



PERIODIC REVIEW REPORT

HAVERSTRAW HARBORS SITE

NYSDEC BCP ID: C344060

Dr. Girling Drive

Haverstraw, New York

April 12, 2018

WCD File: GH9964

Environmental & Construction Risk Management

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PERIODIC REVIEW REPORT

April 12, 2018

WCD File: GH9964

Prepared By:

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

Prepared For:

**GDC Development Properties LLC
100 Summit Lake Drive
Valhalla, New York 10595**

The undersigned has reviewed this Periodic Review Report and certifies to GDC Development Properties, LLC 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 NYSDEC guidance document DER-10..

Paul H. Ciminello

April 12, 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 Haverstraw Harbors Site (“Site”), which entered the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) in July 2004 (BCP ID: C344060). The Site is located at Dr. George Girling Drive, Village of Haverstraw, Rockland County, New York. A map displaying the Site location is presented as Figure 1, Appendix A.

1.2 Site Description

The Site is an irregularly-shaped, 5.0479-acre parcel, bounded by a portion of the Metro North Railroad (MNR) parking lot to the north, the Harbors at Haverstraw residential complex to the south, the Hudson River to the east, and West Street to the west (see Figure 1). Dr. George W. Girling Drive (“Girling Drive”) traverses the Site in an “L” shape from the western Site boundary and ends in the central portion of the Site. The western portion of the Site is currently occupied by the Village of Haverstraw Department of Public Works (“DPW”). The eastern portion of the Site is currently vacant. The Site layout is depicted on Figure 1, Appendix A.

2.0 BACKGROUND

2.1 Site History

The Site is historically comprised of four parcels:

- Former Rockland Fuel Oil Company (Rockland Fuel) parcel, located at the southeastern portion of the Site;
- Portion of the former Keahon parcel, located at the northeastern portion of the Site; and,
- Two DPW parcels (northern and southern parcels), located at the western portion of the Site.
- The Rockland Fuel and Keahon parcels are located at the eastern end of Girling Drive, along the western shoreline of the Hudson River. The DPW parcels are located on both the northern and southern sides of Girling Drive (the southern parcel also has frontage on West Street).

The Rockland Fuel parcel is the site of a former major oil storage facility (MOSF). Aboveground storage tanks (ASTs), ancillary structures, and a limited area of solvent contaminated soil were removed in 2003.

The Keahon parcel is the site of a former concrete manufacturer, which contained ASTs and fuel pumps removed prior to the installation of the MNR parking lot.

The northern DPW parcel is utilized as a maintenance yard containing a salt/gravel shed, and two ASTs (diesel fuel and gasoline) with a fuel pump. The northern DPW parcel is the site of a former wastewater treatment plant.

The southern DPW parcel contains a garage utilized for vehicle maintenance activities, an office trailer, construction trailer associated with the Harbors at Haverstraw residential complex, and a western landscaped area, which contains a 3,000-gallon underground storage tank (UST) supplying heating oil to the garage.

2.2 Prior Investigations and Remediation Activities

2.2.1 Prior Investigations

The following investigations were conducted by Ecosystems Strategies (ESI) at the Site:

- Phase I Environmental Site Assessment for the Keahon and Rockland Fuel parcels, February 5, 1999;
- Combined Phase I – Phase II Environmental Site Assessment for the Rockland Fuel and northern DPW parcel, June 4, 1999;
- Summary Report of Remedial Activities (SRRA) for the former Rockland Fuel parcel, August 2003;
- Tank Closure Site Assessment (TCSA) for the former Rockland Fuel and Keahon parcels, August 2003;
- Letter Reports documenting sampling of on- and off-site monitoring wells for the Rockland Fuel parcel, April 23, 2002 and February 24, 2004;
- Tank Closure Report (TCR) for the southern DPW parcel, February 2, 2005;
- Summary Report of Subsurface Investigation for the southern DPW parcel, August 2005; and,
- Site Investigation Report (SIR), October 2007.

Environmental investigations prior to the SIR identified petroleum contamination in subsurface soils in the eastern and southwestern portions of the Site and in on-site groundwater, and solvent contamination in subsurface soils in the central portion of the Site.

Interim remedial activities at the Site included: removal of all petroleum bulk storage at the Rockland and Keahon parcels (TCSA), removal of solvent impacted soils in the central portion of the Site (SRRA); and removal of an UST in the southwestern portion of the Site (TCR).

The SIR confirmed and extensively documented petroleum contamination in on-site subsurface soils in the northeastern, southeastern and southwestern portions of the Site. Light non-aqueous phase liquid (LNAPL) was identified in several areas associated with grossly contaminated petroleum-impacted soils. No significant off-site contamination associated with the Site was reported in the SIR.

2.2.2 Remediation Activities

Implementation of ESI's NYSDEC-approved Remedial Action Work Plan (RAWP, November 2007), from May through November 2013, included:

1. Excavation of accessible soil/fill exceeding restricted residential soil cleanup objectives (SCOs) and/or grossly contaminated soils to varying depths (maximum depth of 12 feet bsg) in the northeast, southern, and southwestern portions of the Site. Figures 3.1, 3.2 and 3.3, Appendix A depict the areas of excavation at the Site;
2. Recovery, containerization and disposal of accessible LNAPL present in excavation areas;
3. Installation of a demarcation layer in areas with known or suspected remaining contamination;
4. Backfilling excavated areas with NYSDEC-approved material;
5. Demolition of the Sales Center (a temporary structure in the southeastern portion of the Site) during remedial activities to access grossly contaminated soils underneath the building;
6. Construction and maintenance of a cover system consisting of impermeable surfaces (asphalt, pavement and/or building/trailer footprint) or landscaped areas with at least 24 inches of clean soil to prevent human exposure to remaining contaminated soil/fill remaining at the Site. Figure 4 and Table A, Appendix B provide a depiction and summary of remaining soil contamination at the Site, respectively. Figures 5.1 and 5.2 depict the cover system for the Site;
7. Provision for the installation of a sub-slab depressurization system (SSDS), if deemed necessary, in any future building erected on-site during development activities;
8. Execution and recording of an Environmental Easement (EE) to restrict land use and prevent future exposure to any contamination remaining at the site;
9. Establishing Institutional Controls (see Section 2.4);
10. Development and implementation of a Site Management Plan (SMP) for long term management of remaining contamination as required by the EE, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting.

2.3 Engineering Controls

Engineering controls (ECs) have been put into place in order to manage remaining on-site contamination. The only existing EC at the Site is the cover system, to prevent exposure to remaining contamination in soil/fill.

The SMP contains provisions for future ECs. The conditions upon which to implement the future ECs are presented in the SMP. The future ECs consist of:

- The installation of a SSDS, if deemed necessary, in any future building erected on-site during development activities; and,
- In-situ treatment to address remaining contamination in the event LNAPL is encountered in remaining wells and/or this contamination migrates to areas where no previous contamination has been documented.

A site-wide inspection form completed by WCD, which documents the annual inspection of the existing EC, is provided in Appendix C. The cover system is discussed in Section 2.3.1. An evaluation on the need to implement future ECs is presented in Sections 2.3.2 and 2.3.3. These sections discuss the maintenance and operation activities outlined in the SMP, in addition to other pertinent activities that have occurred in the past year.

2.3.1 Cover System

The cover system at the Site consist of a minimum of 24 inches of clean soil, asphalt pavement, concrete-covered sidewalks, trailers in the northern DPW parcel, and/or concrete building slabs of no less than 3 inches in thickness.

The inspection of the cover system was completed on April 4, 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. Photographs of cover system at the Site are presented as Appendix D.

2.3.2 Sub-slab Depressurization System

A SSDS will be installed, if deemed necessary after the evaluation of soil vapor data and in consultation with NYSDEC, in any building erected on-site during future development activities to prevent exposure to any soil vapor intrusion from remaining contamination that exists beneath the Site.

No new structures have been erected since the implementation of the RAWP. No SSDS has been installed at the Site to date. All future buildings erected on-site will be evaluated to determine the need of a SSDS in accordance with the SMP.

2.3.3 Contingency for In Situ Treatment of Groundwater

In-situ treatment of on-site soils and groundwater will be conducted in the event LNAPL is encountered in remaining wells and/or remaining contamination migrates to areas where no previous contamination has been documented. Mobility of remaining contamination will be evaluated by assessing contaminant concentrations in groundwater and the presence of LNAPL.

Post-remediation groundwater monitoring has been conducted at the Site since July 2014 to assess the need for in-situ treatment, document post-remedial groundwater quality and assess natural attenuation. Groundwater monitoring consists of the sampling of on-site and off-site monitoring wells for constituents of concern and determining the presence or absence of LNAPL. Figure 2, Appendix A depicts the monitoring well locations. The latest groundwater sampling event was conducted on July 12, 2017. A Letter Report documenting the July 2017 groundwater monitoring and sampling activities, presented as Appendix E, was prepared by WCD and submitted to NYSDEC on August 2, 2017. The conclusions of the Letter Report are presented below.

No measurable LNAPL was observed at any of the wells during the July 2017 groundwater monitoring activities. Moderate field evidence of petroleum contamination (i.e. odors, sheen and/or PID readings) was observed in monitoring wells HMW-3R, HMW-7R and HMW-10R; no significant dissolved concentrations of petroleum compounds, however, were detected. These findings support the conclusion that remaining petroleum contamination is highly degraded and likely to be bound to soils.

Low-level exceedances of groundwater standards for several chlorinated solvents continue to be present at HMW-8 (TCE and its breakdown products) and HWM-13 (chlorobenzene). Current data document an increase in TCE concentrations and relatively stable chlorobenzene levels.

It is the opinion of WCD that residual petroleum and solvent contamination does not warrant in-situ treatment at this time, based on the absence of LNAPL and only relatively low-levels of dissolved VOCs in on-site groundwater.

2.4 Institutional Controls

A series of 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. Adherence to these ICs on the Site is required by the EE and will be implemented under the SMP. These ICs are:

- Compliance with the EE and SMP by the Grantor and the Grantor's successors and assigns;
- All ECs must be operated and maintained as specified in the SMP;

- All ECs on the Controlled Site must be inspected at a frequency and in a manner defined in the SMP;
- Groundwater, soil vapor and other environmental or public health monitoring must be performed as defined in the SMP; and,
- Data and information pertinent to site management of the Controlled Site must be reported at the frequency and in a manner defined in the SMP.

The Site has a series of ICs in the form of site restrictions. Site restrictions that apply to the Controlled Site are:

- The site may only be used for restricted residential use provided that the long-term Engineering and Institutional Controls included in the SMP are employed.
- The Site may not be used for a higher level of use, such as unrestricted and residential uses without additional remediation and amendment of the EE, as approved by the NYSDEC;
- All future activities on the Site that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for intended use;
- Vegetable gardens and farming on the site are prohibited; and,
- The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Site are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Site at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

3.0 COMPLIANCE WITH ENGINEERING AND INSTITUTIONAL CONTROLS

The EC currently implemented at the Site is effective in protecting human health and the environment. The EC is in compliance with the SMP and is effective for protecting human health and the environment.

The Site was observed to be a storage, maintenance and repair facility for the DPW and vacant land during the annual Site inspection. The Site is not currently used for unrestricted or residential uses. Groundwater is not in use at the Site at this time and no gardens or farms are present. No new structures were erected at the Site. The ICs are currently implemented at the Site and are effective for protecting human health and the environment.

The completed NYSDEC EC/ICs Certification Form is provided in Appendix F.

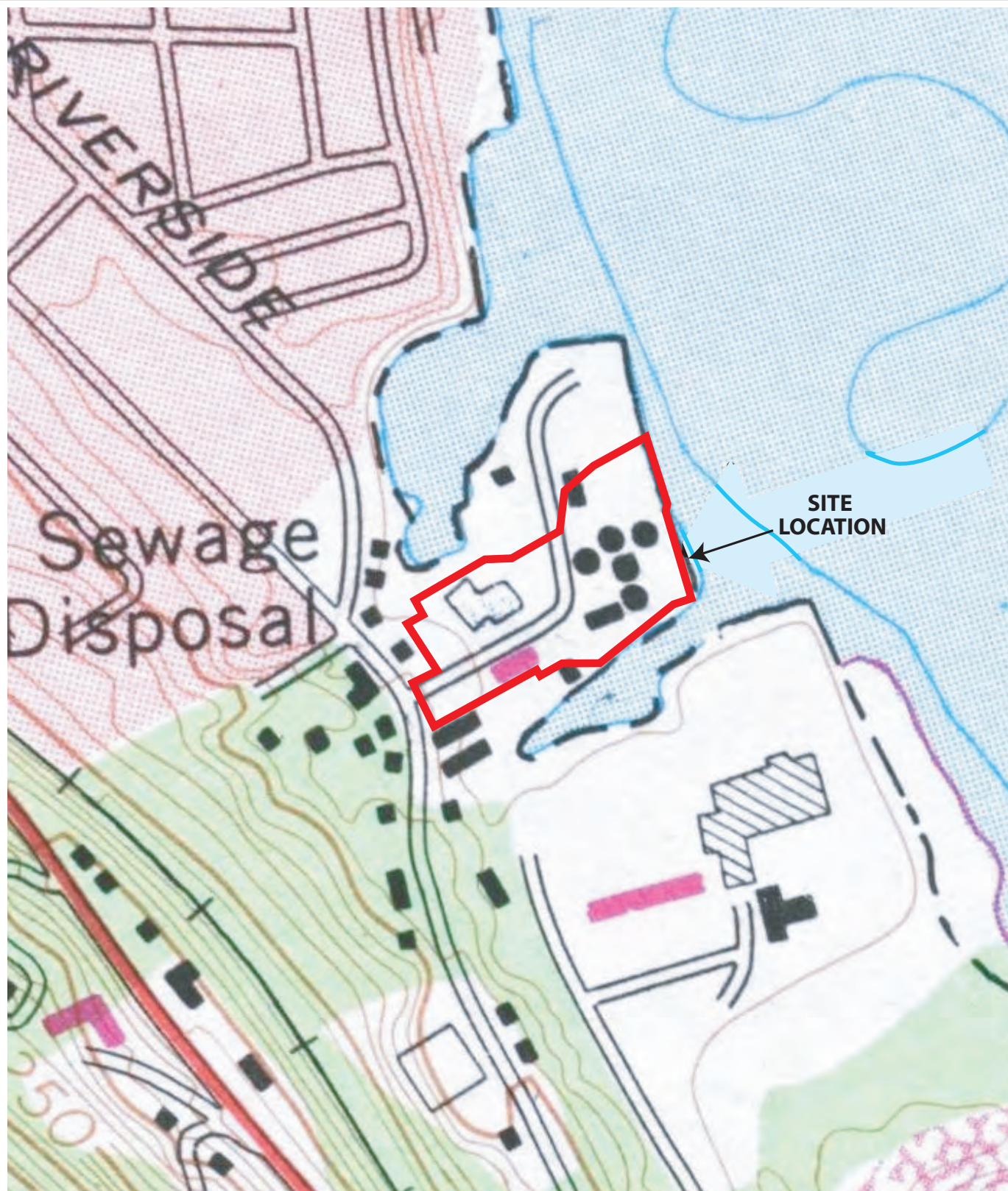
4.0 CONCLUSIONS

Visual inspection of the cover system confirm that the existing ECs are in good condition and working properly. Available groundwater quality data indicate that in-situ treatment is not warranted at this time. 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 an annual basis, in conformance with the SMP. The next sampling event is anticipated in July 2018.

The services summarized in this PRR were conducted in accordance with the approved NYSDEC Brownfields Program SMP, and are considered by WCD to satisfy the requirements set forth in the SMP. The next report will be submitted by April 2019.

APPENDIX A

FIGURES



Source: U.S. Department of Interior Geological Survey Topographic Map of the Haverstraw, NY Quadrangle, dated 1967 (photorevised 1979)

Figure 1 - Site Location and Boundaries Map

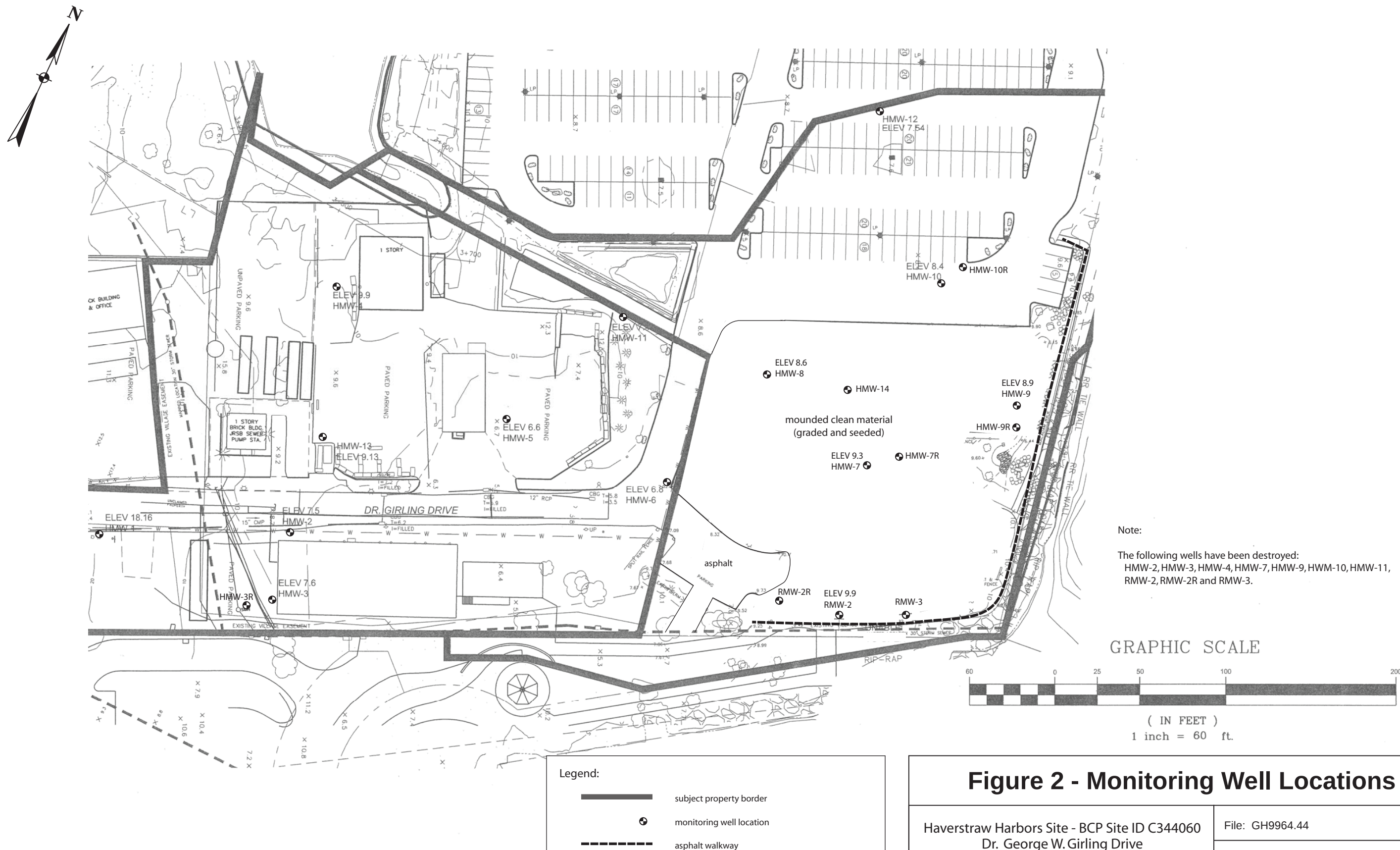
Haverstraw Harbors Site - BCP Site ID C344060
Dr. George W. Girling Drive
Village of Haverstraw
Rockland County, New York



File: GH9964.44

April 2018

Appendix A



Base map provided by Morris Associates Engineering Consultants, PLLC - Figure 6 - Monitoring Well Locations dated 10/4/2013. All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

Figure 2 - Monitoring Well Locations

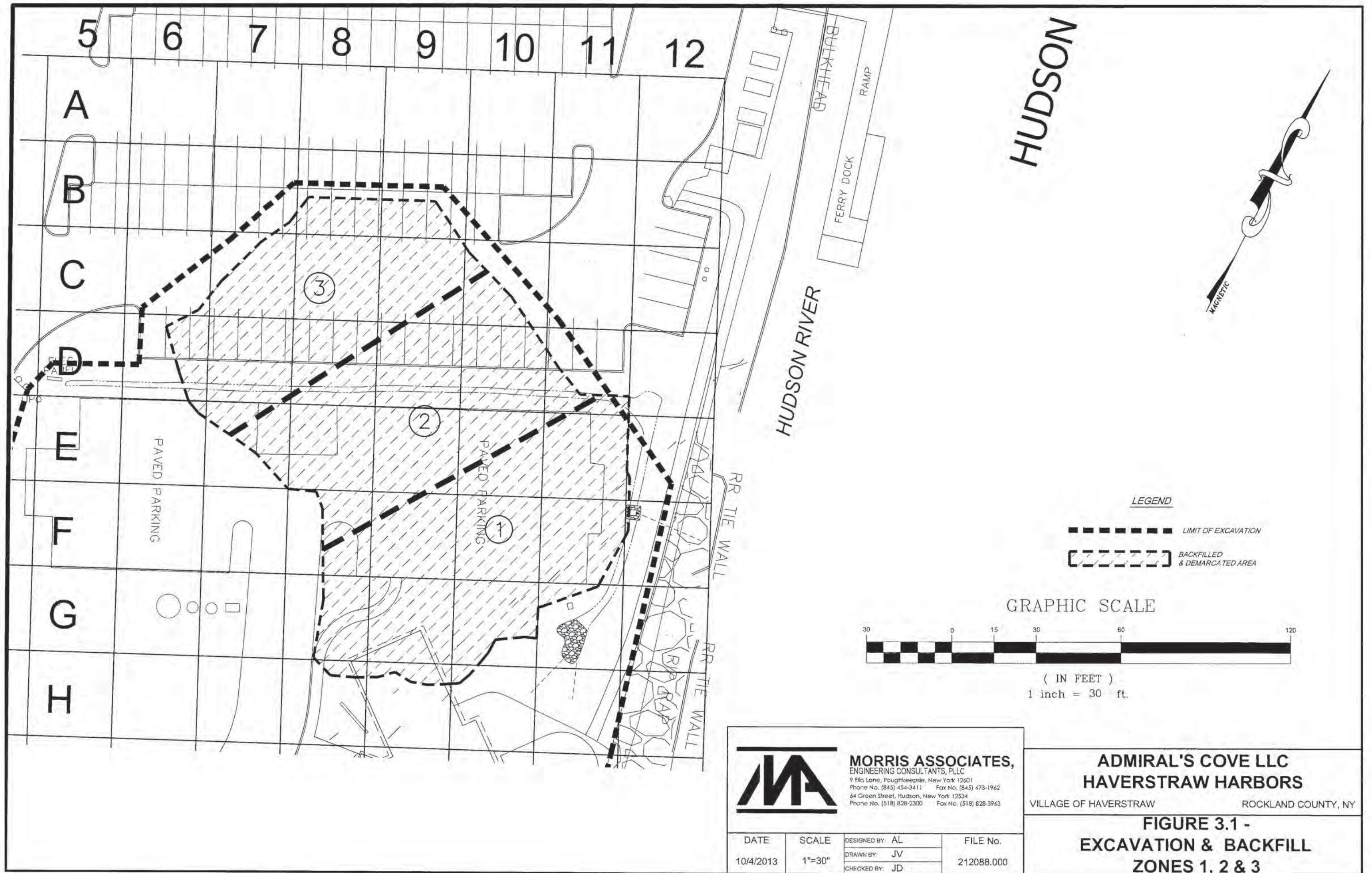
Haverstraw Harbors Site - BCP Site ID C344060
 Dr. George W. Girling Drive
 Village of Haverstraw
 Rockland County, New York

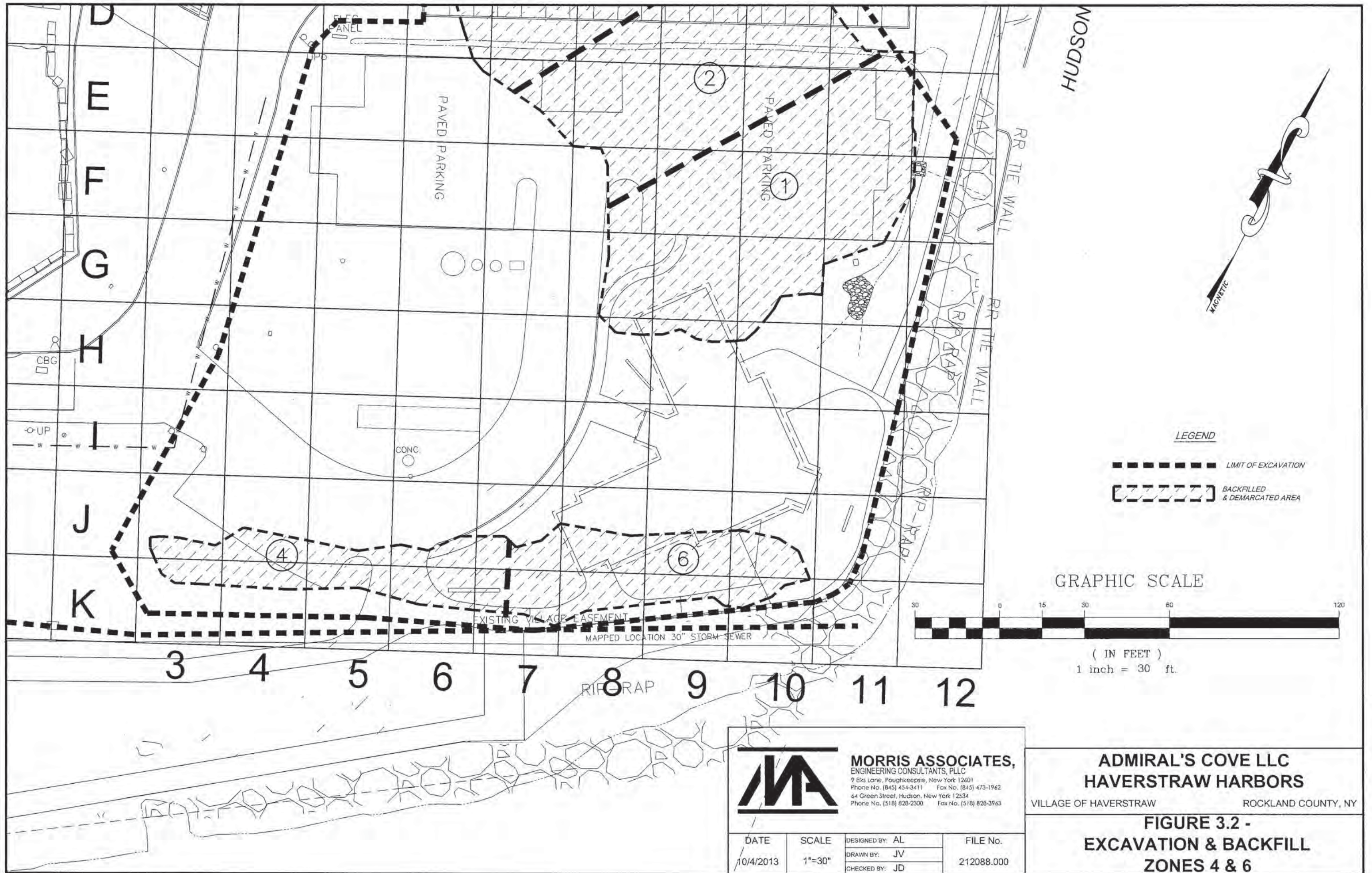
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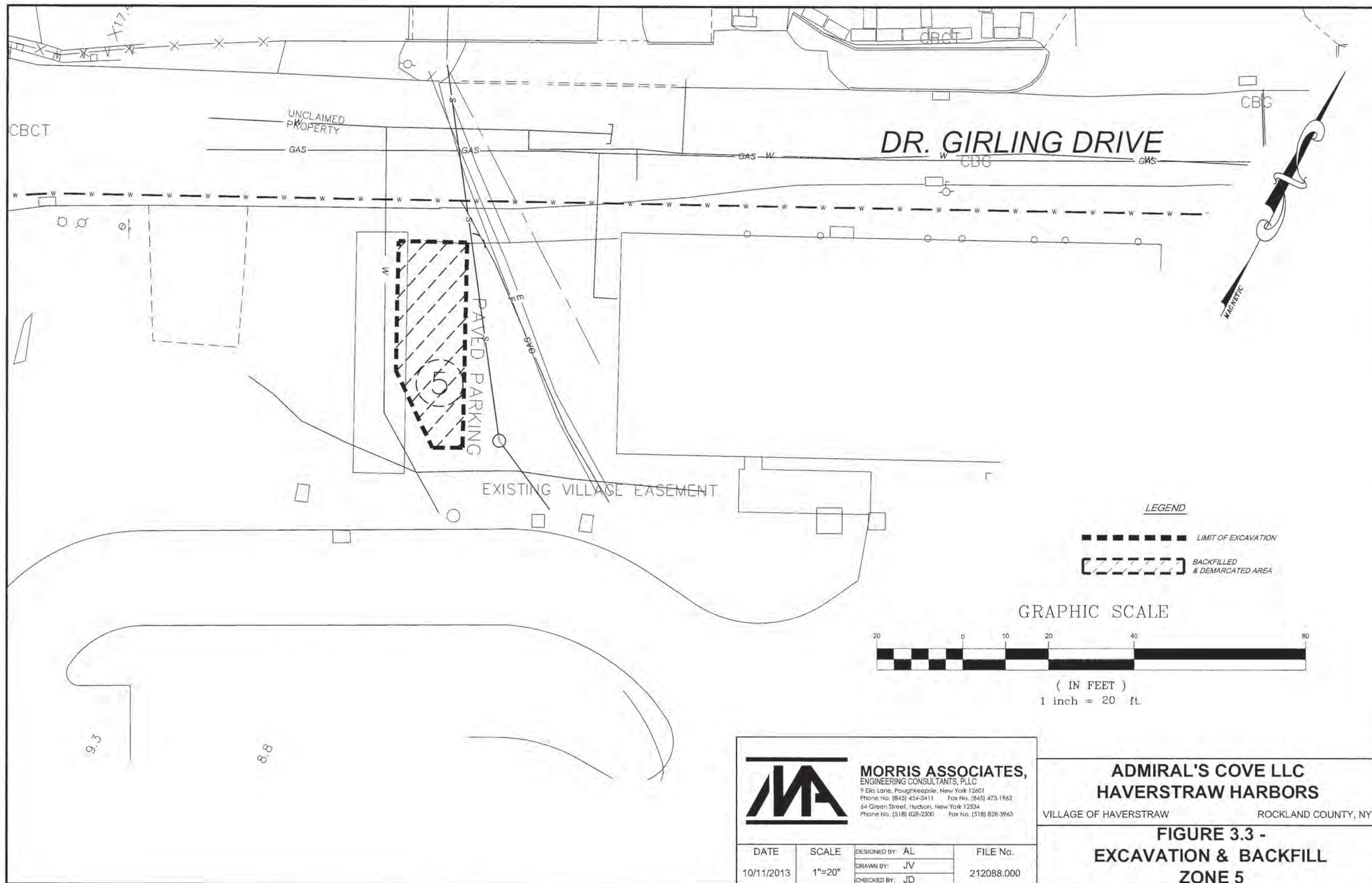
Scale as shown

April 2018

Appendix A









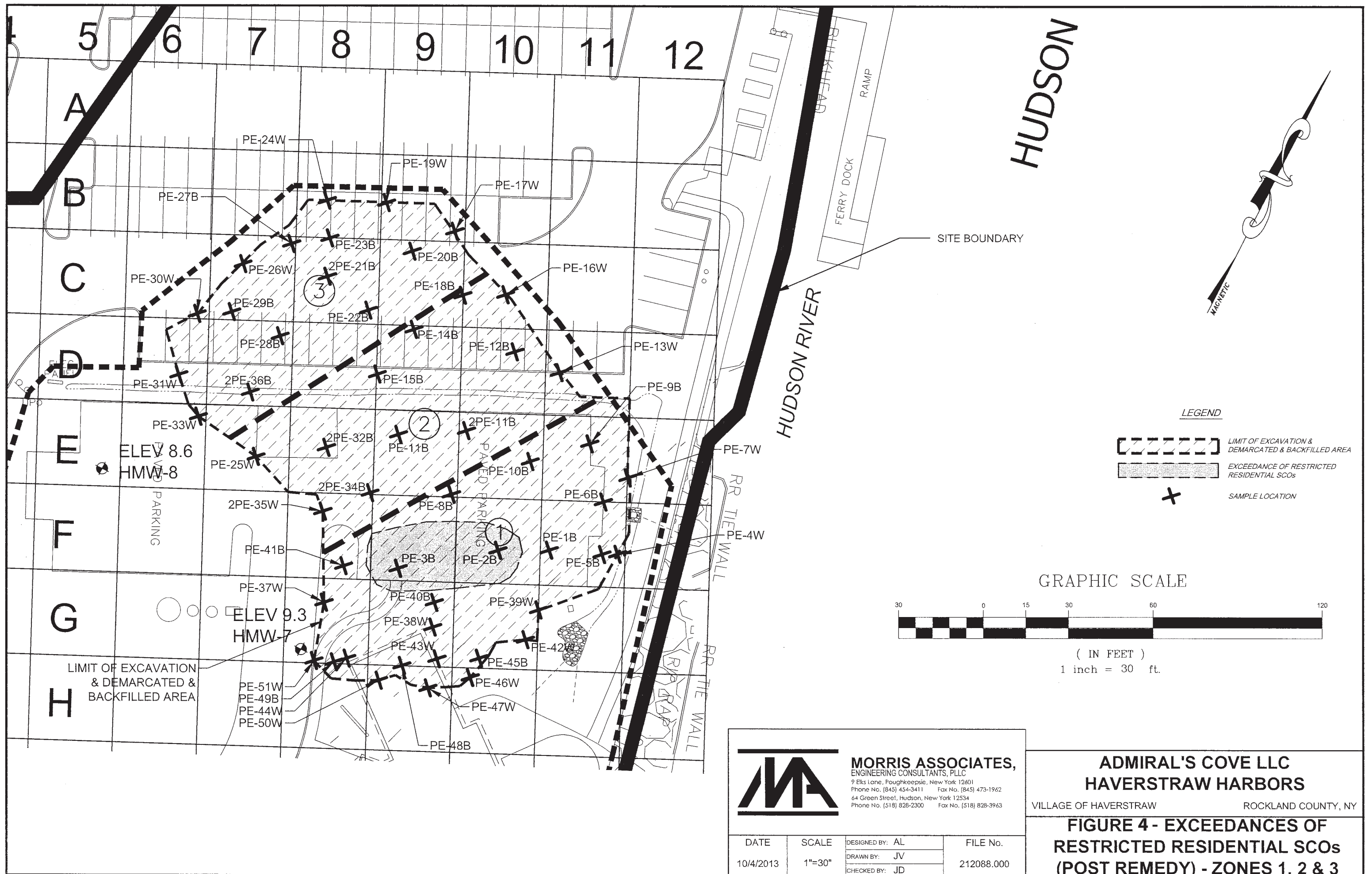
MORRIS ASSOCIATES,
ENGINEERING CONSULTANTS, PLLC
9 Elk Lane, Poughkeepsie, New York 12601
Phone No. (845) 454-3411 Fax No. (845) 473-1962
64 Green Street, Hudson, New York 12534
Phone No. (518) 828-2300 Fax No. (518) 828-3963

DATE	SCALE	DESIGNED BY:	FILE No.
10/11/2013	1"=20"	AL	212088.000
		DRAWN BY: JV	
		CHECKED BY: JD	

ADMIRAL'S COVE LLC
HAVERSTRAW HARBORS

VILLAGE OF HAVERSTRAWROCKLAND COUNTY, NY

FIGURE 3.3 -
EXCAVATION & BACKFILL
ZONE 5



MORRIS ASSOCIATES,
ENGINEERING CONSULTANTS, PLLC
9 Elks Lane, Poughkeepsie, New York 12601
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64 Green Street, Hudson, New York 12534
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ADMIRAL'S COVE LLC
HAVERSTRAW HARBORS

VILLAGE OF HAVERSTRAW

ROCKLAND COUNTY, NY

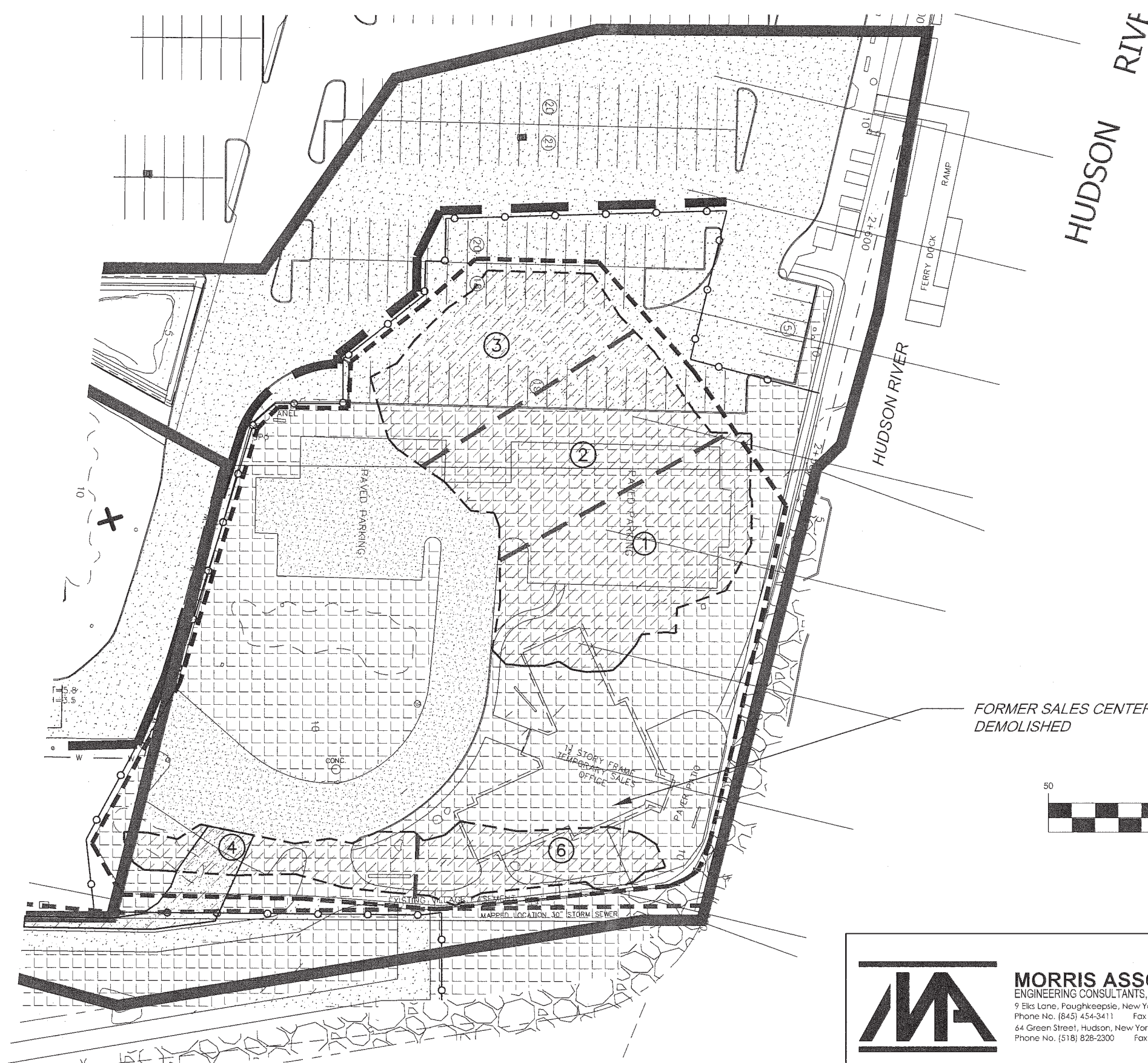
**FIGURE 4 - EXCEEDANCES OF
RESTRICTED RESIDENTIAL SCOs
(POST REMEDY) - ZONES 1, 2 & 3**

DATE
10/4/2013

SCALE
1"=30"

DESIGNED BY: AL
DRAWN BY: JV
CHECKED BY: JD

FILE No.
212088.000



LEGEND

-  BACKFILLED AND DEMARCATED AREAS
-  ASPHALT PAVEMENT
-  LANDSCAPED AREAS
-  REVETMENT

GRAPHIC SCALE



(IN FEET)
1 inch = 50 ft.



MORRIS ASSOCIATES,
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9 Elks Lane, Poughkeepsie, New York 12601
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64 Green Street, Hudson, New York 12534
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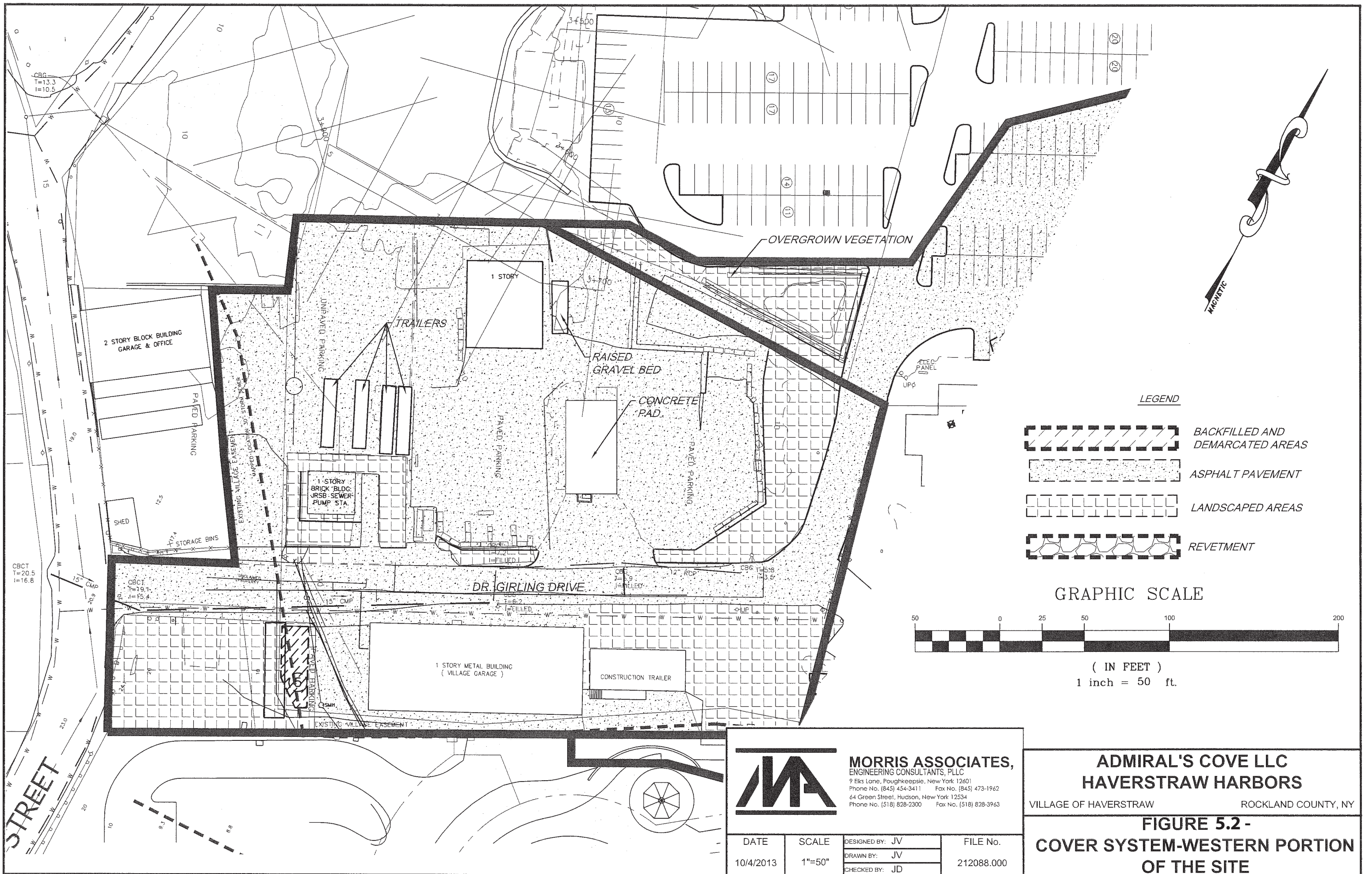
**ADMIRAL'S COVE LLC
HAVERSTRAW HARBORS**

VILLAGE OF HAVERSTRAW

ROCKLAND COUNTY, NY

**FIGURE 5.1 -
COVER SYSTEM-EASTERN PORTION
OF THE SITE**

DATE	SCALE	DESIGNED BY: JV	FILE No.
10/4/2013	1"=50"	DRAWN BY: JV	212088.000
		CHECKED BY: JD	



MORRIS ASSOCIATES,
ENGINEERING CONSULTANTS, PLLC
9 Elks Lane, Poughkeepsie, New York 12601
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64 Green Street, Hudson, New York 12534
Phone No. (518) 828-2300 Fax No. (518) 828-3963

DATE	SCALE	DESIGNED BY: JV	FILE No.
10/4/2013	1"=50"	DRAWN BY: JV	212088.000
		CHECKED BY: JD	

**ADMIRAL'S COVE LLC
HAVERSTRAW HARBORS**

VILLAGE OF HAVERSTRAW ROCKLAND COUNTY, NY

**FIGURE 5.2 -
COVER SYSTEM-WESTERN PORTION
OF THE SITE**

APPENDIX B

TABLE A: SUMMARY OF REMAINING EXCEEDANCES IN SOIL

Appendix B

Table A: Summary of Remaining Exceedances in Soil

Excavation ID	Sample ID	Description	Contaminant of Concern	Criteria* (mg/kg)	Laboratory Result (mg/kg)
Zone 1 – NE Portion of the Site	PE-2B	Bottom	2-methylnaphthalene	36.4	49.7
	PE-3B	Bottom	2-methylnaphthalene	36.4	43.6
Zone 5 – SW Portion of the Site	DPW-PE-5W	Wall	Benzo(a)anthracene	1	2.09
	DPW-PE-6W	Wall	Benzo(a)anthracene	1	5.44
			Benzo(a)pyrene	1	1.42
			Benzo(b)fluoranthene	1	2.06
			Chrysene	3.9	10.40

Notes:

- * Criteria based on BCP Restricted-Residential Use Soil Cleanup Objectives (SCOs), 6 NYCRR, Table 375-6.8(b), with exception of 2-methylnaphthalene, based on BCP Protection of Groundwater SCO in the CP-51 Soil Cleanup Guidance.

APPENDIX C

SIDE-WIDE INSPECTION FORM

SITE-WIDE INSPECTION FORM

Haverstraw Harbors (NYSDEC Site ID: 366040)

51 Dr. Girling Drive, Village of Haverstraw, Rockland County, New York

Inspection Item	Yes	No	NA	Comments (Include Corrective Actions Needed)
General Checklist				
Change of ownership or use (Restricted Residential)? Transfer of COC?		✓		
Erection of structures?		✓		
Any activity likely to disrupt or expose contamination?		✓		
Any activity that will or may interfere with on-going or completed remedial program or the continued ability to implement engineering or institutional controls?		✓		
Cover System Monitoring Checklist				
Where there any ground-intrusive activities conducted (installation/relocation of utilities, etc.)? If so, specify.		✓		
Is there evidence that ground-intrusive activities were conducted? If so, specify.		✓		
Are there signs of soil erosion in the landscaped areas that could interfere with the cover system integrity? If so, specify.		✓		
Are there any holes, cracks, vegetation, or physical deficiencies in the asphalt and paved areas? If so, sketch area on reverse side.	✓			minor cracks in asphalt - not significant
Areas of significant ponding on-site?		✓		
Are there any holes, cracks, vegetation, or physical deficiencies in the building floor slab? If so, identify the building and sketch area on reverse side.		✓		
Groundwater Monitoring Well Network				
Are the monitoring wells (HMW-7, HMW-8, HMW-13 through HMW-18) usable and in good condition? HMW-3R, HMW-5, HMW-6, HMW-7R, HMW-9R, HMW-10R, HMW-11R, HMW-12R, HMW-14R, HMW-15R, HMW-16R, HMW-17R, HMW-18R	✓			Note: HMW-10R requires new manhole cover
SSDS Checklist (Complete a separate sheet for every SSDS on-site and include system identification.)				
Is there an SSDS in place for building erected on-site? (If SSDS are yet to be installed, indicate in the comments section and do not complete the remainder of this section)				No SSDS as no new structures
Are the units generating vacuum operating and maintained?			✓	
Is the discharge vent pipe functional and maintained? Are there any blockages in the vent pipe?			✓	
Are there any holes, cracks or physical deficiencies in the riser pipes?			✓	
Has the SSDS effluent sample been collected, analyzed and submitted to NYSDEC? (on-time event, or otherwise indicated by NYSDEC). Report to NYSDEC.			✓	
Sub-slab vacuum at all monitoring points greater than 0.002 in. of w.c.? Include vacuum readings on comments section. Report to NYSDEC.			✓	
Site Records				
Does the site operator have updated SMP and FER available on-site?	✓			

Inspection Date:

4/5/2018

Weather:

Inspector Name:

Claire Siegrist

Inspector Signature:

Claire Siegrist

Date of Last Inspection:

4/19/2017

Required Date of Next Inspection: (based on findings, otherwise annually)

annually - April 2019

Agency:

WCD Group LLC

Agency's Telephone:

845-452-1658

Additional Comments or Drawings (Use Reverse Side):

none

* active monitoring wells = HMW-3R, HMW-5, HMW-6, HMW-7R, HMW-8, HMW-9R, HMW-10R, HMW-13 and HMW-14

APPENDIX D

PHOTOGRAPHS

PHOTOGRAPHS



1. Cover system in the northern DPW parcel in the vicinity of the salt/gravel shed



2. Cover system in the northern DPW parcel west of the salt/gravel shed

PHOTOGRAPHS



3. Cover system in the eastern portion of the Site



4. Cover system in the northeastern portion of the Site.

PHOTOGRAPHS



5. Western portion of Girling Drive and cover system in the southern DPW parcel west of the DPW garage



6. Cover system in the southeastern portion of the Site

APPENDIX E

JULY 2017 POST-REMEDIATION GROUNDWATER LETTER REPORT



August 2, 2017

Kevin J Carpenter
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233

via EMAIL: kevin.carpenter@dec.ny.gov

Re: Post-Remediation Groundwater Sampling Event – July 2017
Haverstraw Harbors Site B
NYSDEC BCP Site ID: C344060
WCD File: GH9964.50R

Dear Mr. Carpenter:

WCD Group LLC (WCD) has prepared this Letter Report to document post-remediation groundwater monitoring and sampling activities at Haverstraw Harbors Site B (hereafter referred to as the "Site"). This Letter Report describes sampling activities and laboratory results for the July 2017 groundwater sampling event and provides a summary of all post-remediation groundwater sampling events. The Site is located at Dr. George W. Girling Drive (Girling Drive), Village of Haverstraw, Rockland County, New York.

This post-remediation groundwater monitoring event was conducted to assess the performance of the remedy as specified in the NYSDEC-approved Site Management Plan (SMP, March 21, 2014). The SMP addresses remaining contamination at the Site after the completion of remedial activities (conducted from May to December 2013), which were performed in conformance with the NYSDEC-approved Remedial Work Plan and Alternative Analysis (November 2007).

The SMP requires groundwater monitoring at the following on-site wells: RMW-2R, HMW-3R, HMW-9R, HMW-10R, HMW-5 to HMW-8, HMW-13, and HMW-14. A Monitoring Well Location Map is provided as Attachment A. (Note: NYSDEC granted permission to waive the reinstallation and sampling of monitoring well RMW-2R in a December 22, 2014 communication. Reinstallation and sampling could be required by NYSDEC in the future.)

WELL SAMPLING

Groundwater sampling activities were conducted on July 12, 2017 by WCD personnel. Well sampling logs are provided as Attachment B.

No measurable light non-aqueous phase liquid (LNAPL) was detected at any of the monitoring wells during groundwater sampling activities. Table A, presented below, provides a summary of any field evidence of contamination (FEC) observed during the July 2017 sampling event.

Table A: July 2017 Post-Remediation Field Evidence of Contamination

Well ID	PID Reading (ppm) at Top of Casing	Purged Groundwater	
		Odor	Sheen
HMW-3R	0.0	None	Moderate
HMW-5	0.0	Slight	Slight
HMW-6	0.1	Slight	Slight
HMW-7R	11	Slight	Moderate
HMW-8	2	Slight	Slight
HMW-9R	0.2	None	Slight
HMW-10R	51	Moderate	Moderate
HMW-13	0.0	Slight	Slight
HMW-14	8	Slight	Slight
RMW-2R	No Data (well destroyed)		

Notes: ppm = parts per million

Historically, strong FEC has been observed in monitoring wells HMW-7R and HMW-10R, with moderate FEC in HMW-14 at all post-remediation sampling events (slight to no FEC has been observed in remaining wells). FEC was observed to have diminished in these wells during the July 2017 sampling event as compared with historical data (HMW-7R and HMW-10R, however, continue to exhibit greater FEC than other wells, and is likely to be indicative of remaining petroleum contamination in on-site soils and groundwater).

LABORATORY RESULTS

A summary of the results of the laboratory analyses conducted on groundwater samples is presented below. Data summary tables and the laboratory reports are provided in Attachments C and D, respectively, and recommendations regarding these findings are located in the Conclusions section of this Letter Report.

All groundwater samples were analyzed for volatile organic compounds (VOCs) utilizing USEPA Method 8260. Guidance levels for all compounds detected in water are based on data provided in NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1, Ambient Water Quality Standards (AWQS) and Guidance Values and Groundwater Effluent Limitations.

AREA NORTH AND SOUTHWEST OF DR. GIRLING DRIVE (NORTHERN AND SOUTHERN DPW PARCELS)

Monitoring wells in the area north and southwest of Girling Drive include: HMW-3R, HMW-5, HMW-6, and HMW-13.

Chlorinated VOCs

An elevated concentration of chlorobenzene was detected at HMW-13 (26 µg/L, guidance level 5 µg/L). No other concentrations of chlorobenzene were detected in the remaining wells in this area. No concentrations of tetrachloroethylene (PCE), trichloroethylene (TCE), trans-1,2-Dichloroethene (trans-1,2-DCE) cis-1,2-DCE, 1,1-DCE, or vinyl chloride (VC) were detected in remaining samples in this area.

Petroleum VOCs

Trace concentrations of methyl tert-butyl ether (MTBE) were detected in all four wells (peak concentration 2.6 µg/L in HMW-6, guidance level 10 µg/L). Trace concentrations of 1,3,5-trimethylbenzene were detected in three wells (peak concentration 1.9 µg/L in HMW-5, guidance level 5 µg/L).

Summary

The current chlorobenzene concentration at HMW-13 is consistent with pre- and post-remediation concentrations. Generally, all other trace concentrations of VOCs remained consistent with pre-remediation concentrations.

AREA EAST OF GIRLING DRIVE

Monitoring wells in the area east of Girling Drive include: HMW-7R, HMW-8, HMW-9R, HMW-10R and HMW-14.

Chlorinated VOCs

Elevated concentrations of TCE (47 µg/L, guidance level 5 µg/L) and trans-1,2-DCE (5.2 µg/L, guidance level 5 µg/L), and trace to low concentrations of cis-1,2-DCE (3.4 µg/L, guidance level 5 µg/L) and vinyl chloride (0.72 µg/L, guidance level 2 µg/L) were detected at HMW-8. A trace concentration of TCE (0.29 µg/L) was detected in HMW-14. No other concentrations of PCE, TCE, trans-1,2-DCE, cis-1,2-DCE, 1,1-DCE, or VC were detected in remaining samples in this area.

Petroleum VOCs

A low-level concentration of benzene (0.65 µg/L, guidance level 1 µg/L) was detected at HMW-8. No other concentrations of benzene were detected at the remaining wells in this area. Low-level concentrations of 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, isopropylbenzene and n-propylbenzene (guidance level 5 µg/L for all compounds) were detected in one or more of the samples.

Other VOCs

Trace concentrations of several other VOCs were detected in all samples. Generally, trace concentrations remained relatively consistent in all wells compared to pre-remediation conditions.

Summary

The concentration of TCE at HMW-8 marginally exceeds the pre-remediation peak value of 46 µg/L and was detected for the first time in HMW-14 (at a trace level). PCE, detected below AWQS at HMW-7R, HMW-8, and HMW-9R in the previous sampling round, was not detected in these wells. Concentrations of TCE and PCE in these wells will continue to be monitored.

The current benzene concentration at HMW-8 is consistent with historical post-remediation concentrations. Post-remediation concentrations of substituted benzene compounds continue to show a decreasing trend, remaining consistently low and/or non-detect at HMW-7R, HMW-8, HMW-9R HMW-10R, and HMW-14.

DATA USABILITY REPORT (DUSR)

Laboratory data for the July 2017 sampling event will be submitted to the approved validator (ZDataReports), once ASP-B data packages from the laboratory become available, for the generation of a DUSR. The DUSR will be submitted in the following Letter Report.

CONCLUSIONS

No measurable LNAPL was observed at any of the wells during the July 2017 groundwater monitoring activities. Moderate field evidence of petroleum contamination (i.e. odors, sheen and/or PID readings) was observed in monitoring wells HMW-3R, HMW-7R and HMW-10R; no significant dissolved concentrations of petroleum compounds, however, were detected. These findings support the conclusion that remaining petroleum contamination is bound to on-site soils.

Exceedances of groundwater standards for several chlorinated solvents continue to be present at HMW-8 (TCE and its breakdown products) and HWM-13 (chlorobenzene). Current data document an increase in TCE concentrations and relatively stable chlorobenzene concentrations.

It is the opinion of WCD that residual petroleum and solvent contamination does not warrant in-situ treatment at this time, based on the absence of LNAPL and only relatively low-level concentrations of dissolved VOCs in on-site groundwater.

A sub-slab depressurization system (SSDS) is anticipated for any building erected on-site during future development activities to prevent exposure to any soil-vapor intrusion from remaining contamination. Soil-vapor sampling is anticipated in locations where the proposed residential buildings will be erected to determine the need and extent of the SSDS as per the requirements of the SMP.

Annual groundwater monitoring has now been conducted for three years as required by the SMP. Given that low-grade groundwater contamination persists at the site, it is recommended that annual groundwater monitoring continue for at least two additional years. The next sampling event is anticipated in July 2018.

Should you have any questions with regard to this Letter Report, do not hesitate to contact me.

Sincerely,

WCD GROUP, LLC



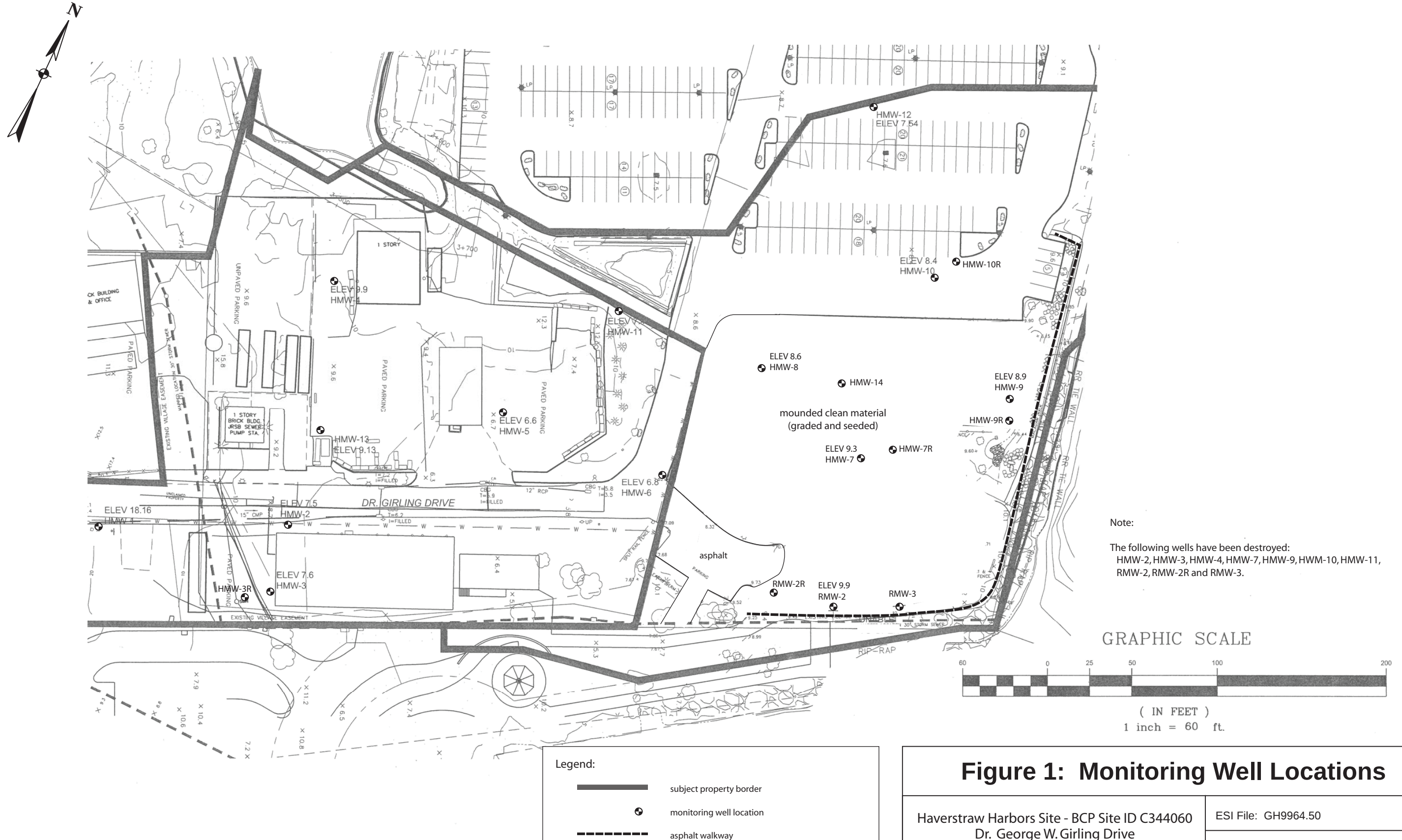
Paul H. Ciminello
Executive Vice President

Attachments:

- Attachment A – Figure 1: Monitoring Well Locations
- Attachment B – Well Sampling Logs
- Attachment C – Data Summary Tables
- Attachment D – Laboratory Data Packages

cc: Richard Hooker, WCD
J. Dziegelewski, GDC
M. Ginsburg, GDC

rhooker@wcdgroup.com
jdziegelewski@gdcllc.com
Mginsburg@gdcllc.com



Base map provided by Morris Associates Engineering Consultants, PLLC - Figure 6 - Monitoring Well Locations dated 10/4/2013. All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

Figure 1: Monitoring Well Locations

Haverstraw Harbors Site - BCP Site ID C344060
 Dr. George W. Girling Drive
 Village of Haverstraw
 Rockland County, New York

ESI File: GH9964.50

Scale as shown

May 2015

Attachment A

Pg 1 of 2
HMMW3R

GROUNDWATER MONITORING WELL SAMPLING FIELD LOG

Haverstraw Harbors Site (NYSDEC Site ID: C344060)

51 Dr. Girling Drive, Village of Haverstraw, Rockland County, New York

Date: July 11, 2016

Field Personnel: Clare SiegnistMonitoring Well No.: HMMW3R

PID Reading: _____ ppm

Depth to well water: 4 ft 3.1 ft

Depth to well bottom: _____ ft.

Purging Device (pump type): Geopump/ _____

Purged Volume: 3.5 gallon

Purged Water Characteristics:-

Odor (circle one): slight/moderate/strong;

None

Sheen (circle one): slight/moderate/strong

LNAPL (circle one): Yes/No
LNAPL thickness (in.): _____

Clock Time 24 hr	Water Depth below MP ft	Pump Dial	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP ³ mv	DO mg/L	Turbidity NTU	Comments
1125		3.95	3.95		20.9	2.885	6.80	-115.1	0.61	8.5	
1128					20.7	2.803	6.84	-119.8	0.35	9.1	
1131					20.4	2.803	6.82	-119.4	0.30	14.3	
1134					20.8	2.763	6.89	-124.2	0.27	19.9	
1137					20.9	2.635	6.93	-126.3	0.26	26.8	slow pump
1140		3.79			20.6	2.478	6.94	-127.4	0.25	34.2	
1143					20.9	2.436	6.94	-128.0	0.25	45.3	
1146		3.63			20.1	2.390	6.94	-129.6	0.23	52.7	adjust tubing
1149					20.9	2.340	6.94	-130.3	0.23	55.4	
1152		3.59			20.2	2.331	6.93	-131.4	0.22	41.2	

Stabilization Criteria

3%

3%

+0.1

+10mv

10%

10%

1. Pump dial setting (for example: hertz, cycles/min, etc).
2. uSiemens per cm (same as umhos/cm) at 25°C
3. Oxidation reduction potential (ORP)

Haverstraw Harbors Site (NYSDEC Site ID: C344060)

Depth to well water: 4 ft 3 in

Date: July 11, 2016

Field Personnel

Against

Depth to well water: 4 ft
Depth to well bottom: _____ ft.

Monitoring Well No.:

HMVSR

PID Reading: _____ ppm

Purged Volume: 3.5 gallon

Purged Water Characteristics:-

Odor (circle one): slight/moderate/strong;

Sheen (circle one): slight/moderate/strong

INAPL (circle one): Yes/No

LNAPL thickness (in.):

[illegible]

Stabilization Criteria

3%

3%

+0.1

+10mV

10%

10%

1. Pump dial setting (for example: hertz, cycles/min, etc).
2. μ Siemens per cm (same as umhos/cm) at 25°C
3. Oxidation reduction potential (ORP)

51 Dr. Girling Drive, Village of Haverstraw, Rockland County, New York

Field Personnel F. S. Lipowicz

Monitoring Well No.: H-14, W-11

PID Reading: _____ ppm

Purged Water Characteristics:-

Odor (circle one). ~~slight~~/moderate/strong;

Sheen (circle one) slight/moderate/strong

LNAPL (circle one): Yes/No
LNAPL thickness (in.):[illegible]

Stabilization Criteria

3%

3%

 ± 0.1

10mV

10%

10%

1. Pump dial setting (for example: hertz, cycles/min, etc).
2. $\mu\text{S/cm}$ per cm (same as $\mu\text{mhos/cm}$) at 25°C
3. Oxidation reduction potential (ORP)

51 Dr. Girling Drive, Village of Haverstraw, Rockland County, New York

Felipe

Monitoring Well No.: 13 MW 5

PID Reading: _____ ppm

Purged Water Characteristics:-

Odor (circle one): slight/moderate/strong;

Sheen (circle one): (slight/moderate/strong

LNAPL (circle one): Yes/No
LNAPL thickness (in.):

LNAPL thickness (in.):

[illegible]

Stabilization Criteria

3%

3%

 ± 0.1 $\pm 10\text{mV}$

10%

10%

1. Pump dial setting (for example: hertz, cycles/min, etc).
2. μ Siemens per cm (same as umhos/cm) at 25°C
3. Oxidation reduction potential (ORP)

51 Dr. Girling Drive, Village of Haverstraw, Rockland County, New York

Field Personnel

Clare Siegmst

Monitoring Well No.:

PID Reading: _____ ppm

Depth to well water: 3 ft 2.8
Depth to well bottom: _____ ft

Depth to well bottom: 2 ft

Purine Device (numb type): Geomura/

Purged Volume: 2 gallon

Odor (circle one) ~~slight/moderate/strong~~;

Sheen (circle one): slight/moderate/strong

moderate/strong
petro - slight to mod

LNAPL (circle one): Yes/No
LNAPL thickness (in.):

Purged Water Characteristics:-

[illegible]

Stabilization Criteria

3%

3%

 ± 0.1

10mV

100%

100%

1. Pump dial setting (for example: hertz, cycles/min, etc).
2. ω Siemens per cm (same as umhos/cm) at 25°C
3. Oxidation reduction potential (ORP)

GROUNDWATER MONITORING WELL SAMPLING FIELD LOG

Haverstraw Harbors Site (NYSDEC Site ID: C344060)

51 Dr. Girling Drive, Village of Haverstraw, Rockland County, New York

Date: July 12, 2016Field Personnel: HNWMonitoring Well No.: HWA 7RPID Reading: ppmDepth to well water: 11' ft 2.0Depth to well bottom: ft.Purging Device (pump type): Geopump/ Purged Volume: gallonOdor (circle one): slight/moderate/strong:Sheen (circle one): slight/moderate/strong

Purged Water Characteristics:-

LNAPL (circle one): Yes/No

LNAPL thickness (in.):

Clock Time 24 hr	Water Depth below MP ft	Pump Dial	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP ³ mv	DO mg/L	Turbidity NTU	Comments
12 ¹⁵					17.2	3886	6.77	-161.2	0.36	1.5	
12 ¹³					17.3	3881	6.75	-161.6	0.22	1.4	
12 ¹⁶					17.3	4153	6.76	-164.2	0.22	1.5	
12 ¹⁴					17.1	4186	6.77	-165.3	0.20	2.6	
12 ²²					17.2	4162	6.77	-165.5	0.19	2.4	
12 ²⁵					17.4	4133	6.77	-165.0	0.18	2.5	
12 ²⁸					17.1	4130	6.78	-166.0	0.16	2.8	
12 ³¹											
12 ³⁴											
12 ³⁷											

Stabilization Criteria

3%

3%

+0.1

+10mv

10%

10%

1. Pump dial setting (for example: hertz, cycles/min, etc).

2. uSiemens per cm (same as umhos/cm) at 25°C

3. Oxidation reduction potential (ORP)

GROUNDWATER MONITORING WELL SAMPLING FIELD LOG

Haverstraw Harbors Site (NYSDEC Site ID: C344060)

51 Dr. Girling Drive, Village of Haverstraw, Rockland County, New York

Date: July 14, 2016

Field Personnel

Felipe Siqueira

Depth to well water: 5 ft 8 1/2
Depth to well bottom: ft.

Monitoring Well No.: HK W 8

PID Reading: _____ ppm

Purged Water Characteristics:-

Purged Volume: 29.91 gallon

Peris Taltic.

Odor (circle one): (slight/moderate/strong;

Sheen (circle one): slight/moderate/strong

LNAPL (circle one): Yes/No

LNAPL thickness (in.):

[illegible]

Stabilization Criteria

3%

3%

 ± 0.1 $\pm 10\text{mV}$

10%

10%

1. Pump dial setting (for example: hertz, cycles/min, etc).
2. $\mu\text{Siemens per cm}$ (same as $\mu\text{mhos/cm}$) at 25°C
3. Oxidation reduction potential (ORP)

GROUNDWATER MONITORING WELL SAMPLING FIELD LOG

Haverstraw Harbors Site (NYSDEC Site ID: C344060)

51 Dr. Girling Drive, Village of Haverstraw, Rockland County, New York

Date: July 11, 2016Field Personnel: F. S. PoirierMonitoring Well No.: HMMU 9R

PID Reading: _____ ppm

Depth to well water: 6' ft 8 1/2

Depth to well bottom: _____ ft.

Purging Device (pump type): Geopump/ _____

Purged Volume: _____ gallon

Purged Water Characteristics:-

Odor (circle one): slight/moderate/strong;

Sheen (circle one): slight/moderate/strong

LNAPL (circle one): Yes/No

LNAPL thickness (in.): _____

Clock Time 24 hr	Water Depth below MP ft	Pump Dial	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/CM	pH	ORP ³ mv	DO mg/L	Turbidity NTU	Comments
105		3.81			16.9	1940	6.83	-114.4	6.33	2.4	
106					17.4	2001	6.83	-125.9	0.25	2.7	
111					17.7	2023	6.82	-128.1	0.22	2.7	
114					17.5	2050	6.82	-129.5	0.21	2.9	
117					17.2	2039	6.82	-129.4	0.18	2.7	
120					17.0	2043	6.82	-128.9	0.18	2.8	
123											
126											
129											

Stabilization Criteria

3%

3%

+0.1

+10mv

10%

10%

HMMW10R

NOTE: needs
new manhole
well cap (metal
plate)

GROUNDWATER MONITORING WELL SAMPLING FIELD LOG

Haverstraw Harbors Site (NYSDEC Site ID: C344060)

51 Dr. Girling Drive, Village of Haverstraw, Rockland County, New York

Date: July 11, 2016

Field Personnel: C. Siegnist

Monitoring Well No.: HMMW10R

PID Reading: _____ ppm

Depth to well water: 6 ft 1 in

Depth to well bottom: _____ ft.

Purging Device (pump type): Geopump/

Purged Volume: _____ gallon

Odor (circle one): slight/moderate/strong:

Sheen (circle one): slight/moderate/strong

Purged Water Characteristics:-

LNAPL (circle one): Yes/No

LNAPL thickness (in.):

Clock Time 24 hr	Water Depth below MP ft	Pump Dial	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP ³ mv	DO mg/L	Turbidity NTU	Comments
1254											
1254		4.0			21.8	3504	6.56	-125.8	0.37	3.5	
1257					21.8	3543	6.57	-128.0	0.34	3.8	
1300					21.8	3595	6.58	-130.6	0.26	3.2	
1303		3.93			22.3	3643	6.58	-128.8	0.77	0.5	
1307					21.8	3673	6.59	-128.0	0.80	0.4	
1310					22.2	3704	6.58	-129.2	0.84	0.5	
1313					22.3	3721	6.59	-124.1	0.89	0.6	sample

Stabilization Criteria

3%

3%

+0.1

+10mv

10%

10%

1. Pump dial setting (for example: hertz, cycles/min, etc):

2. uS/cm per cm (same as umhos/cm) at 25°C

3. Oxidation reduction potential (ORP)

GROUNDWATER MONITORING WELL SAMPLING FIELD LOG

Haverstraw Harbors Site (NYSDEC Site ID: C344060)

51 Dr. Girling Drive, Village of Haverstraw, Rockland County, New York

Date: July 11, 2016Field Personnel: Claire StearnsMonitoring Well No.: HMW-13

PID Reading: _____ ppm

Depth to well water: 3 ft 8.5 m

Depth to well bottom: _____ ft.

Purging Device (pump type): Geopump/ AtmosphericPurged Volume: 3.5 gallon

Purged Water Characteristics:-

Odor (circle one): slight/moderate/strong:Sheen (circle one): slight/moderate/strongLNAPL (circle one): Yes/No
LNAPL thickness (in.): _____

Clock Time 24 hr	Water Depth below MP ft	Pump Dial	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 us/cm	pH	ORP ³ mv	DO mg/L	Turbidity NTU	Comments
850		3.91	3.00		20.7	1.60	6.56	-11.9	0.95	20.2	
853					20.4	1.606	6.57	-14.2	0.65	18.2	
856					20.3	1.611	6.59	-16.3	0.50	15.9	
859					20.2	1.617	6.60	-16.8	0.44	14.4	
902		4.00	4.00		20.1	1.623	6.60	-16.6	0.39	12.2	
905					20.2	1.628	6.60	-14.4	0.36	9.7	
908		3.95			20.2	1.639	6.61	-15.0	0.34	8.6	
911					20.3	1.650	6.61	-11.5	0.33	7.8	
914					20.4	1.656	6.61	-21.8	0.32	6.9	
917					20.4	1.665	6.61	-23.2	0.31	6.5	

Stabilization Criteria

3%

3%

+0.1

+10mv

10%

10%

1. Pump dial setting (for example: hertz, cycles/min, etc).
2. uSiemens per cm (same as umhos/cm) at 25°C
3. Oxidation reduction potential (ORP)

Haverstraw Harbors Site (NYSDEC Site ID: C344060)

Clark Sparist

Mo: $H(M) = 13$

ppm

Purging Device (pump type): Geopump/ Same
Purged Volume: _____ gallon

Odor (circle one): slight/moderate/strong;

Sheen (circle one): slight/moderate/strong

Purged Water Characteristics:-

LNAPL (circle one): Yes/No

[illegible]

Stabilization Criteria

1. Pump dial setting (for example: hertz, cycles/min, etc)
2. μ siemens per cm (same as umhos/cm) at 25°C
3. Oxidation reduction potential (ORP)



Technical Report

prepared for:

WCD Group - Poughkeepsie NY
24 Davis Avenue
Poughkeepsie NY, 12603
Attention: Richard Hooker

Report Date: 07/28/2017
Client Project ID: GH9964
York Project (SDG) No.: 17G0335

Revision No. 1.0

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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132-02 89th AVENUE
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RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 07/28/2017
Client Project ID: GH9964
York Project (SDG) No.: 17G0335

WCD Group - Poughkeepsie NY
24 Davis Avenue
Poughkeepsie NY, 12603
Attention: Richard Hooker

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 July 13, 2017 and listed below. The project was identified as your project: **GH9964**.

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>
17G0335-01	HMW-3R	Water	07/12/2017	07/13/2017
17G0335-02	HMW-5	Water	07/12/2017	07/13/2017
17G0335-03	HMW-6	Water	07/12/2017	07/13/2017
17G0335-04	HMW-7R	Water	07/12/2017	07/13/2017
17G0335-05	HMW-8	Water	07/12/2017	07/13/2017
17G0335-06	HMW-9R	Water	07/12/2017	07/13/2017
17G0335-07	HMW-10R	Water	07/12/2017	07/13/2017
17G0335-08	HMW-13	Water	07/12/2017	07/13/2017
17G0335-09	HMW-14	Water	07/12/2017	07/13/2017
17G0335-10	TB-20170712	Water	07/12/2017	07/13/2017

General Notes for York Project (SDG) No.: 17G0335

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: 07/28/2017





Sample Information

Client Sample ID: HMW-3R

York Sample ID: 17G0335-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

17G0335

GH9964

Water

July 12, 2017 3:00 pm

07/13/2017

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,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	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,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS



Sample Information

Client Sample ID: HMW-3R

York Sample ID: 17G0335-01

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS



Sample Information

Client Sample ID: HMW-3R

York Sample ID: 17G0335-01

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	0.62		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 06:51	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 06:51	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	07/17/2017 12:33	07/18/2017 06:51	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	100 %	69-130								



Sample Information

Client Sample ID: HMW-3R

York Sample ID: 17G0335-01

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
2037-26-5	Surrogate: Toluene-d8	99.3 %			81-117						
460-00-4	Surrogate: p-Bromofluorobenzene	97.8 %			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	07/14/2017 10:57	07/17/2017 13:57	KH
83-32-9	Acenaphthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/14/2017 10:57	07/17/2017 11:06	SR
208-96-8	Acenaphthylene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/14/2017 10:57	07/17/2017 11:06	SR
120-12-7	Anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/14/2017 10:57	07/17/2017 11:06	SR
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/14/2017 10:57	07/17/2017 11:06	SR
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/14/2017 10:57	07/17/2017 11:06	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/14/2017 10:57	07/17/2017 11:06	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	07/14/2017 10:57	07/17/2017 11:06	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/14/2017 10:57	07/17/2017 11:06	SR
218-01-9	Chrysene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/14/2017 10:57	07/17/2017 11:06	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/14/2017 10:57	07/17/2017 11:06	SR
206-44-0	Fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/14/2017 10:57	07/17/2017 11:06	SR
86-73-7	Fluorene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/14/2017 10:57	07/17/2017 11:06	SR
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	07/14/2017 10:57	07/17/2017 11:06	SR
91-20-3	Naphthalene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/14/2017 10:57	07/17/2017 11:06	SR
85-01-8	Phenanthrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/14/2017 10:57	07/17/2017 11:06	SR
129-00-0	Pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/14/2017 10:57	07/17/2017 11:06	SR
Surrogate Recoveries		Result	Acceptance Range								
4165-60-0	Surrogate: Nitrobenzene-d5	48.6 %	12-96								
321-60-8	Surrogate: 2-Fluorobiphenyl	55.8 %	16-84								
1718-51-0	Surrogate: Terphenyl-d14	29.9 %	15-106								



Sample Information

Client Sample ID: HMW-3R

York Sample ID: 17G0335-01

<u>York Project (SDG) No.</u> 17G0335	<u>Client Project ID</u> GH9964	<u>Matrix</u> Water	<u>Collection Date/Time</u> July 12, 2017 3:00 pm	<u>Date Received</u> 07/13/2017
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Sample Information

Client Sample ID: HMW-5

York Sample ID: 17G0335-02

<u>York Project (SDG) No.</u> 17G0335	<u>Client Project ID</u> GH9964	<u>Matrix</u> Water	<u>Collection Date/Time</u> July 12, 2017 3:00 pm	<u>Date Received</u> 07/13/2017
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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,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	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,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
108-67-8	1,3,5-Trimethylbenzene	1.9		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS



Sample Information

Client Sample ID: HMW-5

York Sample ID: 17G0335-02

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS



Sample Information

Client Sample ID: HMW-5

York Sample ID: 17G0335-02

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	0.40	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 07:23	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 07:23	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS



Sample Information

Client Sample ID: HMW-5

York Sample ID: 17G0335-02

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	07/17/2017 12:33	07/18/2017 07:23	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	106 %			69-130						
2037-26-5	Surrogate: Toluene-d8	98.4 %			81-117						
460-00-4	Surrogate: p-Bromofluorobenzene	93.4 %			79-122						

Sample Information

Client Sample ID: HMW-6

York Sample ID: 17G0335-03

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	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,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS



Sample Information

Client Sample ID: HMW-6

York Sample ID: 17G0335-03

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
108-67-8	1,3,5-Trimethylbenzene	0.80		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS



Sample Information

Client Sample ID: HMW-6

York Sample ID: 17G0335-03

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	2.6		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 07:55	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 07:55	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS



Sample Information

Client Sample ID: HMW-6

York Sample ID: 17G0335-03

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	07/17/2017 12:33	07/18/2017 07:55	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	103 %	69-130								
2037-26-5	Surrogate: Toluene-d8	97.7 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	98.4 %	79-122								

Sample Information

Client Sample ID: HMW-7R

York Sample ID: 17G0335-04

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	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,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS



Sample Information

Client Sample ID: HMW-7R

York Sample ID: 17G0335-04

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
95-63-6	1,2,4-Trimethylbenzene	2.7		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
67-64-1	Acetone	4.7		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS



Sample Information

Client Sample ID: HMW-7R

York Sample ID: 17G0335-04

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
110-82-7	Cyclohexane	4.5		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	5.9		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS



Sample Information

Client Sample ID: HMW-7R

York Sample ID: 17G0335-04

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
103-65-1	n-Propylbenzene	4.3		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 08:27	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 08:27	SS
99-87-6	p-Isopropyltoluene	3.4		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
108-88-3	Toluene	0.39	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	07/17/2017 12:33	07/18/2017 08:27	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	102 %	69-130								
2037-26-5	Surrogate: Toluene-d8	99.7 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	98.3 %	79-122								



Sample Information

Client Sample ID: HMW-8

York Sample ID: 17G0335-05

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	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,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
108-67-8	1,3,5-Trimethylbenzene	1.0		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS



Sample Information

Client Sample ID: HMW-8

York Sample ID: 17G0335-05

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
71-43-2	Benzene	0.65		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
156-59-2	cis-1,2-Dichloroethylene	3.4		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS



Sample Information

Client Sample ID: HMW-8

York Sample ID: 17G0335-05

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 08:59	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 08:59	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
156-60-5	trans-1,2-Dichloroethylene	5.2		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
79-01-6	Trichloroethylene	47		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
75-01-4	Vinyl Chloride	0.72		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	07/17/2017 12:33	07/18/2017 08:59	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	95.4 %	69-130								
2037-26-5	Surrogate: Toluene-d8	101 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	99.1 %	79-122								



Sample Information

Client Sample ID: HMW-8

York Sample ID: 17G0335-05

<u>York Project (SDG) No.</u> 17G0335	<u>Client Project ID</u> GH9964	<u>Matrix</u> Water	<u>Collection Date/Time</u> July 12, 2017 3:00 pm	<u>Date Received</u> 07/13/2017
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Sample Information

Client Sample ID: HMW-9R

York Sample ID: 17G0335-06

<u>York Project (SDG) No.</u> 17G0335	<u>Client Project ID</u> GH9964	<u>Matrix</u> Water	<u>Collection Date/Time</u> July 12, 2017 3:00 pm	<u>Date Received</u> 07/13/2017
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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,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	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,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS



Sample Information

Client Sample ID: HMW-9R

York Sample ID: 17G0335-06

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS



Sample Information

Client Sample ID: HMW-9R

York Sample ID: 17G0335-06

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	0.88		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 09:31	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 09:31	SS
99-87-6	p-Isopropyltoluene	2.5		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS



Sample Information

Client Sample ID: HMW-9R

York Sample ID: 17G0335-06

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	07/17/2017 12:33	07/18/2017 09:31	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	92.2 %			69-130						
2037-26-5	Surrogate: Toluene-d8	101 %			81-117						
460-00-4	Surrogate: p-Bromofluorobenzene	105 %			79-122						

Sample Information

Client Sample ID: HMW-10R

York Sample ID: 17G0335-07

York Project (SDG) No.
17G0335

Client Project ID
GH9964

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July 12, 2017 3:00 pm

Date Received
07/13/2017

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,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	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,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS



Sample Information

Client Sample ID: HMW-10R

York Sample ID: 17G0335-07

York Project (SDG) No.
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July 12, 2017 3:00 pm

Date Received
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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
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
67-64-1	Acetone	1.5	J	ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS



Sample Information

Client Sample ID: HMW-10R

York Sample ID: 17G0335-07

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
98-82-8	Isopropylbenzene	0.33	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	1.8		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 10:03	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 10:03	SS
99-87-6	p-Isopropyltoluene	0.31	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS



Sample Information

Client Sample ID: HMW-10R

York Sample ID: 17G0335-07

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

17G0335

GH9964

Water

July 12, 2017 3:00 pm

07/13/2017

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
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	07/17/2017 12:33	07/18/2017 10:03	SS
Surrogate Recoveries		Result		Acceptance Range							
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	93.1 %		69-130							
2037-26-5	Surrogate: Toluene-d8	100 %		81-117							
460-00-4	Surrogate: p-Bromofluorobenzene	98.5 %		79-122							

Sample Information

Client Sample ID: HMW-13

York Sample ID: 17G0335-08

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

17G0335

GH9964

Water

July 12, 2017 3:00 pm

07/13/2017

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,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	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,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS



Sample Information

Client Sample ID: HMW-13

York Sample ID: 17G0335-08

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
107-06-2	1,2-Dichloroethane	0.60		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS



Sample Information

Client Sample ID: HMW-13

York Sample ID: 17G0335-08

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
108-90-7	Chlorobenzene	26		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	1.6		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS



Sample Information

Client Sample ID: HMW-13

York Sample ID: 17G0335-08

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 10:36	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 10:36	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	07/17/2017 12:33	07/18/2017 10:36	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	95.7 %	69-130								
2037-26-5	Surrogate: Toluene-d8	102 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	102 %	79-122								

Sample Information

Client Sample ID: HMW-14

York Sample ID: 17G0335-09

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017



Sample Information

Client Sample ID: HMW-14

York Sample ID: 17G0335-09

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

17G0335

GH9964

Water

July 12, 2017 3:00 pm

07/13/2017

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,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	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,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
108-67-8	1,3,5-Trimethylbenzene	0.78		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
67-64-1	Acetone	1.4	J	ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS



Sample Information

Client Sample ID: HMW-14

York Sample ID: 17G0335-09

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
98-82-8	Isopropylbenzene	0.54		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS



Sample Information

Client Sample ID: HMW-14

York Sample ID: 17G0335-09

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
1634-04-4	Methyl tert-butyl ether (MTBE)	4.3		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
95-47-6	o-Xylene	0.20	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 11:08	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 11:08	SS
99-87-6	p-Isopropyltoluene	0.46	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
79-01-6	Trichloroethylene	0.29	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	07/17/2017 12:33	07/18/2017 11:08	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	96.7 %	69-130								
2037-26-5	Surrogate: Toluene-d8	100 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	99.8 %	79-122								



Sample Information

Client Sample ID: TB-20170712

York Sample ID: 17G0335-10

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	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,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS



Sample Information

Client Sample ID: TB-20170712

York Sample ID: 17G0335-10

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
67-66-3	Chloroform	1.7		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS



Sample Information

Client Sample ID: TB-20170712

York Sample ID: 17G0335-10

York Project (SDG) No.
17G0335

Client Project ID
GH9964

Matrix
Water

Collection Date/Time
July 12, 2017 3:00 pm

Date Received
07/13/2017

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
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 02:02	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854	07/17/2017 12:33	07/18/2017 02:02	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	07/17/2017 12:33	07/18/2017 02:02	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	91.7 %	69-130								
2037-26-5	Surrogate: Toluene-d8	99.7 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	107 %	79-122								



Sample Information

Client Sample ID: TB-20170712

York Sample ID: 17G0335-10

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

17G0335

GH9964

Water

July 12, 2017 3:00 pm

07/13/2017



Analytical Batch Summary

Batch ID: BG70559

Preparation Method: EPA 3510C

Prepared By: TMP

YORK Sample ID	Client Sample ID	Preparation Date
17G0335-01	HMW-3R	07/14/17
BG70559-BLK1	Blank	07/14/17
BG70559-BLK2	Blank	07/14/17
BG70559-BS1	LCS	07/14/17
BG70559-BS2	LCS	07/14/17
BG70559-BSD1	LCS Dup	07/14/17

Batch ID: BG70585

Preparation Method: EPA 5030B

Prepared By: RDS

YORK Sample ID	Client Sample ID	Preparation Date
17G0335-01	HMW-3R	07/17/17
17G0335-02	HMW-5	07/17/17
17G0335-03	HMW-6	07/17/17
17G0335-04	HMW-7R	07/17/17
17G0335-05	HMW-8	07/17/17
17G0335-06	HMW-9R	07/17/17
17G0335-07	HMW-10R	07/17/17
17G0335-08	HMW-13	07/17/17
17G0335-09	HMW-14	07/17/17
17G0335-10	TB-20170712	07/17/17
BG70585-BLK1	Blank	07/17/17
BG70585-BS1	LCS	07/17/17
BG70585-BSD1	LCS Dup	07/17/17



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG70585 - EPA 5030B											
Blank (BG70585-BLK1)											
Prepared: 07/17/2017 Analyzed: 07/18/2017											
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L								
1,1,1-Trichloroethane	ND	0.50	"								
1,1,2,2-Tetrachloroethane	ND	0.50	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	"								
1,1,2-Trichloroethane	ND	0.50	"								
1,1-Dichloroethane	ND	0.50	"								
1,1-Dichloroethylene	ND	0.50	"								
1,2,3-Trichlorobenzene	ND	0.50	"								
1,2,3-Trichloropropane	ND	0.50	"								
1,2,4-Trichlorobenzene	ND	0.50	"								
1,2,4-Trimethylbenzene	ND	0.50	"								
1,2-Dibromo-3-chloropropane	ND	0.50	"								
1,2-Dibromoethane	ND	0.50	"								
1,2-Dichlorobenzene	ND	0.50	"								
1,2-Dichloroethane	ND	0.50	"								
1,2-Dichloropropane	ND	0.50	"								
1,3,5-Trimethylbenzene	ND	0.50	"								
1,3-Dichlorobenzene	ND	0.50	"								
1,4-Dichlorobenzene	ND	0.50	"								
1,4-Dioxane	ND	40	"								
2-Butanone	ND	0.50	"								
2-Hexanone	ND	0.50	"								
4-Methyl-2-pentanone	ND	0.50	"								
Acetone	ND	2.0	"								
Acrolein	ND	0.50	"								
Acrylonitrile	ND	0.50	"								
Benzene	ND	0.50	"								
Bromochloromethane	ND	0.50	"								
Bromodichloromethane	ND	0.50	"								
Bromoform	ND	0.50	"								
Bromomethane	ND	0.50	"								
Carbon disulfide	ND	0.50	"								
Carbon tetrachloride	ND	0.50	"								
Chlorobenzene	ND	0.50	"								
Chloroethane	ND	0.50	"								
Chloroform	ND	0.50	"								
Chloromethane	ND	0.50	"								
cis-1,2-Dichloroethylene	ND	0.50	"								
cis-1,3-Dichloropropylene	ND	0.50	"								
Cyclohexane	ND	0.50	"								
Dibromochloromethane	ND	0.50	"								
Dibromomethane	ND	0.50	"								
Dichlorodifluoromethane	ND	0.50	"								
Ethyl Benzene	ND	0.50	"								
Hexachlorobutadiene	ND	0.50	"								
Isopropylbenzene	ND	0.50	"								
Methyl acetate	ND	0.50	"								
Methyl tert-butyl ether (MTBE)	ND	0.50	"								
Methylcyclohexane	ND	0.50	"								
Methylene chloride	ND	2.0	"								



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BG70585 - EPA 5030B

Blank (BG70585-BLK1)

Prepared: 07/17/2017 Analyzed: 07/18/2017

n-Butylbenzene	ND	0.50	ug/L								
n-Propylbenzene	ND	0.50	"								
o-Xylene	ND	0.50	"								
p- & m- Xylenes	ND	1.0	"								
p-Isopropyltoluene	ND	0.50	"								
sec-Butylbenzene	ND	0.50	"								
Styrene	ND	0.50	"								
tert-Butyl alcohol (TBA)	ND	1.0	"								
tert-Butylbenzene	ND	0.50	"								
Tetrachloroethylene	ND	0.50	"								
Toluene	ND	0.50	"								
trans-1,2-Dichloroethylene	ND	0.50	"								
trans-1,3-Dichloropropylene	ND	0.50	"								
Trichloroethylene	ND	0.50	"								
Trichlorofluoromethane	ND	0.50	"								
Vinyl Chloride	ND	0.50	"								
Xylenes, Total	ND	1.5	"								
Surrogate: 1,2-Dichloroethane-d4	8.88		"	10.0		88.8	69-130				
Surrogate: Toluene-d8	10.0		"	10.0		100	81-117				
Surrogate: p-Bromofluorobenzene	10.3		"	10.0		103	79-122				

LCS (BG70585-BS1)

Prepared & Analyzed: 07/17/2017

1,1,1,2-Tetrachloroethane	10		ug/L	10.0		104	82-126				
1,1,1-Trichloroethane	10		"	10.0		102	78-136				
1,1,2,2-Tetrachloroethane	10		"	10.0		102	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11		"	10.0		112	54-165				
1,1,2-Trichloroethane	10		"	10.0		104	82-123				
1,1-Dichloroethane	11		"	10.0		107	82-129				
1,1-Dichloroethylene	10		"	10.0		103	68-138				
1,2,3-Trichlorobenzene	8.8		"	10.0		88.3	76-136				
1,2,3-Trichloropropane	10		"	10.0		101	77-128				
1,2,4-Trichlorobenzene	9.1		"	10.0		91.1	76-137				
1,2,4-Trimethylbenzene	11		"	10.0		111	82-132				
1,2-Dibromo-3-chloropropane	8.3		"	10.0		83.3	45-147				
1,2-Dibromoethane	10		"	10.0		102	83-124				
1,2-Dichlorobenzene	10		"	10.0		104	79-123				
1,2-Dichloroethane	9.3		"	10.0		93.1	73-132				
1,2-Dichloropropane	11		"	10.0		106	78-126				
1,3,5-Trimethylbenzene	11		"	10.0		111	80-131				
1,3-Dichlorobenzene	11		"	10.0		108	86-122				
1,4-Dichlorobenzene	11		"	10.0		110	85-124				
1,4-Dioxane	170		"	200		85.1	10-349				
2-Butanone	4.6		"	10.0		46.1	49-152	Low Bias			
2-Hexanone	8.8		"	10.0		87.9	51-146				
4-Methyl-2-pentanone	9.4		"	10.0		94.5	57-145				
Acetone	7.9		"	10.0		78.7	14-150				
Acrolein	9.6		"	10.0		95.8	10-153				
Acrylonitrile	6.2		"	10.0		62.3	51-150				
Benzene	11		"	10.0		110	85-126				
Bromochloromethane	10		"	10.0		103	77-128				
Bromodichloromethane	9.9		"	10.0		99.3	79-128				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BG70585 - EPA 5030B

LCS (BG70585-BS1)

Prepared & Analyzed: 07/17/2017

Bromoform	9.6		ug/L	10.0		95.6	78-133				
Bromomethane	8.0		"	10.0		79.7	43-168				
Carbon disulfide	11		"	10.0		111	68-146				
Carbon tetrachloride	10		"	10.0		101	77-141				
Chlorobenzene	11		"	10.0		107	88-120				
Chloroethane	11		"	10.0		112	65-136				
Chloroform	11		"	10.0		105	82-128				
Chloromethane	9.8		"	10.0		98.0	43-155				
cis-1,2-Dichloroethylene	10		"	10.0		102	83-129				
cis-1,3-Dichloropropylene	10		"	10.0		101	80-131				
Cyclohexane	11		"	10.0		113	63-149				
Dibromochloromethane	9.8		"	10.0		97.8	80-130				
Dibromomethane	10		"	10.0		101	72-134				
Dichlorodifluoromethane	10		"	10.0		99.5	44-144				
Ethyl Benzene	11		"	10.0		110	80-131				
Hexachlorobutadiene	8.9		"	10.0		88.7	67-146				
Isopropylbenzene	11		"	10.0		113	76-140				
Methyl acetate	9.4		"	10.0		94.4	51-139				
Methyl tert-butyl ether (MTBE)	10		"	10.0		102	76-135				
Methylcyclohexane	11		"	10.0		111	72-143				
Methylene chloride	8.8		"	10.0		88.0	55-137				
n-Butylbenzene	11		"	10.0		107	79-132				
n-Propylbenzene	11		"	10.0		114	78-133				
o-Xylene	11		"	10.0		107	78-130				
p- & m- Xylenes	22		"	20.0		110	77-133				
p-Isopropyltoluene	11		"	10.0		112	81-136				
sec-Butylbenzene	11		"	10.0		112	79-137				
Styrene	11		"	10.0		110	67-132				
tert-Butyl alcohol (TBA)	14		"	10.0		145	25-162				
tert-Butylbenzene	11		"	10.0		112	77-138				
Tetrachloroethylene	11		"	10.0		106	82-131				
Toluene	11		"	10.0		108	80-127				
trans-1,2-Dichloroethylene	11		"	10.0		107	80-132				
trans-1,3-Dichloropropylene	9.8		"	10.0		97.7	78-131				
Trichloroethylene	11		"	10.0		106	82-128				
Trichlorofluoromethane	10		"	10.0		104	67-139				
Vinyl Chloride	11		"	10.0		108	58-145				
Surrogate: 1,2-Dichloroethane-d4	9.01		"	10.0		90.1	69-130				
Surrogate: Toluene-d8	10.1		"	10.0		101	81-117				
Surrogate: p-Bromofluorobenzene	10.2		"	10.0		102	79-122				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG70585 - EPA 5030B											
LCS Dup (BG70585-BSD1)						Prepared: 07/17/2017 Analyzed: 07/18/2017					
1,1,1,2-Tetrachloroethane	10		ug/L	10.0		104	82-126		0.289	30	
1,1,1-Trichloroethane	10		"	10.0		102	78-136		0.0980	30	
1,1,2,2-Tetrachloroethane	10		"	10.0		103	76-129		0.880	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11		"	10.0		110	54-165		1.71	30	
1,1,2-Trichloroethane	10		"	10.0		101	82-123		2.83	30	
1,1-Dichloroethane	11		"	10.0		108	82-129		0.372	30	
1,1-Dichloroethylene	10		"	10.0		102	68-138		0.681	30	
1,2,3-Trichlorobenzene	8.9		"	10.0		89.4	76-136		1.24	30	
1,2,3-Trichloropropane	10		"	10.0		102	77-128		0.790	30	
1,2,4-Trichlorobenzene	9.5		"	10.0		94.9	76-137		4.09	30	
1,2,4-Trimethylbenzene	11		"	10.0		109	82-132		2.27	30	
1,2-Dibromo-3-chloropropane	9.4		"	10.0		93.5	45-147		11.5	30	
1,2-Dibromoethane	10		"	10.0		102	83-124		0.196	30	
1,2-Dichlorobenzene	10		"	10.0		102	79-123		2.14	30	
1,2-Dichloroethane	9.6		"	10.0		96.2	73-132		3.28	30	
1,2-Dichloropropane	10		"	10.0		104	78-126		1.14	30	
1,3,5-Trimethylbenzene	11		"	10.0		111	80-131		0.360	30	
1,3-Dichlorobenzene	11		"	10.0		108	86-122		0.462	30	
1,4-Dichlorobenzene	11		"	10.0		108	85-124		2.39	30	
1,4-Dioxane	190		"	200		96.5	10-349		12.6	30	
2-Butanone	5.4		"	10.0		53.8	49-152		15.4	30	
2-Hexanone	8.9		"	10.0		89.3	51-146		1.58	30	
4-Methyl-2-pentanone	9.4		"	10.0		94.2	57-145		0.318	30	
Acetone	8.3		"	10.0		82.7	14-150		4.96	30	
Acrolein	3.8		"	10.0		38.1	10-153		86.2	30	Non-dir.
Acrylonitrile	7.2		"	10.0		72.1	51-150		14.6	30	
Benzene	11		"	10.0		110	85-126		0.0905	30	
Bromochloromethane	10		"	10.0		104	77-128		1.74	30	
Bromodichloromethane	9.8		"	10.0		98.4	79-128		0.910	30	
Bromoform	9.7		"	10.0		97.0	78-133		1.45	30	
Bromomethane	7.9		"	10.0		79.1	43-168		0.756	30	
Carbon disulfide	11		"	10.0		111	68-146		0.540	30	
Carbon tetrachloride	10		"	10.0		103	77-141		1.47	30	
Chlorobenzene	10		"	10.0		105	88-120		1.89	30	
Chloroethane	11		"	10.0		106	65-136		5.77	30	
Chloroform	10		"	10.0		104	82-128		1.53	30	
Chloromethane	9.8		"	10.0		97.7	43-155		0.307	30	
cis-1,2-Dichloroethylene	10		"	10.0		102	83-129		0.491	30	
cis-1,3-Dichloropropylene	10		"	10.0		102	80-131		1.38	30	
Cyclohexane	11		"	10.0		112	63-149		0.266	30	
Dibromochloromethane	10		"	10.0		99.6	80-130		1.82	30	
Dibromomethane	9.9		"	10.0		99.0	72-134		1.90	30	
Dichlorodifluoromethane	9.9		"	10.0		99.4	44-144		0.101	30	
Ethyl Benzene	11		"	10.0		110	80-131		0.00	30	
Hexachlorobutadiene	8.9		"	10.0		88.7	67-146		0.00	30	
Isopropylbenzene	11		"	10.0		111	76-140		2.05	30	
Methyl acetate	9.6		"	10.0		96.2	51-139		1.89	30	
Methyl tert-butyl ether (MTBE)	10		"	10.0		102	76-135		0.0982	30	
Methylcyclohexane	11		"	10.0		110	72-143		1.18	30	
Methylene chloride	8.8		"	10.0		88.0	55-137		0.00	30	
n-Butylbenzene	11		"	10.0		106	79-132		1.03	30	



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BG70585 - EPA 5030B

LCS Dup (BG70585-BSD1)

Prepared: 07/17/2017 Analyzed: 07/18/2017

n-Propylbenzene	11		ug/L	10.0		112	78-133		1.78	30	
o-Xylene	11		"	10.0		107	78-130		0.00	30	
p- & m- Xylenes	22		"	20.0		109	77-133		1.46	30	
p-Isopropyltoluene	11		"	10.0		110	81-136		1.71	30	
sec-Butylbenzene	11		"	10.0		111	79-137		0.359	30	
Styrene	11		"	10.0		108	67-132		1.28	30	
tert-Butyl alcohol (TBA)	15		"	10.0		149	25-162		2.66	30	
tert-Butylbenzene	11		"	10.0		112	77-138		0.893	30	
Tetrachloroethylene	11		"	10.0		106	82-131		0.377	30	
Toluene	11		"	10.0		106	80-127		1.31	30	
trans-1,2-Dichloroethylene	10		"	10.0		104	80-132		2.18	30	
trans-1,3-Dichloropropylene	9.6		"	10.0		96.1	78-131		1.65	30	
Trichloroethylene	10		"	10.0		105	82-128		0.856	30	
Trichlorofluoromethane	10		"	10.0		104	67-139		0.287	30	
Vinyl Chloride	11		"	10.0		110	58-145		1.47	30	
Surrogate: 1,2-Dichloroethane-d4	9.23		"	10.0		92.3	69-130				
Surrogate: Toluene-d8	10.1		"	10.0		101	81-117				
Surrogate: p-Bromofluorobenzene	10.4		"	10.0		104	79-122				



Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BG70559 - EPA 3510C

Blank (BG70559-BLK1)

Prepared: 07/14/2017 Analyzed: 07/17/2017

2-Methylnaphthalene	ND	5.00	ug/L
Acenaphthene	ND	0.0500	"
Acenaphthylene	ND	0.0500	"
Anthracene	ND	0.0500	"
Benzo(a)anthracene	ND	0.0500	"
Benzo(a)pyrene	ND	0.0500	"
Benzo(b)fluoranthene	ND	0.0500	"
Benzo(g,h,i)perylene	ND	0.0500	"
Benzo(k)fluoranthene	ND	0.0500	"
Chrysene	ND	0.0500	"
Dibenzo(a,h)anthracene	ND	0.0500	"
Fluoranthene	ND	0.0500	"
Fluorene	ND	0.0500	"
Indeno(1,2,3-cd)pyrene	ND	0.0500	"
Naphthalene	ND	0.0500	"
Phenanthrene	ND	0.0500	"
Pyrene	ND	0.0500	"

Surrogate: Nitrobenzene-d5	35.2	"	53.4	65.9	12-96
Surrogate: 2-Fluorobiphenyl	35.5	"	50.8	69.8	16-84
Surrogate: Terphenyl-d14	32.8	"	50.2	65.4	15-106

Blank (BG70559-BLK2)

Prepared: 07/14/2017 Analyzed: 07/17/2017

Acenaphthene	ND	0.0500	ug/L
Acenaphthylene	ND	0.0500	"
Anthracene	ND	0.0500	"
Benzo(a)anthracene	ND	0.0500	"
Benzo(a)pyrene	ND	0.0500	"
Benzo(b)fluoranthene	ND	0.0500	"
Benzo(g,h,i)perylene	ND	0.0500	"
Benzo(k)fluoranthene	ND	0.0500	"
Chrysene	ND	0.0500	"
Dibenzo(a,h)anthracene	ND	0.0500	"
Fluoranthene	ND	0.0500	"
Fluorene	ND	0.0500	"
Indeno(1,2,3-cd)pyrene	ND	0.0500	"
Naphthalene	ND	0.0500	"
Phenanthrene	ND	0.0500	"
Pyrene	ND	0.0500	"



Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BG70559 - EPA 3510C

LCS (BG70559-BS1)

Prepared: 07/14/2017 Analyzed: 07/17/2017

2-Methylnaphthalene	20.8	5.00	ug/L	25.0		83.3	33-101				
Acenaphthene	19.6	0.0500	"	25.0		78.6	24-114				
Acenaphthylene	17.2	0.0500	"	25.0		68.6	26-112				
Anthracene	20.0	0.0500	"	25.0		80.1	35-114				
Benzo(a)anthracene	22.1	0.0500	"	25.0		88.4	38-127				
Benzo(a)pyrene	20.6	0.0500	"	25.0		82.6	30-146				
Benzo(b)fluoranthene	20.1	0.0500	"	25.0		80.6	36-145				
Benzo(g,h,i)perylene	22.4	0.0500	"	25.0		89.7	10-163				
Benzo(k)fluoranthene	21.1	0.0500	"	25.0		84.6	16-149				
Chrysene	19.6	0.0500	"	25.0		78.4	33-120				
Dibenzo(a,h)anthracene	22.4	0.0500	"	25.0		89.4	10-149				
Fluoranthene	21.4	0.0500	"	25.0		85.5	33-126				
Fluorene	19.1	0.0500	"	25.0		76.6	28-117				
Indeno(1,2,3-cd)pyrene	19.8	0.0500	"	25.0		79.2	10-150				
Naphthalene	18.5	0.0500	"	25.0		73.8	30-99				
Phenanthrene	21.7	0.0500	"	25.0		86.9	31-112				
Pyrene	20.1	0.0500	"	25.0		80.2	42-125				
<i>Surrogate: Nitrobenzene-d5</i>	<i>40.0</i>		<i>"</i>	<i>53.4</i>		<i>74.9</i>	<i>12-96</i>				
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>38.2</i>		<i>"</i>	<i>50.8</i>		<i>75.2</i>	<i>16-84</i>				
<i>Surrogate: Terphenyl-d14</i>	<i>34.3</i>		<i>"</i>	<i>50.2</i>		<i>68.3</i>	<i>15-106</i>				

LCS (BG70559-BS2)

Prepared: 07/14/2017 Analyzed: 07/17/2017

Acenaphthene	0.770	0.0500	ug/L	1.00		77.0	24-114				
Acenaphthylene	0.850	0.0500	"	1.00		85.0	26-112				
Anthracene	0.830	0.0500	"	1.00		83.0	35-114				
Benzo(a)anthracene	0.850	0.0500	"	1.00		85.0	38-127				
Benzo(a)pyrene	0.980	0.0500	"	1.00		98.0	30-146				
Benzo(b)fluoranthene	0.810	0.0500	"	1.00		81.0	36-145				
Benzo(g,h,i)perylene	0.920	0.0500	"	1.00		92.0	10-163				
Benzo(k)fluoranthene	1.17	0.0500	"	1.00		117	16-149				
Chrysene	0.900	0.0500	"	1.00		90.0	33-120				
Dibenzo(a,h)anthracene	1.01	0.0500	"	1.00		101	10-149				
Fluoranthene	1.06	0.0500	"	1.00		106	33-126				
Fluorene	0.910	0.0500	"	1.00		91.0	28-117				
Indeno(1,2,3-cd)pyrene	0.980	0.0500	"	1.00		98.0	10-150				
Naphthalene	0.740	0.0500	"	1.00		74.0	30-99				
Phenanthrene	0.810	0.0500	"	1.00		81.0	31-112				
Pyrene	0.930	0.0500	"	1.00		93.0	42-125				



Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BG70559 - EPA 3510C

LCS Dup (BG70559-BSD1)

Prepared: 07/14/2017 Analyzed: 07/17/2017

2-Methylnaphthalene	21.0	5.00	ug/L	25.0		84.1	33-101		1.00	20	
Acenaphthene	22.4	0.0500	"	25.0		89.8	24-114		13.3	20	
Acenaphthylene	18.7	0.0500	"	25.0		74.7	26-112		8.43	20	
Anthracene	18.0	0.0500	"	25.0		71.9	35-114		10.8	20	
Benzo(a)anthracene	20.7	0.0500	"	25.0		82.6	38-127		6.78	20	
Benzo(a)pyrene	19.8	0.0500	"	25.0		79.2	30-146		4.20	20	
Benzo(b)fluoranthene	20.2	0.0500	"	25.0		80.7	36-145		0.149	20	
Benzo(g,h,i)perylene	23.4	0.0500	"	25.0		93.8	10-163		4.45	20	
Benzo(k)fluoranthene	21.6	0.0500	"	25.0		86.6	16-149		2.34	20	
Chrysene	18.3	0.0500	"	25.0		73.0	33-120		7.08	20	
Dibenzo(a,h)anthracene	22.6	0.0500	"	25.0		90.4	10-149		1.11	20	
Fluoranthene	20.5	0.0500	"	25.0		81.8	33-126		4.35	20	
Fluorene	19.9	0.0500	"	25.0		79.5	28-117		3.74	20	
Indeno(1,2,3-cd)pyrene	21.8	0.0500	"	25.0		87.4	10-150		9.75	20	
Naphthalene	17.9	0.0500	"	25.0		71.5	30-99		3.19	20	
Phenanthrene	20.4	0.0500	"	25.0		81.8	31-112		6.07	20	
Pyrene	20.7	0.0500	"	25.0		82.9	42-125		3.29	20	
Surrogate: Nitrobenzene-d5	39.6		"	53.4		74.1	12-96				
Surrogate: 2-Fluorobiphenyl	38.4		"	50.8		75.6	16-84				
Surrogate: Terphenyl-d14	31.1		"	50.2		62.0	15-106				



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
17G0335-01	HMW-3R	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17G0335-02	HMW-5	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17G0335-03	HMW-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17G0335-04	HMW-7R	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17G0335-05	HMW-8	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17G0335-06	HMW-9R	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17G0335-07	HMW-10R	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17G0335-08	HMW-13	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17G0335-09	HMW-14	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17G0335-10	TB-20170712	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



Sample and Data Qualifiers Relating to This Work Order

QL-03	This LCS analyte recovered outside of acceptance limits. The LCS contains approximately 70 compounds, a limited number of which may be outside acceptance windows.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).

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.

Revision Description: This report has been revised to correct the client project ID in accordance with the COC and update the Trip Blank ID per client request.



YORK ANALYTICAL LABORATORIES
120 RESEARCH DR.
STRATFORD, CT 06615
(203) 325-1371
FAX (203) 357-0166

Field Chain-of-Custody Record

Page of

York Project No. 17G0335

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

YOUR INFORMATION		Report To:		Invoice To:		YOUR PROJECT ID		Turn-Around Time		Report Type	
Company: <u>WCD Group</u>	Company: <u>Richard</u>	Company: <u>Brenda</u>	Semi-Vols. <u>8270 or 625</u>		Volatiles <u>8260 full</u>		RUSH - Same Day ☐		Summary Report ☒		
Address: <u>24 Davis Ave</u>	Address: <u></u>	Address: <u></u>	STARS list <u>624</u>		Site Spec. <u>624</u>		RUSH - Next Day ☐		Summary w/ QA Summary ☐		
Phone No. <u></u>	Phone No. <u></u>	Phone No. <u></u>	BN Only <u></u>		Nassau Co. <u></u>		RUSH - Two Day ☐		CT RCP Package ☐		
Contact Person: <u></u>	Attention: <u></u>	Attention: <u></u>	Acids Only <u></u>		Suffolk Co. <u></u>		RUSH - Three Day ☐		CTRCP DQADUE Pkg ☐		
E-Mail Address: <u></u>	E-Mail Address: <u></u>	E-Mail Address: <u></u>	PAH list <u></u>		Ketones <u></u>		RUSH - Four Day ☐		NY ASP A Package ☐		
			TAGM list <u></u>		Oxygenates <u></u>		Standard(5-7 Days) ☒		NY ASP B Package ☒		
			CT RCP list <u></u>		TCL list <u></u>				NIJDEP Red. Deliv. ☐		
			TCL list <u></u>		TAGM list <u></u>				<u>Electronic Data Deliverables (EDD)</u>		
			CT RCP list <u></u>		TCL list <u></u>				Simple Excel ☒		
			TCL list <u></u>		TAGM list <u></u>				NYSDCE EQuIS ☒		
			TCL list <u></u>		TAGM list <u></u>				EQuIS (std) ☐		
			TCL list <u></u>		TAGM list <u></u>				EZ-EDD (EQuIS) ☐		
			TCL list <u></u>		TAGM list <u></u>				NIJDEP SRP HazSite EDD ☐		
			TCL list <u></u>		TAGM list <u></u>				GIS/KEY (std) ☐		
			TCL list <u></u>		TAGM list <u></u>				Other ☐		
			TCL list <u></u>		TAGM list <u></u>				York Regulatory Comparison ☐		
			TCL list <u></u>		TAGM list <u></u>				Excel Spreadsheet ☐		
			TCL list <u></u>		TAGM list <u></u>				Compare to the following Regs. (please fill in): ☐		

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

PAHs (For P Source)

Samples Collected/Authorized By (Signature)

P. SPOWICZ
Name (printed)

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)	Temperature on Receipt
HMW-3R	7/12/17	GW	VOCs, PAHs	3x40m + Amber	3.2 °C
HMW-5			VOCs		
HMW-6					
HMW-7R					
HMW-8					
HMW-9R					
HMW-10R					
HMW-13					
HMW-14					
Trap Blank					

APPENDIX F

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.	C344060		
Site Name Haverstraw Harbors Site			
Site Address: Dr. George W. Girling Drive		Zip Code: 10927-	
City/Town: Haverstraw			
County: Rockland			
Site Acreage: 5.0			
Reporting Period: March 04, 2017 to March 04, 2018			
		YES	NO
1.	Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.			
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.			
5.	Is the site currently undergoing development?	☐	☒
		Box 2	
		YES	NO
6.	Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	☒	☐
7.	Are all ICs/ECs in place and functioning as designed?	☒	☐
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.			
A Corrective Measures Work Plan must be submitted along with this form to address these issues.			
_____ Signature of Owner, Remedial Party or Designated Representative		_____ Date	

Box 2A

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

YES NO

☐ ☒

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid?
(The Qualitative Exposure Assessment must be certified every five years)

☒ ☐

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C344060**Box 3****Description of Institutional Controls**ParcelOwnerInstitutional Control

27.14-1-5.1

Admiral's Cove Haverstraw, LLC

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction

Site Management Plan

27.62-2-12

Village of Haverstraw

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Site Management Plan

27.62-2-7.1

Admiral's Cove Haverstraw, LLC

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction

Site Management Plan

27.62-2-7.2

Admiral's Cove Haverstraw, LLC

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction

Site Management Plan

27.62-2-8

Village of Haverstraw

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction

Site Management Plan

Description of Engineering Controls

<u>Parcel</u>	<u>Engineering Control</u>
27.14-1-5.1	Vapor Mitigation Cover System
27.62-2-12	Vapor Mitigation Cover System
27.62-2-7.1	Vapor Mitigation Cover System
27.62-2-7.2	Vapor Mitigation Cover System
27.62-2-8	Vapor Mitigation Cover System

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

☒ ☐

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

☒ ☐

**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. C344060

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 H. Ciminello at WCD Group, LLC,
print name print business address

am certifying as _____ designated representative (Owner or Remedial Party)

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


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

4/6/2018

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 H. Ciminello at WCD Group, LLC
print name print business address

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

Paul H. Ciminello



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

Stamp
(Required for PE)

4/6/2018

Date