liter (µg/L).

VOCs	Guidance Levels	Sample Identification															
		MW-3												MW-3R			
		May-05	Feb-06	May-06	Apr-07	Aug-07	Nov-07	Feb-08	Jun-08	Dec-08	Jun-09	Dec-09	Aug-10	Dec-13	Apr-15	Aug-18	
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane(Freon 113)	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	
1,1,2-Trichloroethane	1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
1,1-Dichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
1,1-Dichloropropylene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
1,2,3-Trichlorobenzene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
1,2,3-Trichloropropane	0.04	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
1,2,3-Trimethylbenzene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA	ND	
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
1,2,4-Trimethylbenzene	5	ND	NA	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	34 (J)	7.2	33	
1,2-Dibromo-3-chloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
1,2-Dibromoethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
1,2-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
1,2-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	NA	ND	ND	ND	ND	
1,2-Dichloroethylene (total)	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA	ND	
1,2-Dichloropropane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.0 (J)	15	
1,3-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
1,3-Dichloropropane	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
1-Chlorohexane	5	NA	NA	ND	ND	ND	ND	ND	NA	NA	ND	NA	ND	NA	NA	ND	
2,2-Dichloropropane	5	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
2-Butanone	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	
2-Chlorotoluene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
4-Chlorotoluene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Acetone	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	
Benzene	1	2	590	400	1,300	1,800	1,800	100	172	970	1,600	1,500	1,100	2,400	530	530	
Bromobenzene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Bromochloromethane	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Bromodichloromethane	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Bromoform	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Carbon tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	0.22 (J)	
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Cis-1,2-Dichloroethylene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	
Cis-1,3-Dichloropropylene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Cyclohexane	NE	NA	6.4	ND	NA	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA	1.5	
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Dibromomethane	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Ethylbenzene	5	ND	540	140	240	220	220	ND	20	71	160	120	50	480	160	330	
Hexachlorobutadiene	0.5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Isopropylbenzene	5	ND	110	44	ND	130	130	65	10	65	89	100	68	51	12	48	
Methylene chloride	5	ND	ND	21	ND	ND	ND	ND	ND	ND	ND	NA	140(B)	ND	ND	ND	
Methyl tert-butyl ether (MTBE)	10	ND	16	13	ND	50	50	34	6	42	29	36	26	ND	ND	1	
Methylcyclohexane	NE	NA	30	9.8	NA	ND	ND	ND	NA	NA	ND	NA	ND	NA	NA	9	
Naphthalene	10	46	NA	ND	930	530	630	230	48	97	310	240	200	1,400	490 (B)	ND	
n-Butylbenzene	5	ND	NA	ND	ND	ND	200	ND	ND	ND	ND	110	ND	ND	ND	ND	
n-Propylbenzene	5	ND	NA	ND	ND	ND	40	ND	ND	23	27	37 (J)	25(J)	ND	3.9 (J)	20	
o-Xylene	5	ND	11	6.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	35 (J)	13	35	
p-&m-Xylenes	5	1	9.5	3.9	ND	320	ND	ND	ND	71	ND	13 (J)	9(J)	ND	9.1 (J)	18	
p-Isopropyltoluene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	
sec-Butylbenzene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	
Styrene	5	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
tert-Butylbenzene	5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Tetrachloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Toluene	5	ND	3.4	1.4	ND	ND	ND	ND	2	ND	ND	NA	ND	ND	ND	2.8	
trans-1,2-Dichloroethylene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	
trans-1,3-Dichloropropylene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Trichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Vinyl acetate	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	ND	
Vinyl chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	
Total	NE	49	1317.4	639.6	2470	3050	3086	429	262	1339	2215	2156	1618	4400	1228.2	1049.52	

Notes:

Guidance levels based on NYSDEC Division of Water TOGS 1.1.1 (June 1998) and subsequent NYSDEC Memoranda.

Results in bold and highlighted yellow exceed above-referenced guidance levels.

Results highlighted blue indicate detected concentrations.

J = Estimated concentration

NE = Not Established

NA = Not Analyzed

ND = Not Detected

Table 2: Summary of PAHs in Water - WCD File: GY99143

All results provided in micrograms per liter (µg/L).

PAHs	Guidance Levels	Sample Identification																													
		MW-1															MW-2														
		May-05	Feb-06	May-06	Apr-07	Aug-07	Nov-07	Feb-08	Jun-08	Dec-08	Jun-09	Dec-09	Aug-10	Apr-13	Apr-15	Aug-18	May-05	Feb-06	May-06	Apr-07	Aug-07	Nov-07	Feb-08	Jun-08	Dec-08	Jun-09	Dec-09	Aug-10	Apr-13	Apr-15	Aug-18
2-Methylnaphthalene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	48.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	46.4	77.3	ND	
Acenaphthene	20	93	39	190	110	370	310	88	38	38	35	40	209	28.7	22.2	NA	44	44	46	49	39	34	50	ND	32	39	33	39	26.3	42.0	37
Acenaphthylene	50	ND	2	ND	29	100	43	ND	ND	2	ND	8	51	ND	0.610	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.510	0.451	
Anthracene	50	40	8	81	77	280	160	24	4	10	7	24	171	3.66 (J)	3.24	NA	5.1	1	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.980	1.29	
Benzo(a)anthracene	0.002	33	4	120	73	240	140	12	ND	16	3	27	160	ND	0.180	NA	2.9	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.220	0.226	
Benzo(a)pyrene	0.002	24	3	90	71	220	110	12	ND	3	3	22	139	ND	0.0600	NA	2.3	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo(b)fluoranthene	0.002	17	3	84	41	130	75	10	ND	3	3	12	72	ND	ND	NA	1.1	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo(g,h,i)perylene	5	1.8	2	34	26	56	ND	ND	ND	ND	ND	11	61	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo(k)fluoranthene	0.002	15	1	29	34	150	64	8	ND	2	3	13	58	ND	0.0500 (J)	NA	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chrysene	0.002	27	4	110	81	210	130	17	ND	5	3	25	151	ND	0.190	NA	2.5	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.210	0.205	
Dibenzo(a,h)anthracene	50	1.6	ND	6	13	ND	ND	ND	ND	ND	ND	5 (J)	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Fluoranthene	50	62	11	210	130	400	270	ND	2	16	8	44	249	2.19 (J)	1.9	NA	7.7	3	5	ND	ND	3	ND	ND	3	2	ND	3(J)	1.81	3.05	
Fluorene	50	47	13	80	62	260	140	32	10	17	14	25	152	11.8	7.18	NA	9.7	7	8	ND	8	6	ND	ND	5	5	4 (J)	8	1.39 (J)	5.18	
Indeno(1,2,3-cd)pyrene	0.002	2.8	2	40	ND	58	ND	ND	ND	ND	ND	9	52	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Naphthalene	10	ND	20	11	ND	ND	41	14	9	9	8	6	ND	13.0	6.26	NA	2.1	8	ND	ND	ND	6	ND	ND	4	3	3 (J)	4	ND	2.12	
Phenanthrene	50	97	29	250	190	630	720	93	19	34	23	67	417	13.5	8.29	NA	2.8	3	4	ND	ND	3	ND	ND	3	3	3 (J)	5	1.79 (J)	2.81	
Pyrene	50	86	15	340	170	600	490	ND	3	16	11	59	313	2.38 (J)	2.26	NA	10	5	8	ND	6	4	ND	ND	3	3	3 (J)	3	ND	2.35	
Totals	NE	547.2	156	1675	1107	3704	2693	310	85	171	121	392	2255	75.23	52.42	NA	91.7	71	81	49	53	56	50	ND	50	55	46	62	75.88	135.49	
PAHs	Guidance Levels	MW-3												MW-3R																	
		May-05	Feb-06	May-06	Apr-07	Aug-07	Nov-07	Feb-08	Jun-08	Dec-08	Jun-09	Dec-09	Aug-10	Dec-13	Apr-15	Aug-18															
		NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	218	19.2	258															
2-Methylnaphthalene	20	ND	90	7	ND	ND	ND	ND	5	ND	5 (J)	8	75.0 (J)	5.49	117																
Acenaphthylene	50	ND	53	2	ND	ND	ND	26	ND	ND	ND	ND	ND	0.190	2.4																
Anthracene	50	ND	210	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.830	4.8																
Benzo(a)anthracene	0.002	ND	340	9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.821																
Benzo(a)pyrene	0.002	ND	340	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND																
Benzo(b)fluoranthene	0.002	ND	370	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND																
Benzo(g,h,i)perylene	5	ND	110	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND																
Benzo(k)fluoranthene	0.002	ND	110	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND																
Chrysene	0.002	ND	280	9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.821																
Dibenzo(a,h)anthracene	50	ND	15 (J)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND																
Fluoranthene	50	ND	560	15	ND	ND	ND	ND	ND	ND	ND	4(J)	ND	0.100	2.08																
Fluorene	50	ND	220	9	ND	ND	ND	ND	6	ND	6	9	ND	1.77	38																
Indeno(1,2,3-cd)pyrene	0.002	ND	150	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND																
Naphthalene	10	13	3,900	7	350	280	240	ND	120	26	170	68	66	1,460	338	709															
Phenanthrene	50	ND	780	16	ND	ND	ND	ND	ND	ND	4 (J)	5(J)	ND	ND	33.1																
Pyrene	50	ND	560	24	ND	ND	ND	ND	ND	ND	ND	3(J)	ND	ND	1.58																
Totals	NE	13	8088	143	350	280	240	26	120	37	170	83	95	1,535	366	1167.582															

Notes:

Guidance levels based on NYSDEC Division of Water TOGS 1.1.1 (June 1998) and subsequent NYSDEC Memoranda.

Results in bold and highlighted yellow exceed above-referenced guidance levels.

Results highlighted blue indicate detected concentrations.

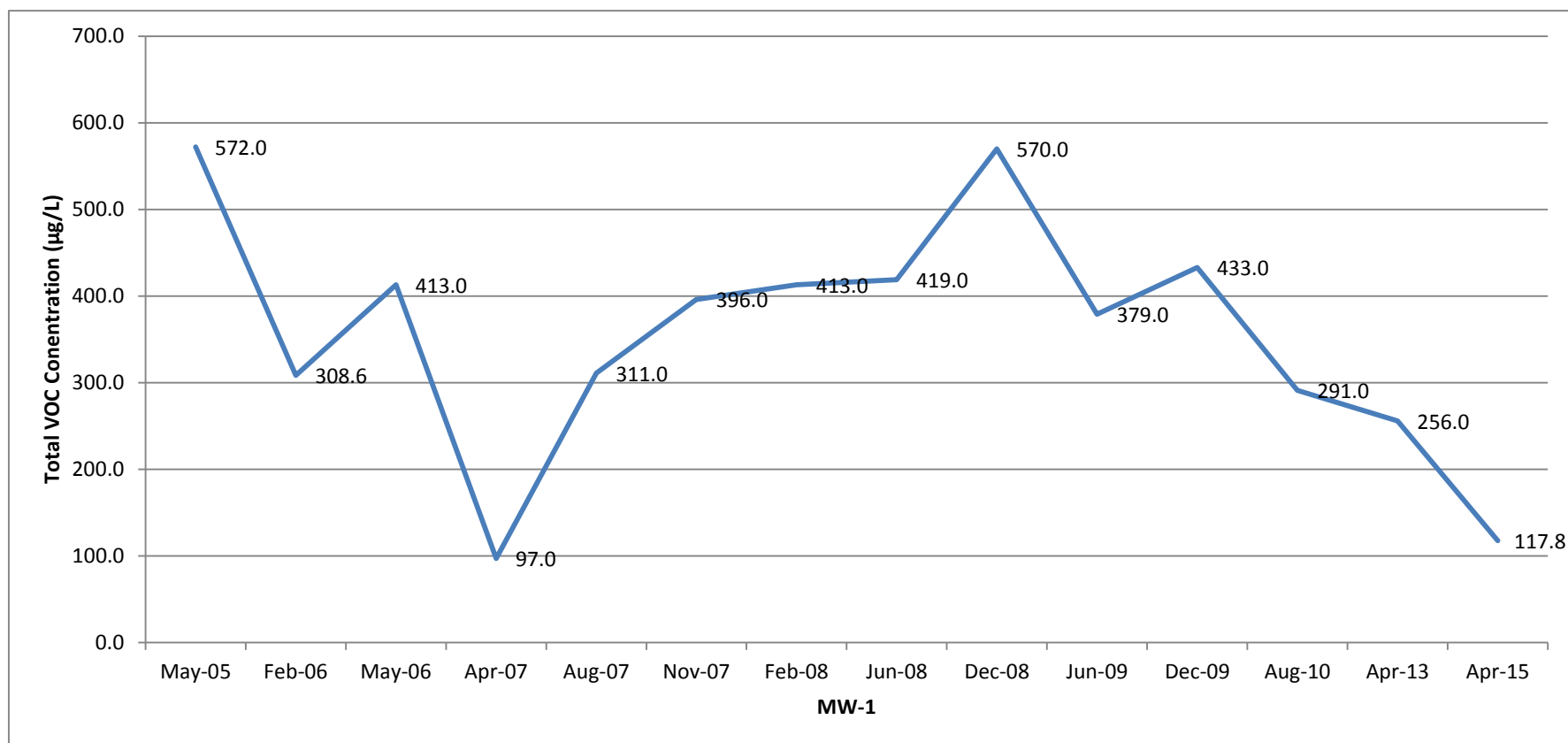
J = Estimated concentration

NA = Not Analyzed

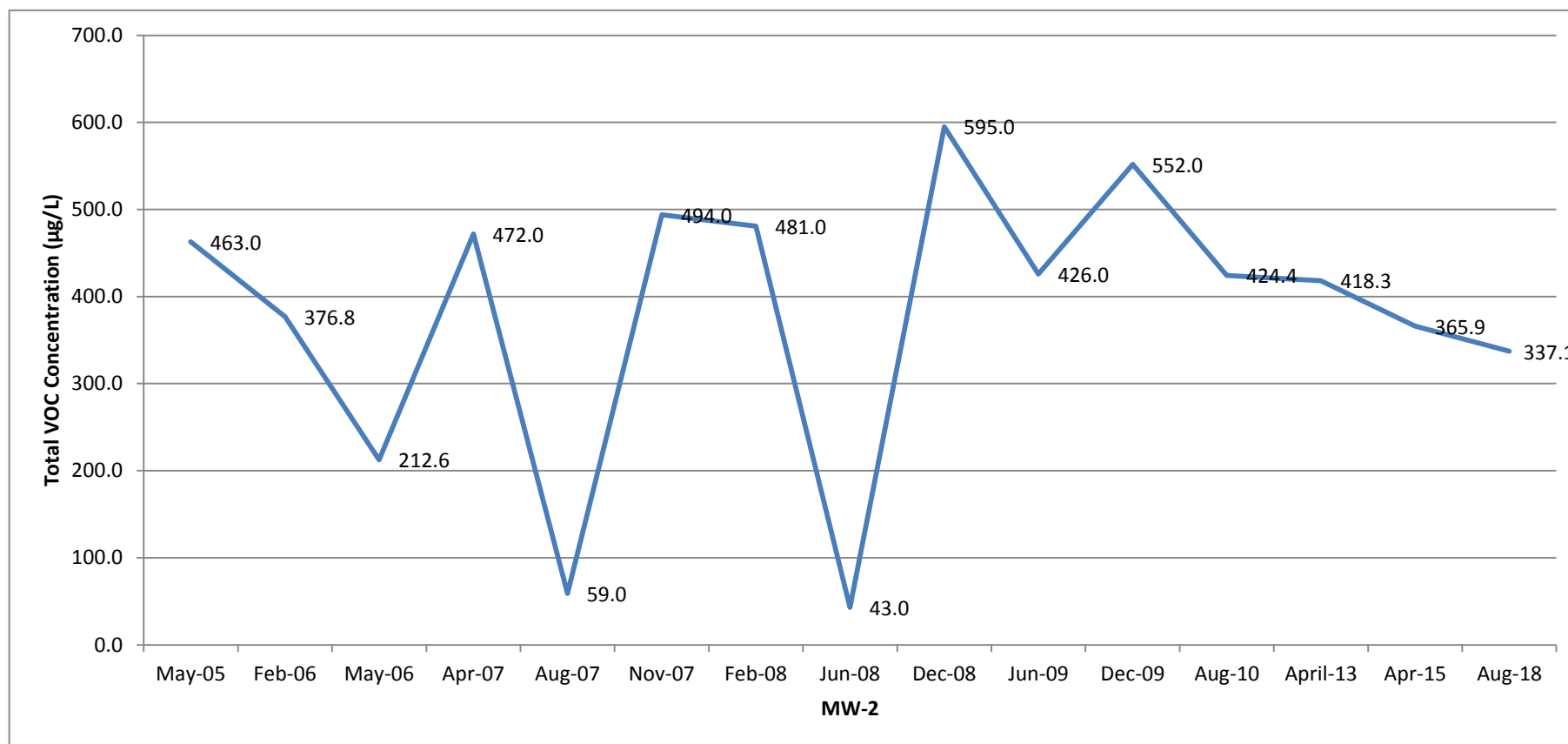
NE = Not Established

ND = Not Detected

Graph 1: Greyston Bakery Total VOCs - MW-1

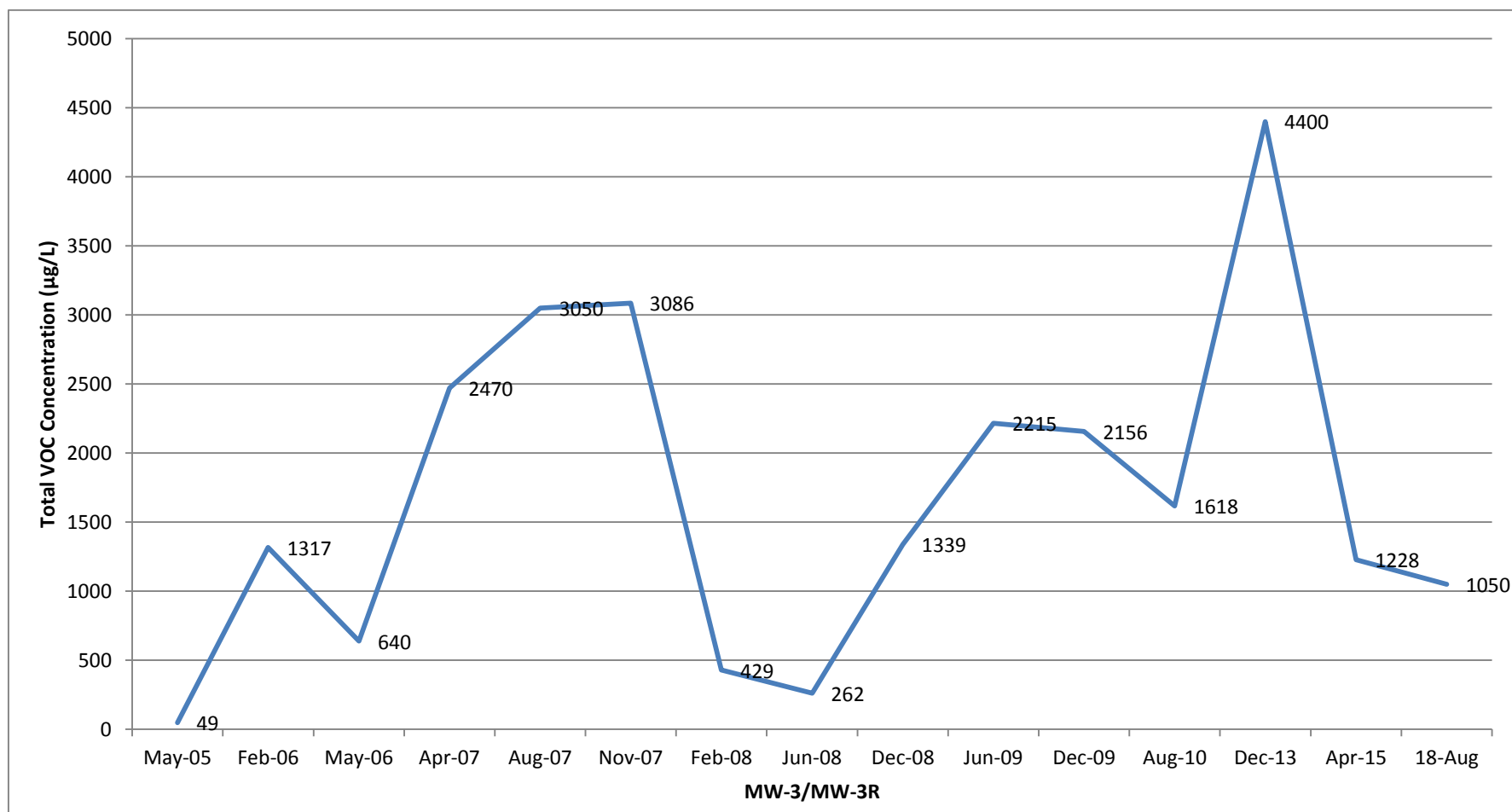


Graph 2: Greyston Bakery Total VOCs - MW-2

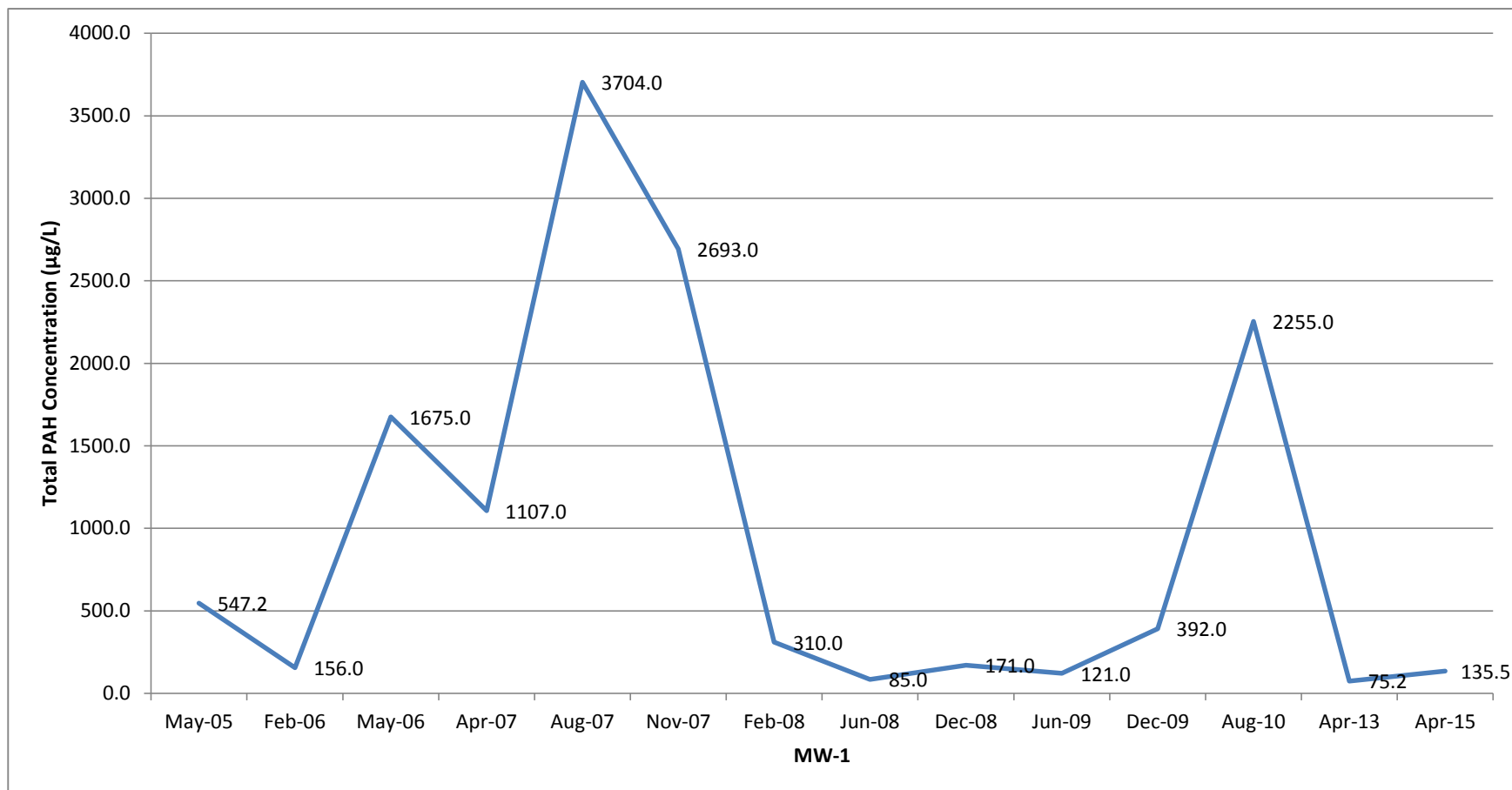


## Graph 3: Greyston Bakery Total VOCs - MW-3 and MW-3R

**Note:** All Total VOC concentrations in this Graph corresponded to monitoring well MW-3, with the exception of the December 2013 and April 2015 sampling events. The Total VOC concentration for December 2013 and April 2015 corresponds to replacement well MW-3R.

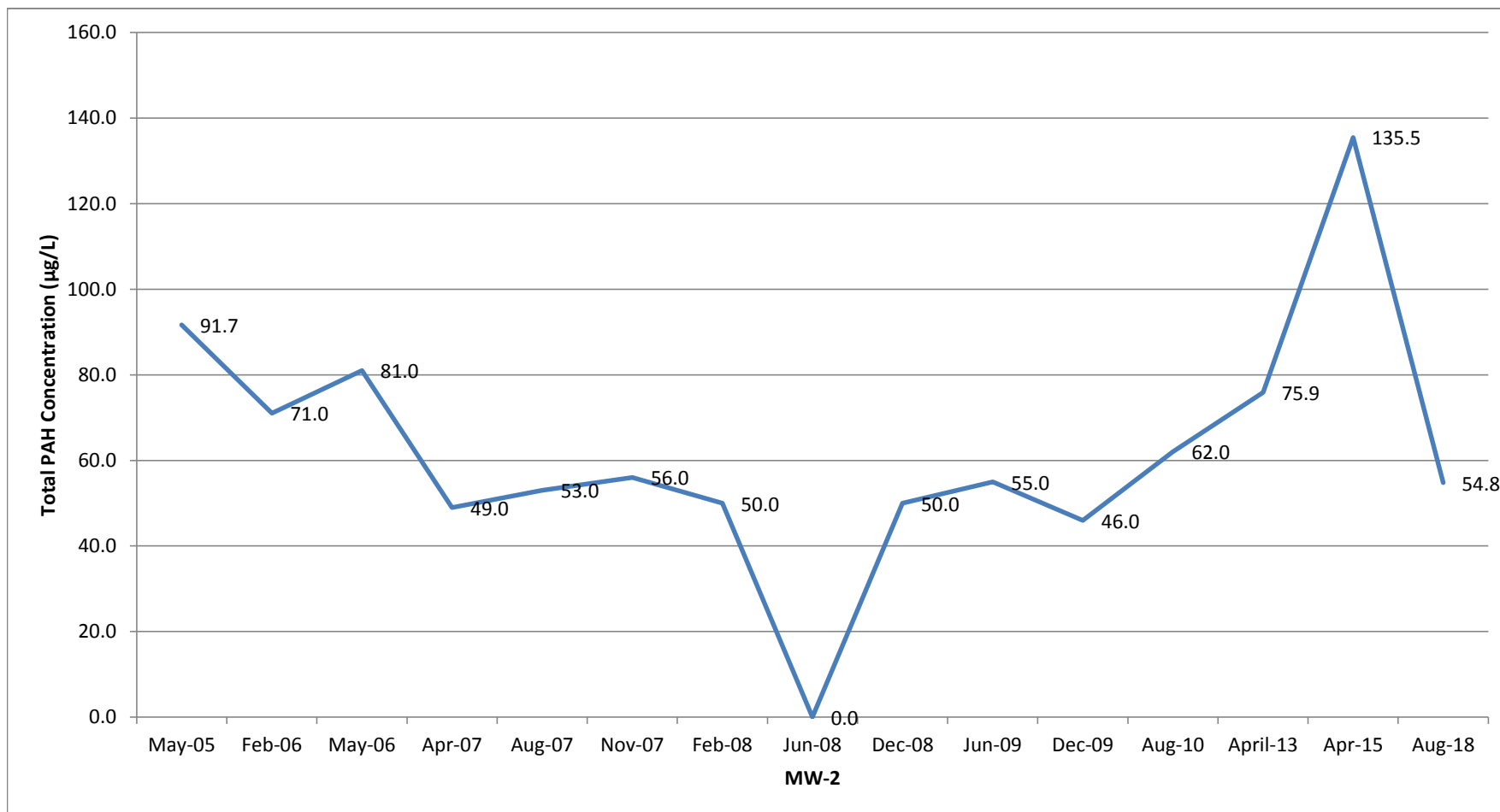


Graph 4: Greyston Bakery Total PAHs - MW-1





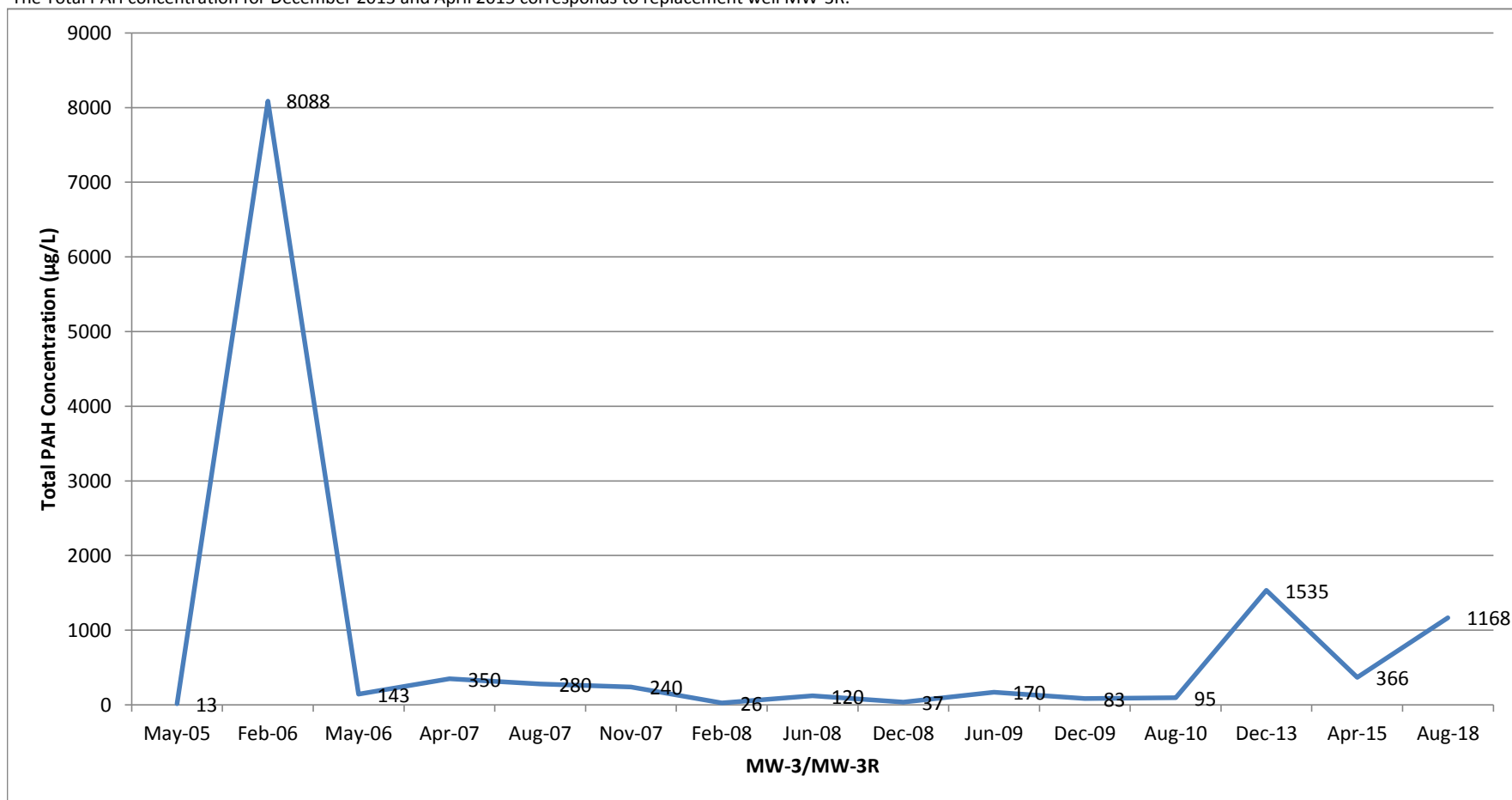
Graph 5: Greyston Bakery Total PAHs - MW-2



## Graph 6: Greyston Bakery Total PAHs - MW-3 and MW-3R

**Note:** All Total PAH concentrations in this Graph corresponded to monitoring well MW-3, with the exception of the December 2013 and April 2015 sampling events.

The Total PAH concentration for December 2013 and April 2015 corresponds to replacement well MW-3R.



## **APPENDIX E**

### ***2018 Laboratory Data***



# Technical Report

prepared for:

**WCD Group**  
23 Route 31 North, Suite B26  
Pennington NJ, 08534  
**Attention: Claire Siegrist**

Report Date: 08/30/2018  
**Client Project ID: GY99143**  
York Project (SDG) No.: 18H1160

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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[ClientServices@yorklab.com](mailto:ClientServices@yorklab.com)

Report Date: 08/30/2018  
Client Project ID: GY99143  
York Project (SDG) No.: 18H1160

**WCD Group**  
23 Route 31 North, Suite B26  
Pennington NJ, 08534  
Attention: Claire Siegrist

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## 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 August 24, 2018 and listed below. The project was identified as your project: **GY99143**.

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.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
18H1160-01	MW-2 20180823	Water	08/23/2018	08/24/2018
18H1160-02	MW-3R 20180823	Water	08/23/2018	08/24/2018
18H1160-03	MW-4 20180823	Water	08/23/2018	08/24/2018
18H1160-04	TB-20180823	Water	08/23/2018	08/24/2018

## **General Notes for York Project (SDG) No.: 18H1160**

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:**



Benjamin Gulizia  
Laboratory Director

**Date:** 08/30/2018





## Sample Information

**Client Sample ID:** MW-2 20180823

**York Sample ID:** 18H1160-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18H1160

GY99143

Water

August 23, 2018 3:00 pm

08/24/2018

### Volatile Organics, 8260 - 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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 06:59	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 06:59	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 06:59	SS
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>1.2</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>0.30</b>	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	200	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 06:59	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS



## Sample Information

**Client Sample ID:** MW-2 20180823

**York Sample ID:** 18H1160-01

York Project (SDG) No.  
18H1160

Client Project ID  
GY99143

Matrix  
Water

Collection Date/Time  
August 23, 2018 3:00 pm

Date Received  
08/24/2018

### Volatile Organics, 8260 - 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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
71-43-2	<b>Benzene</b>	<b>280</b>		ug/L	1.0	2.5	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/29/2018 07:30	08/29/2018 15:19	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 06:59	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
74-87-3	<b>Chloromethane</b>	<b>0.27</b>	CCV-E , J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
110-82-7	<b>Cyclohexane</b>	<b>2.8</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 06:59	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 06:59	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 06:59	SS





## Sample Information

**Client Sample ID:** MW-2 20180823

**York Sample ID:** 18H1160-01

York Project (SDG) No.  
18H1160

Client Project ID  
GY99143

Matrix  
Water

Collection Date/Time  
August 23, 2018 3:00 pm

Date Received  
08/24/2018

### Volatile Organics, 8260 - 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	0.63		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 06:59	SS
98-82-8	Isopropylbenzene	27		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 06:59	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	4.7		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
108-87-2	Methylcyclohexane	6.0		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 06:59	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
103-65-1	n-Propylbenzene	8.2		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
95-47-6	o-Xylene	2.0		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	08/28/2018 11:43	08/29/2018 06:59	SS
179601-23-1	p- & m- Xylenes	2.7	SCAL- E	ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	08/28/2018 11:43	08/29/2018 06:59	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
135-98-8	sec-Butylbenzene	0.65		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	2.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 06:59	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
108-88-3	Toluene	0.67		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS



## Sample Information

**Client Sample ID:** MW-2 20180823

**York Sample ID:** 18H1160-01

York Project (SDG) No.  
18H1160

Client Project ID  
GY99143

Matrix  
Water

Collection Date/Time  
August 23, 2018 3:00 pm

Date Received  
08/24/2018

### Volatile Organics, 8260 - 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
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
1330-20-7	<b>Xylenes, Total</b>	<b>4.7</b>		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 06:59	SS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	100 %	69-130								
2037-26-5	Surrogate: Toluene-d8	98.9 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	96.3 %	79-122								

### Semi-Volatiles, PAH Target List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	2.83	5.13	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 18:16	KH
83-32-9	<b>Acenaphthene</b>	<b>36.8</b>	B	ug/L	2.56	5.13	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 18:16	KH
208-96-8	<b>Acenaphthylene</b>	<b>0.451</b>		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 16:45	SR
120-12-7	<b>Anthracene</b>	<b>1.29</b>		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 16:45	SR
56-55-3	<b>Benzo(a)anthracene</b>	<b>0.226</b>		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 16:45	SR
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 16:45	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 16:45	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 16:45	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 16:45	SR
218-01-9	<b>Chrysene</b>	<b>0.205</b>		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 16:45	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 16:45	SR
206-44-0	<b>Fluoranthene</b>	<b>3.05</b>		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 16:45	SR
86-73-7	<b>Fluorene</b>	<b>5.32</b>		ug/L	2.56	5.13	1	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 18:16	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 16:45	SR



## Sample Information

**Client Sample ID:** MW-2 20180823

**York Sample ID:** 18H1160-01

York Project (SDG) No.  
18H1160

Client Project ID  
GY99143

Matrix  
Water

Collection Date/Time  
August 23, 2018 3:00 pm

Date Received  
08/24/2018

### Semi-Volatiles, PAH Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-20-3	Naphthalene	ND		ug/L	2.56	5.13	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 18:16	KH
85-01-8	Phenanthrene	3.96		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 16:45	SR
129-00-0	Pyrene	3.49		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 16:45	SR
Surrogate Recoveries		Result		Acceptance Range							
4165-60-0	Surrogate: Nitrobenzene-d5	40.0 %	S-08		50.2-113						
321-60-8	Surrogate: 2-Fluorobiphenyl	63.8 %			39.9-105						
1718-51-0	Surrogate: Terphenyl-d14	75.6 %			30.7-106						

## Sample Information

**Client Sample ID:** MW-3R 20180823

**York Sample ID:** 18H1160-02

York Project (SDG) No.  
18H1160

Client Project ID  
GY99143

Matrix  
Water

Collection Date/Time  
August 23, 2018 3:00 pm

Date Received  
08/24/2018

### Volatile Organics, 8260 - 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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 07:30	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 07:30	SS



## Sample Information

**Client Sample ID:** MW-3R 20180823

**York Sample ID:** 18H1160-02

York Project (SDG) No.  
18H1160

Client Project ID  
GY99143

Matrix  
Water

Collection Date/Time  
August 23, 2018 3:00 pm

Date Received  
08/24/2018

### Volatile Organics, 8260 - 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
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 07:30	SS
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>33</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>15</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	200	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 07:30	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
71-43-2	<b>Benzene</b>	<b>530</b>		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/29/2018 07:30	08/29/2018 15:51	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 07:30	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS



## Sample Information

**Client Sample ID:** MW-3R 20180823

**York Sample ID:** 18H1160-02

York Project (SDG) No.  
18H1160

Client Project ID  
GY99143

Matrix  
Water

Collection Date/Time  
August 23, 2018 3:00 pm

Date Received  
08/24/2018

### Volatile Organics, 8260 - 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
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
67-66-3	<b>Chloroform</b>	<b>0.22</b>	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
110-82-7	<b>Cyclohexane</b>	<b>1.5</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 07:30	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 07:30	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 07:30	SS
100-41-4	<b>Ethyl Benzene</b>	<b>330</b>		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/29/2018 07:30	08/29/2018 15:51	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 07:30	SS
98-82-8	<b>Isopropylbenzene</b>	<b>48</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 07:30	SS
1634-04-4	<b>Methyl tert-butyl ether (MTBE)</b>	<b>1.0</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
108-87-2	<b>Methylcyclohexane</b>	<b>9.0</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 07:30	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
103-65-1	<b>n-Propylbenzene</b>	<b>20</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
95-47-6	<b>o-Xylene</b>	<b>35</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	08/28/2018 11:43	08/29/2018 07:30	SS



## Sample Information

**Client Sample ID:** MW-3R 20180823

**York Sample ID:** 18H1160-02

**York Project (SDG) No.**  
18H1160

**Client Project ID**  
GY99143

**Matrix**  
Water

**Collection Date/Time**  
August 23, 2018 3:00 pm

**Date Received**  
08/24/2018

### Volatile Organics, 8260 - 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
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>18</b>	SCAL- E	ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	08/28/2018 11:43	08/29/2018 07:30	SS
99-87-6	<b>p-Isopropyltoluene</b>	<b>4.4</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
135-98-8	<b>sec-Butylbenzene</b>	<b>1.6</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	2.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 07:30	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
108-88-3	<b>Toluene</b>	<b>2.8</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
1330-20-7	<b>Xylenes, Total</b>	<b>53</b>		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 07:30	SS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	100 %	69-130								
2037-26-5	Surrogate: Toluene-d8	97.8 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	104 %	79-122								

### Semi-Volatiles, PAH Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	<b>2-Methylnaphthalene</b>	<b>258</b>		ug/L	28.3	51.3	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/29/2018 12:52	KH
83-32-9	<b>Acenaphthene</b>	<b>117</b>	B	ug/L	25.6	51.3	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/29/2018 12:52	KH



## Sample Information

**Client Sample ID:** MW-3R 20180823

**York Sample ID:** 18H1160-02

York Project (SDG) No.  
18H1160

Client Project ID  
GY99143

Matrix  
Water

Collection Date/Time  
August 23, 2018 3:00 pm

Date Received  
08/24/2018

### Semi-Volatiles, PAH Target List

### Log-in Notes:

### Sample Notes: EXT-EM

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
208-96-8	Acenaphthylene	2.40		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:16	SR
120-12-7	Anthracene	4.78		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:16	SR
56-55-3	Benzo(a)anthracene	0.0821		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:16	SR
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:16	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:16	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:16	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:16	SR
218-01-9	Chrysene	0.0821		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:16	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:16	SR
206-44-0	Fluoranthene	2.08		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:16	SR
86-73-7	Fluorene	38.0		ug/L	2.56	5.13	1	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 19:05	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:16	SR
91-20-3	Naphthalene	709	B	ug/L	51.3	103	20	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/30/2018 10:14	KH
85-01-8	Phenanthrene	33.1		ug/L	2.56	5.13	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 19:05	KH
129-00-0	Pyrene	1.58		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:16	SR
Surrogate Recoveries		Result	Acceptance Range								
4165-60-0	Surrogate: Nitrobenzene-d5	61.5 %	50.2-113								
321-60-8	Surrogate: 2-Fluorobiphenyl	87.5 %	39.9-105								
1718-51-0	Surrogate: Terphenyl-d14	67.4 %	30.7-106								

## Sample Information

**Client Sample ID:** MW-4 20180823

**York Sample ID:** 18H1160-03

York Project (SDG) No.  
18H1160

Client Project ID  
GY99143

Matrix  
Water

Collection Date/Time  
August 23, 2018 3:00 pm

Date Received  
08/24/2018





## Sample Information

**Client Sample ID:** MW-4 20180823

**York Sample ID:** 18H1160-03

**York Project (SDG) No.**  
18H1160

**Client Project ID**  
GY99143

**Matrix**  
Water

**Collection Date/Time**  
August 23, 2018 3:00 pm

**Date Received**  
08/24/2018

### Volatile Organics, 8260 - 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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 08:02	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 08:02	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 08:02	SS
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>1.4</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>0.37</b>	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	200	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 08:02	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS





## Sample Information

**Client Sample ID:** MW-4 20180823

**York Sample ID:** 18H1160-03

York Project (SDG) No.  
18H1160

Client Project ID  
GY99143

Matrix  
Water

Collection Date/Time  
August 23, 2018 3:00 pm

Date Received  
08/24/2018

### Volatile Organics, 8260 - 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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
71-43-2	<b>Benzene</b>	<b>310</b>		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/29/2018 07:30	08/29/2018 16:23	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 08:02	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
110-82-7	<b>Cyclohexane</b>	<b>3.3</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 08:02	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 08:02	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 08:02	SS



## Sample Information

**Client Sample ID:** MW-4 20180823

**York Sample ID:** 18H1160-03

**York Project (SDG) No.**  
18H1160

**Client Project ID**  
GY99143

**Matrix**  
Water

**Collection Date/Time**  
August 23, 2018 3:00 pm

**Date Received**  
08/24/2018

### Volatile Organics, 8260 - 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	0.90		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 08:02	SS
98-82-8	Isopropylbenzene	30		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 08:02	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	5.1		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
108-87-2	Methylcyclohexane	6.8		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 08:02	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
103-65-1	n-Propylbenzene	9.1		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
95-47-6	o-Xylene	2.1		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	08/28/2018 11:43	08/29/2018 08:02	SS
179601-23-1	p- & m- Xylenes	2.8	SCAL- E	ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	08/28/2018 11:43	08/29/2018 08:02	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
135-98-8	sec-Butylbenzene	0.78		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	2.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 08:02	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
108-88-3	Toluene	0.71		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS



## Sample Information

**Client Sample ID:** MW-4 20180823

**York Sample ID:** 18H1160-03

**York Project (SDG) No.**

18H1160

**Client Project ID**

GY99143

**Matrix**

Water

**Collection Date/Time**

August 23, 2018 3:00 pm

**Date Received**

08/24/2018

### Volatile Organics, 8260 - 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
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
1330-20-7	<b>Xylenes, Total</b>	<b>4.9</b>		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 08:02	SS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	97.4 %	69-130								
2037-26-5	Surrogate: Toluene-d8	96.1 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	101 %	79-122								

### Semi-Volatiles, PAH Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	2.83	5.13	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 19:55	KH
83-32-9	<b>Acenaphthene</b>	<b>39.3</b>	B	ug/L	2.56	5.13	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 19:55	KH
208-96-8	<b>Acenaphthylene</b>	<b>0.410</b>		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:48	SR
120-12-7	<b>Anthracene</b>	<b>0.954</b>		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:48	SR
56-55-3	<b>Benzo(a)anthracene</b>	<b>0.164</b>		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:48	SR
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:48	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:48	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:48	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:48	SR
218-01-9	<b>Chrysene</b>	<b>0.154</b>		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:48	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:48	SR
206-44-0	<b>Fluoranthene</b>	<b>2.14</b>		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:48	SR
86-73-7	<b>Fluorene</b>	<b>5.22</b>		ug/L	2.56	5.13	1	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 19:55	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:48	SR



## Sample Information

**Client Sample ID:** MW-4 20180823

**York Sample ID:** 18H1160-03

York Project (SDG) No.  
18H1160

Client Project ID  
GY99143

Matrix  
Water

Collection Date/Time  
August 23, 2018 3:00 pm

Date Received  
08/24/2018

### Semi-Volatiles, PAH Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-20-3	Naphthalene	ND		ug/L	2.56	5.13	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 19:55	KH
85-01-8	Phenanthrene	2.96		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:48	SR
129-00-0	Pyrene	2.57		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 08:05	08/28/2018 17:48	SR
Surrogate Recoveries		Result			Acceptance Range						
4165-60-0	Surrogate: Nitrobenzene-d5	54.9 %			50.2-113						
321-60-8	Surrogate: 2-Fluorobiphenyl	63.6 %			39.9-105						
1718-51-0	Surrogate: Terphenyl-d14	53.0 %			30.7-106						

## Sample Information

**Client Sample ID:** TB-20180823

**York Sample ID:** 18H1160-04

York Project (SDG) No.  
18H1160

Client Project ID  
GY99143

Matrix  
Water

Collection Date/Time  
August 23, 2018 3:00 pm

Date Received  
08/24/2018

### Volatile Organics, 8260 - 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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 02:44	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 02:44	SS



## Sample Information

**Client Sample ID:** TB-20180823

**York Sample ID:** 18H1160-04

York Project (SDG) No.  
18H1160

Client Project ID  
GY99143

Matrix  
Water

Collection Date/Time  
August 23, 2018 3:00 pm

Date Received  
08/24/2018

### Volatile Organics, 8260 - 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
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 02:44	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	200	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 02:44	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
67-64-1	Acetone	1.2	CCV-E , J	ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 02:44	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS



## Sample Information

**Client Sample ID:** TB-20180823

**York Sample ID:** 18H1160-04

York Project (SDG) No.  
18H1160

Client Project ID  
GY99143

Matrix  
Water

Collection Date/Time  
August 23, 2018 3:00 pm

Date Received  
08/24/2018

### Volatile Organics, 8260 - 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
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 02:44	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 02:44	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 02:44	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 02:44	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 02:44	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 02:44	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS



## Sample Information

**Client Sample ID:** TB-20180823

**York Sample ID:** 18H1160-04

York Project (SDG) No.  
18H1160

Client Project ID  
GY99143

Matrix  
Water

Collection Date/Time  
August 23, 2018 3:00 pm

Date Received  
08/24/2018

### Volatile Organics, 8260 - 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
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	08/28/2018 11:43	08/29/2018 02:44	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	08/28/2018 11:43	08/29/2018 02:44	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	2.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	08/28/2018 11:43	08/29/2018 02:44	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	08/28/2018 11:43	08/29/2018 02:44	SS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	106 %	69-130								
2037-26-5	Surrogate: Toluene-d8	97.6 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	107 %	79-122								





### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
18H1160-01	MW-2 20180823	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18H1160-02	MW-3R 20180823	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18H1160-03	MW-4 20180823	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18H1160-04	TB-20180823	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C





## Sample and Data Qualifiers Relating to This Work Order

SCAL-E	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration (average Rf>20%).
S-08	The recovery of this surrogate was outside of QC limits.
QR-04	The RPD exceeded control limits for the LCS/LCSD QC.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
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.
EXT-EM	The sample exhibited emulsion formation during the extraction process. This may affect surrogate recoveries.
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).
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.



## **APPENDIX F**

### ***Institutional and Engineering Controls Certification Form***





**Enclosure 2**  
**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**Site Management Periodic Review Report Notice**  
**Institutional and Engineering Controls Certification Form**



Site Details		Box 1
Site No.	V00361	
Site Name Greyston Bakery (formerly, 104 Ashburton Avenue)		
Site Address: 104 Alexander Street      Zip Code: 10701		
City/Town: Yonkers		
County: Westchester		
Site Acreage: 1.6		
Reporting Period: <del>March 27, 2015 to March 27, 2018</del> April 15, 2015 to October 15, 2018		
		YES      NO
1. Is the information above correct?		<input type="checkbox"/> <input checked="" type="checkbox"/>
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		<input type="checkbox"/> <input checked="" type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		<input type="checkbox"/> <input checked="" type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		<input type="checkbox"/> <input checked="" type="checkbox"/>
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?		<input type="checkbox"/> <input checked="" type="checkbox"/>
		Box 2
		YES      NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial		<input checked="" type="checkbox"/> <input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?		<input checked="" type="checkbox"/> <input type="checkbox"/>
<b>IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.</b>		
<b>A Corrective Measures Work Plan must be submitted along with this form to address these issues.</b>		
Signature of Owner, Remedial Party or Designated Representative		Date

aside from well decommissioning permit w/ City of Yonkers

**SITE NO. V00361**

**Box 3**

**Description of Institutional Controls**

Parcel

**2-2618-1**

Owner

**Greyston Foundation**

Institutional Control

**Ground Water Use Restriction  
Landuse Restriction**

**Soil Management Plan**

The owner of the Property shall prohibit the Property from ever being used for purposes other than for commercial or industrial use without the express written waiver of such prohibition by the Department or Relevant Agency.

The owner of the Property shall prohibit the use of the groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Department or Relevant Agency.

**Box 4**

**Description of Engineering Controls**

Parcel

**2-2618-1**

Engineering Control

**Vapor Mitigation  
Cover System**

The owner of the Property shall maintain the cap covering the Property by maintaining its landscaped cover or, after obtaining the written approval of the Department or Relevant Agency, by capping the Property with another material.

The owner of the Property shall maintain the vapor extraction system, as described in the Site Management Plan.



**Periodic Review Report (PRR) Certification Statements**

1. I certify by checking "YES" below that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

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2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

- (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

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**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and  
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

\_\_\_\_\_  
Signature of Owner, Remedial Party or Designated Representative

\_\_\_\_\_  
Date

IC CERTIFICATIONS  
SITE NO. V00361

Box 6

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Paul Ciminello, WCD Group, at 24 Davis Avenue, Poughkeepsie, NY 12603,  
print name print business address

am certifying as Remedial Party (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Paul Ciminello

10/17/18

Signature of Owner, Remedial Party, or Designated Representative  
Rendering Certification

Date



IC/EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Paul Ciminello, WCD Group, at 24 Davis Avenue, Poughkeepsie, New York 12603  
print name print business address

am certifying as a Qualified Environmental Professional for the Remedial Party  
(Owner or Remedial Party)

*Paul H. Wt*

10/17/18

Signature of Qualified Environmental Professional, for  
the Owner or Remedial Party, Rendering Certification

Stamp  
(Required for PE)

Date