PERIODIC REVIEW REPORT

Haverstraw Harbors Site

NYSDEC BCP ID: C344060

Dr. Girling Drive Haverstraw, New York

April 2016

ESI File: GH9964.44



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Prepared By: Prepared For:

Ecosystems Strategies, Inc. 24 Davis Avenue Poughkeepsie, New York 12603 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 6, 2016

Qualified Environmental Professional

Date

Signature

Paul & Catto



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1.0 INTRODUCTION

1.1 Purpose

This Periodic Review Report (PRR) 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 ending 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:

- The former Rockland Fuel Oil Company (Rockland Fuel) parcel, located at the southeastern portion of the Site;
- A portion of the former Keahon parcel, located at the northeastern portion of the Site; and.
- The 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.

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2.2 Prior Investigations and Remediation Activities

2.2.1 Prior Investigations

The following investigations have been conducted by Ecosystems Strategies, Inc. (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

The following remedial actions were conducted as part of the implementation of the NYSDEC approved Remedial Action Work Plan (RAWP, November 2007) prepared by ESI:

- 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;

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- 3. Installation of a demarcation layer in areas with known or suspected remaining contamination;
- 4. Backfilling excavated areas with NYSDEC-approved material;
- 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);
- 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:
 Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting.

Remedial activities were completed at the Site from May through November 2013.

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 ESI, 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.

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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 January 13, 2016. 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 and Groundwater Monitoring

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 consist of the sampling of on-site and off-site monitoring wells for constituents of concern and the evaluating the presence of LNALP in on-site and off-site wells. Figure 2, Appendix A depicts the monitoring well locations. The latest groundwater sampling event was conducted on January 13, 2016. A Letter Report documenting the January 2016 groundwater monitoring and sampling activities, presented as Appendix E, was prepared by ESI and submitted to NYSDEC on March 9, 2016. The conclusions of the Letter Report are presented below.

No measurable LNAPL was observed at any of the wells during the January 2016 groundwater monitoring activities. Strong field evidence of petroleum contamination (i.e. odors, sheen and PID readings) was observed in monitoring wells HMW-7R and HMW-10R; laboratory results, however, document only a single petroleum compound (benzene) at concentrations above guidance levels. These findings support the conclusion that remaining petroleum contamination in on-site soils and groundwater is highly degraded.

Low-level exceedances of groundwater standards for several chlorinated solvents continue to be present at HMW-8 (trichloroethylene [TCE] and its breakdown products) and HWM-13 (chlorobenzene). Current data suggest that TCE is naturally degrading in situ; chlorobenzene concentrations, however, appear to be relatively stable.

It is the opinion of ESI that residual petroleum and solvent contamination does not warrant in-situ treatment at this time, based on the absence of LNAPL and only low-level concentrations of VOCs in on-site groundwater. Groundwater monitoring will be conducted on an annual basis for

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the third year of post-remediation monitoring as indicated in the SMP. The next annual sampling event is anticipated in July 2016.

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;
- 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.

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2.5 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.

3.0 CONCLUSIONS

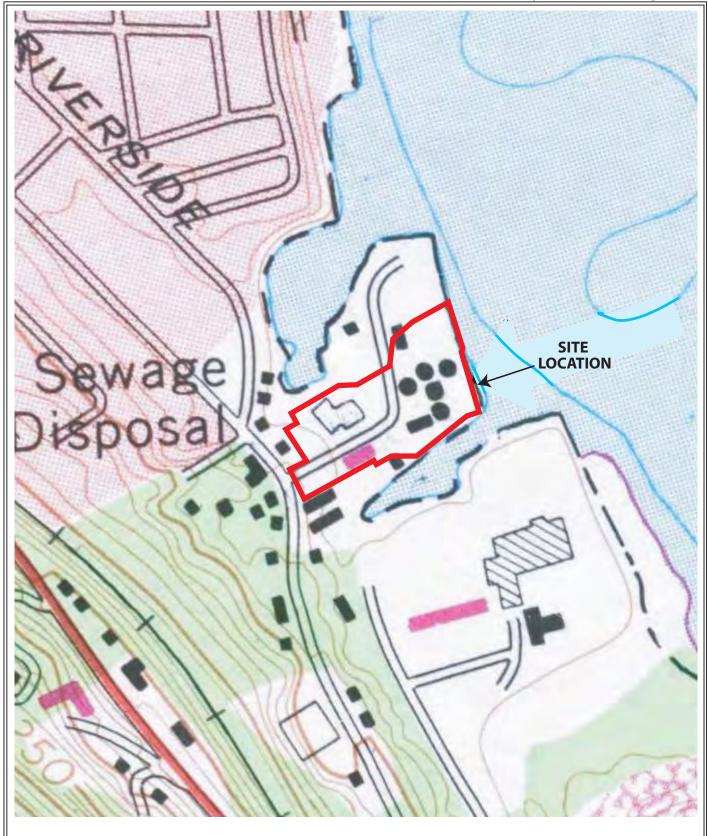
Visual inspection of the cover system confirm that the existing EC is in good condition and working properly. Available groundwater quality data indicate that in-situ treatment is not warranted at this time. All ECs and ICs in place at the Site are in compliance with the SMP.

The services summarized in this PRR were conducted in accordance with the approved NYSDEC Brownfields Program SMP, and are considered by ESI to satisfy the requirements set forth in the SMP. The next report will be submitted by April 2017.



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

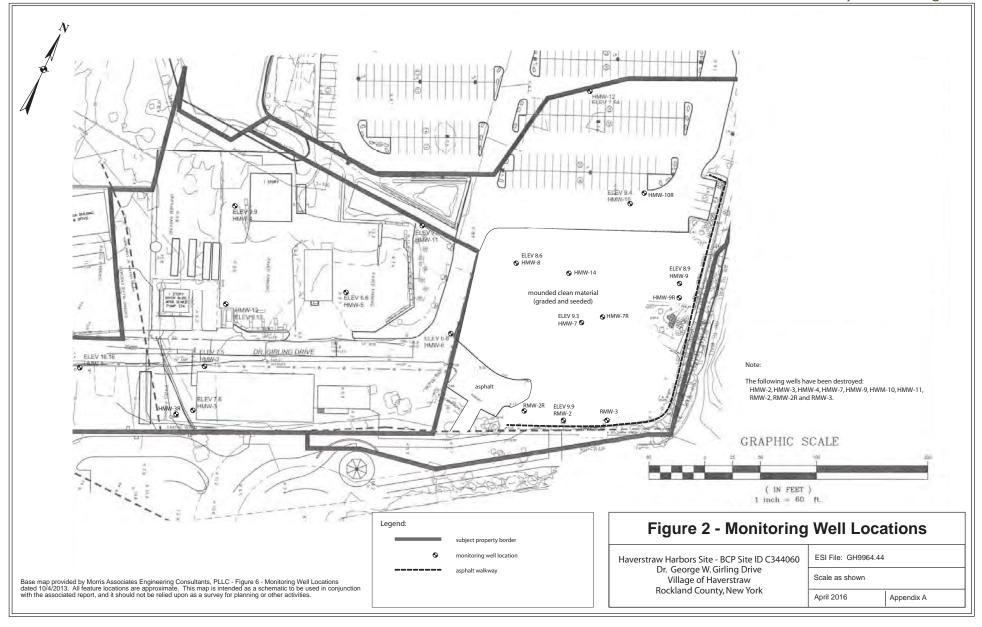
Haverstraw Harbors Site - BCP Site ID C344060 Dr. George W. Girling Drive Village of Haverstraw Rockland County, New York

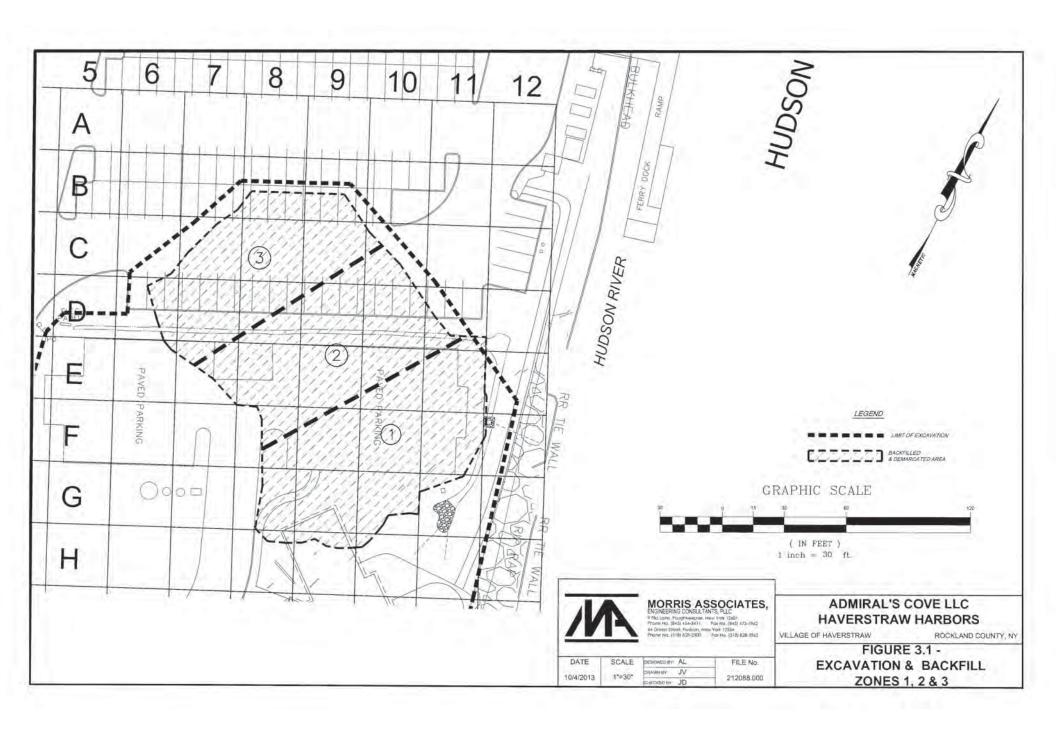


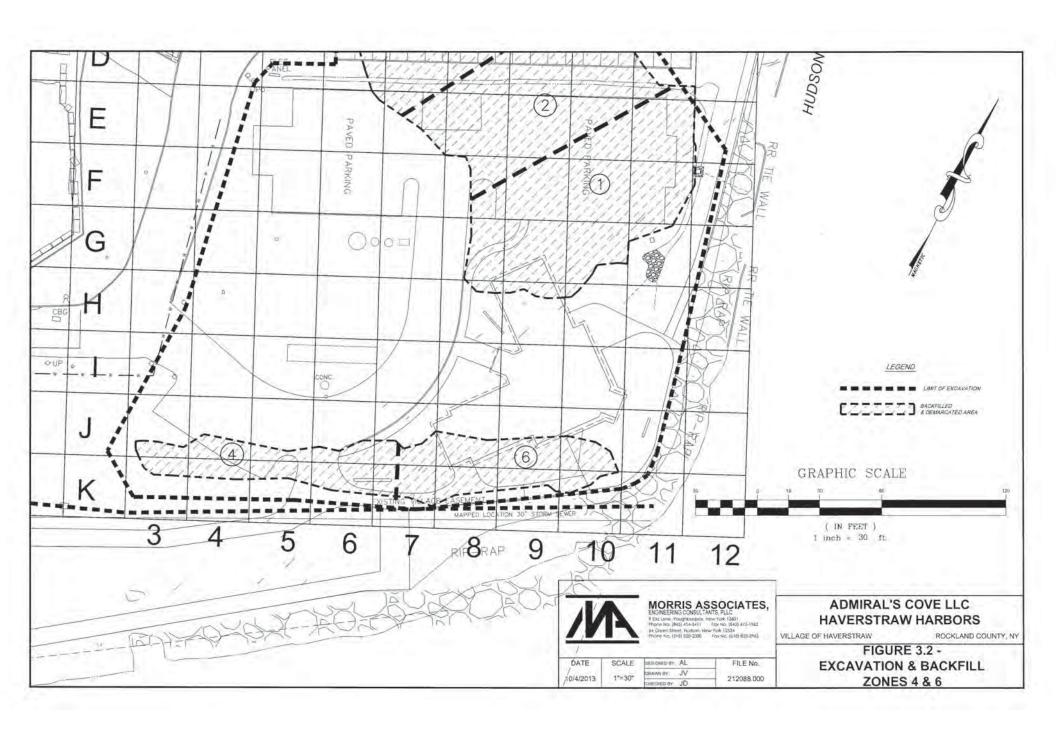
ESI File: GH9964.44

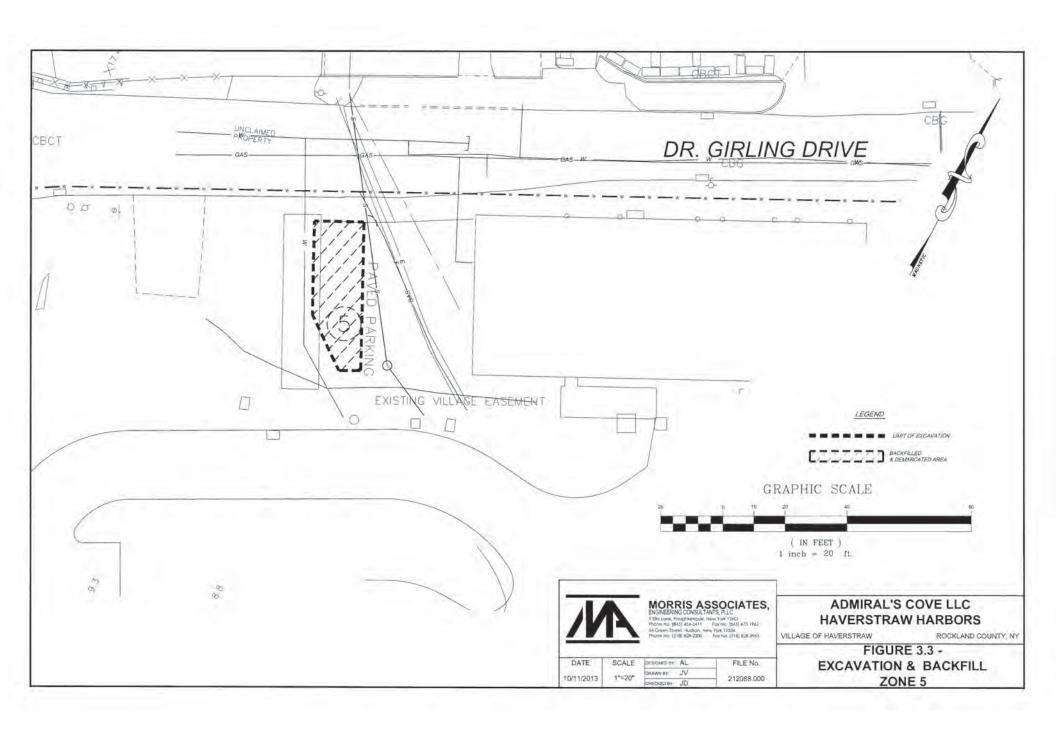
April 2016

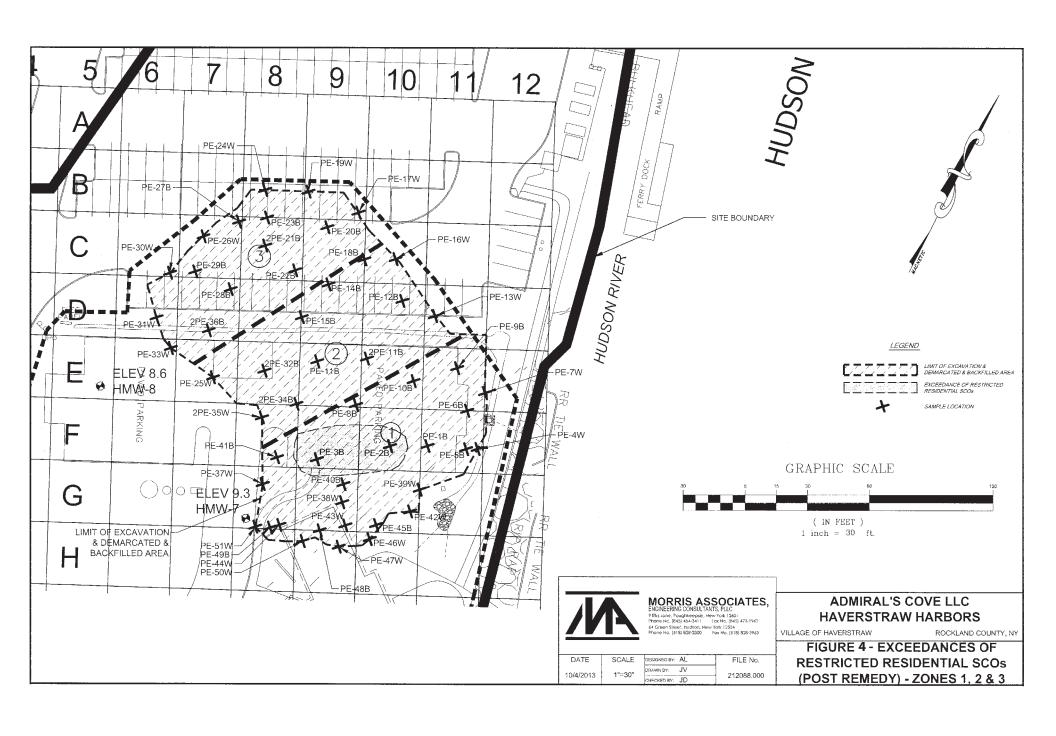
Appendix A

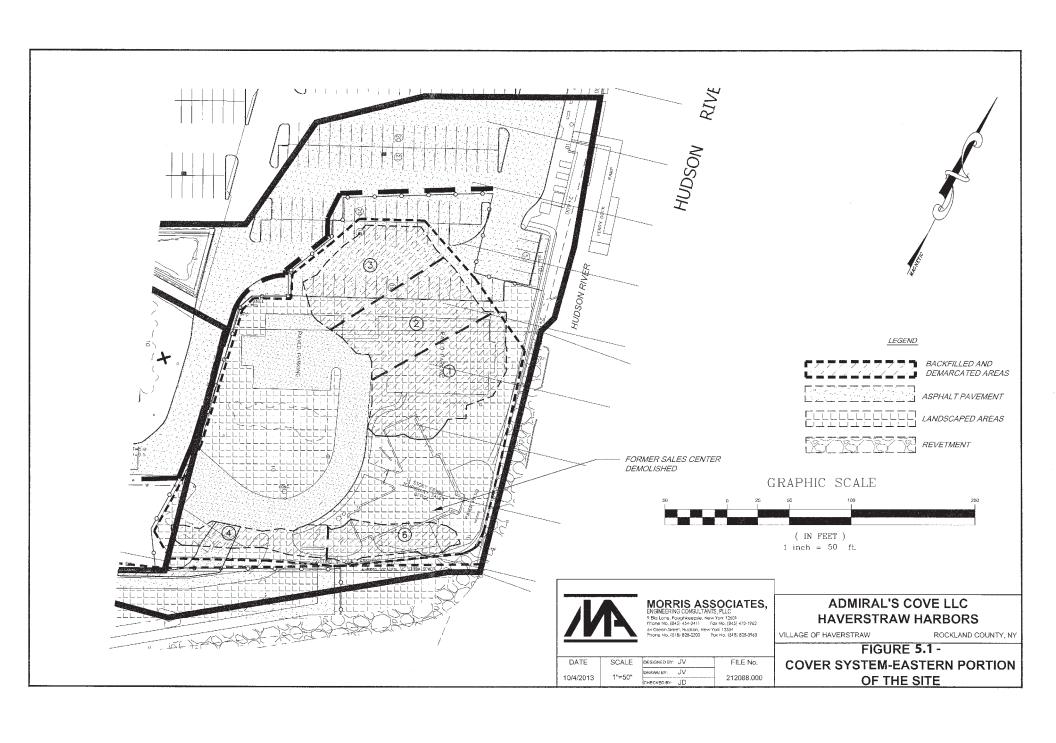


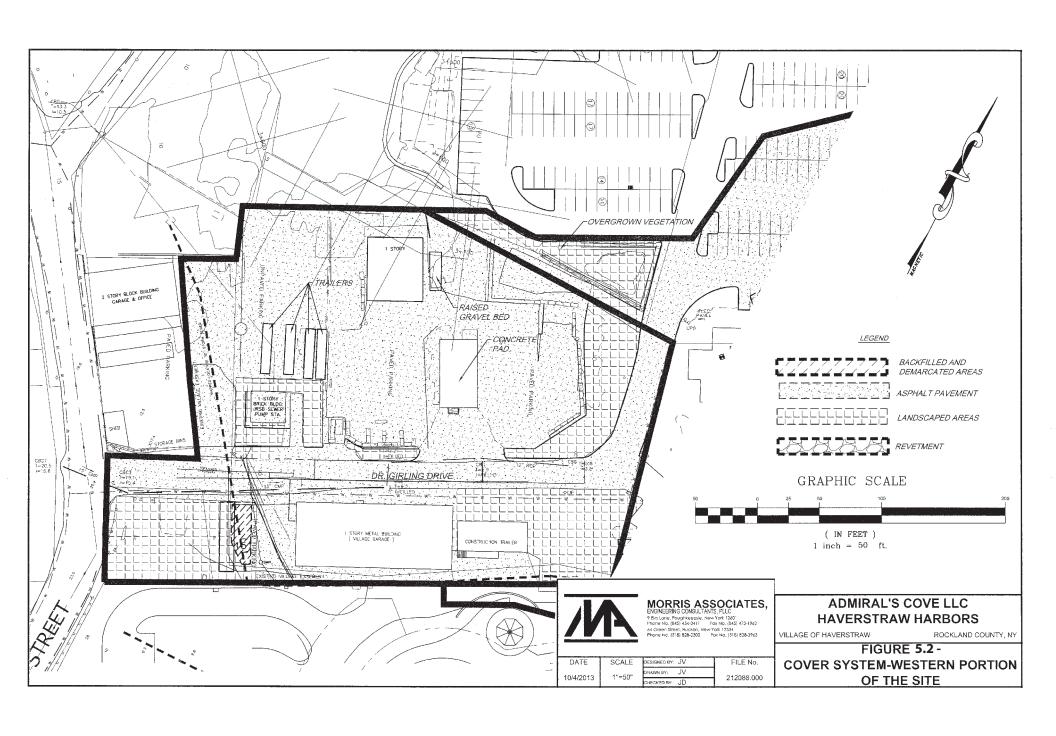














APPENDIX B

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	Guidance Level* (mg/kg)	Laboratory Result (mg/kg)
Zone 1 – NE	PE-2B	Bottom	2-methylnapthalene	36.4	49.7
Portion of the Site	PE-3B	Bottom	2-methylnapthalene	36.4	43.6
	DPW-PE-5W	Wall	Benzo(a)anthracene	1,000	2,090
7 5 014	DPW-PE-6W	Wall	Benzo(a)anthracene	1,000	5,440
Zone 5 – SW Portion of the Site			Benzo(a)pyrene	1,000	1,420 J
Portion of the Site			Benzo(b)fluoranthene	1,000	2,060
			Chrysene	3,900	10,400

Notes:

Guidance levels based on BCP Restricted-Residential Use Soil Cleanup Objectives (SCOs), 6 NYCRR, Table 375-6.8(b), with exception of 2-methylnapthalene. Guidance level for 2-methylnapthalene is based on BCP Protection of Groundwater SCO in the CP-51 Soil Cleanup Guidance. J - The concentration given is an approximate value.



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	1			
		1./		
Change of ownership or use (Restricted Residential)? Transfer of COC?		V	,	
		1		
Erection of structures?		V		
		1		
Any activity likely to disrupt or expose contamination?		V		
Any activity that will or may interfere with on-going or completed			1	
remedial program or the continued ability to implement engineering or		11/		
institutional controls?		V		
Cover System Monitoring Checklist				
Where there any ground-intrusive activites conducted	1	1/	1	1
(installation/relocation of utilities, etc.)? If so, specify.		V		Cover system in good condition. Photos taken.
Is there evidence that ground-intrusive activites were conducted? If so,		1./	1	DI
specify.		V		Condition. Photos taken.
Are there signs of soil erosion in the landscpaed areas that could		1	1	70000
interfere with the cover system integrity? If so, specify.		V		
Are there any holes, cracks, vegetation, or physical deficiences in the	-	1	1	
asphalt and paved areas? If so, sketch area on reverse side.		V		
estime and have alread in any anerest alread all reverse since.		1	1	
Areas of significant ponding on-site?		V		
Are there any holes, cracks, vegetation, or physical deficiences in the		-	-	
building floor slab? If so, Identify the building and sketch area on reverse		1		
side.		V		
Groundwater Monitoring Well Network	-	-	-	
Are the monitoring wells (HMW-7, HMW-8, HMW-13 through HMW-18)	T	1	_	
usable and in good condition?	V			Sampling went in Jan. 2016
SSDS Checklist (Complete a separate sheet for every SSDS on-site and I	alizata	or and distance	Idanti	Beatlan 1
Is there an SSDS in place for building erected on-site? (If SSDS are yet to	Tidde	System	Tuenti	A .
be installed, indicate in the comments section and do not complete the			1/	
remainder of this section)			V	No SSAS m-site as new
remainder of this section)	-	1	1	1 1 22.32
As the units generating various operating and maintained?			V	No SSDS in-site as new sheekers not exected in-site
Are the units generating vacuum operating and maintaned?	-	-	1	Since forces in the constant of
Is the discharge vent pipe functional and maintained? Are there any			V	
blockages in the vent pipe?	-	-	-	
			1	
Are there any holes, cracks or physical deficiences in the riser pipes?	-	-		
Has the SSDS effluent sample been collected, analyzed and submitted to			1/	
NYSDEC? (on-time event, or othwerwise indicated by NYSDEC). Report to			V	
NYSDEC.	-	-		
			11/	
Sub-slab vacuum at all monitoring points greater than 0.002 in. of w.c.?			V .	
Include vacuum readings on comments section. Report to NYSDEC.	-	-	-	
	-	Site R	ecords	
		1		SMPIFER not available to DAW.
Does the site operator have updated SMP and FER available on-site?		V		The state of the s
	1	- 1-		, Site owner consultant to make avail
Inspection Date:	01/1	3/20	14	to DPW.
Weather:	4	uni	24	+ cold 30-40°F
Inspector Name:	K	osac	in	- Andigor-Herrell
Inspector Signature:	10	oscu		- Omderjoin-Mokel
Date of Last Inspection:	_0	uly	- 6	2015
Required Date of Next Inspection: (based on findings, otherwise		10	1	1 to and bill a Trans
annually)	1	mni	call	y Jan 2017 all sumpling Jul. 30
Agency:	E	eus	45+	ems strategus Inc.
Agency's Telephone:	18	1455	945	2-1658
Additional Comments or Drawings (Use Reverse Side):	-	NA		
		14-12		



APPENDIX D

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



3. Cover system in the southern DPW parcel west of the DPW trailer and garage



4. Cover system in the southern DPW parcel between the DPW trailer and garage



5. Eastern portion of Girling Drive and cover system in the southern DPW parcel east of the DPW garage



6. Cover system in the southeastern portion of the Site (former location of Sales Center)





7. Cover system in the eastern portion of the Site



8. Cover system in the northeastern portion of the Site



APPENDIX E

January 2016 Post-Remediation Groundwater Letter Report

24 Davis Avenue, Poughkeepsie, NY 12603 phone 845.452.1658 | fax 845.485.7083 | ecosystemsstrategies.com

March 9, 2016

James Candiloro, P.E.

New York State Department of Environmental Conservation

Division of Environmental Remediation

625 Broadway, 11th Floor

Albany, New York 12233

via EMAIL: james.candiloro@dec.ny.gov

Re: Post-Remediation Groundwater Sampling Event – 2nd Year, 2nd Biannual Event, January 2016

Haverstraw Harbors Site B NYSDEC BCP Site ID: C344060

ESI File: GH9964.50

Dear Mr. Candiloro:

Ecosystems Strategies Inc. (ESI), in conjunction with Morris Associates Engineering Consultants, P.L.L.C. (MA), 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 January 2016 groundwater sampling event (second year, second biannual 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 January 13, 2016 by ESI 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 field evidence of contamination (FEC) observed during the January 2016 sampling event.



J. Candiloro March 9, 2016 NYSDEC ID: C344060 ESI File: GH9964.50 Page 2 of 4

Table A: January 2016 Post-Remediation Field Evidence of Contamination

	PID Reading at the Top	Purged Groundwater						
Well ID	of Casing (ppm*)	Odor	Sheen					
HMW-3R	0.0	None	None					
HMW-5	0.0	Slight	Slight					
HMW-6	0.0	Slight	None					
HMW-7R	24.8	Moderate	Slight					
HMW-8	2.0	Slight	None					
HMW-9R	**	Slight	Slight					
HMW-10R	114.7	Strong	Heavy					
HMW-13	0.0	Slight	Slight					
HMW-14	2.2	Slight	Slight					
RMW-2R		Destroyed						

Notes: *ppm = parts per million, ** PID malfunctioned, no reading recorded.

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 observed in the January 2016 sampling event is consistent with historical data, with exception of a less elevated PID reading in the current result at HMW-14 (versus July 2015 PID reading 17.2 ppm). FEC documented in HMW-7R and HMW-10R 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 NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1, Ambient Water Quality Standards 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.

A slightly elevated concentration of chlorobenzene was detected at HMW-13 (17 μ g/L, guidance level 5 μ g/L) and benzene was detected at the guidance level at HMW-5 (1.0 μ g/L, guidance level 1 μ g/L). No chlorobenzene or benzene were detected in remaining wells in this area. Non-elevated concentrations of acetone, cyclohexane, methyl tert-butyl ether (MTBE), sec- and tert-butyl benzene, isopropylbenzene, and tert-butyl alcohol (TBA) were detected in all samples (no other VOCs were detected).

The current chlorobenzene concentration at HMW-13 is consistent with pre- and post-remediation concentrations. Post-remediation concentrations of benzene at HMW-5 have slightly increased (peak



J. Candiloro March 9, 2016 NYSDEC ID: C344060 ESI File: GH9964.50 Page 3 of 4

concentration 2.7 μ g/L, July 2014) compared to pre-remediation concentrations (ranging from 0.62 μ g/L to non-detect). Generally, all 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.

Trichloroethene and Related Compounds

Elevated concentrations of trichloroethene (TCE, 6.3 μ g/L, guidance level 5 μ g/L), cis-1,2-dichloroethene (cis-1,2-DCE, 14 μ g/L, guidance level 5 μ g/L), trans-1,2-dichloroethene (trans-1,2-DCE, 22 μ g/L, guidance level 5 μ g/L), 1,1 dichloroethane (1,1-DCE, 5.7 μ g/L, guidance level 5 μ g/L) and vinyl chloride (VC, 4.3 μ g/L, guidance level 2 μ g/L) were detected at HMW-8. A slightly elevated concentration of 1,1,2-trichloroethane was detected at HMW-10R (1,1,2-TCA, 1.6 μ g/L, guidance level 1 μ g/L). No TCE, trans-1,2-DCE, cis-1,2-DCE, 1,1-DCE, VC or 1,1,2-TCA were detected in remaining samples in this area.

Post-remediation concentrations of TCE at HMW-8 continue to show a steady decrease compared to both pre-remediation and earlier post-remediation sampling events (pre-remediation peak valued of 46 μ g/L). Slight increases in cis-1,2-DCE, trans-1,2-DCE and VC concentrations at HMW-8 are consistent with TCE dechlorination and resulting decreased TCE levels. The low-level exceedance of 1,1,2-TCA at HMW-10R marks the first time this compound has been seen in any wells.

Benzene and Related Compounds

An elevated concentration of benzene (1.3 μ g/L) was detected at HMW-8 (benzene was non-detect at all remaining wells). Trace to low-level concentrations of isopropyl benzene and n-propylbenzene (guidance level 5 μ g/L for both compounds) were detected at HMW-7R, HMW-9R and HMW-10R (isopropyl benzene and n-propylbenzene were non-detect at all remaining wells in this area).

The current benzene concentration at HMW-8 matches the initial pre-remediation concentration reported in July 2014 and represents an increase over previous post-remediation sampling events (average concentration approximately 0.8 µg/L). Post-remediation concentrations of isopropyl benzene and n-propylbenzene at HMW-7R continue to show a decreasing trend, have remained consistently low at HMW-8, HMW-9R and HMW-10R, and are now non-detect at HMW-14 after having spiked to slightly elevated concentrations in July 2015.

Other VOCs

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

DATA USABILITY REPORT

A Data Usability Report (DUSR, Attachment E) was prepared by ZDataReports in August 2015 for the laboratory data generated in July 2015, in accordance with the SMP and NYSDEC DER-10. All data were determined to be usable for qualitative and quantitative purposes.

Laboratory data for the January 2016 sampling event will be submitted to 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.



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CONCLUSIONS

No measurable LNAPL was observed at any of the wells during the January 2016 groundwater monitoring activities. Strong field evidence of petroleum contamination (i.e. odors, sheen and PID readings) was observed in monitoring wells HMW-7R and HMW-10R; laboratory results, however, document only a single petroleum compound (benzene) at concentrations above guidance levels. These findings support the conclusion that remaining petroleum contamination in on-site soils and groundwater is highly degraded.

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 suggest that TCE is naturally degrading in situ; chlorobenzene concentrations, however, appear to be relatively stable.

It is the opinion of ESI that residual petroleum and solvent contamination does not warrant in-situ treatment at this time, based on the absence of LNAPL and only low-level concentrations of 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-gas intrusion from remaining contamination. Soil-gas sampling is anticipated in locations were the proposed residential buildings will be erected to determine the need and extent of the SSDS as per the requirements of the SMP.

Groundwater monitoring will be conducted on an annual basis for the third year of post-remediation monitoring as indicated in the SMP. The next annual sampling event is anticipated in July 2016.

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

Sincerely,

ECOSYSTEMS STRATEGIES, INC.

Paul H. Ciminello

Paul H Lit

President

Attachments:

Attachment A – Figure 1: Monitoring Well Locations

Attachment B – Well Sampling Logs Attachment C – Data Summary Tables

Attachment D – Laboratory Results

Attachment E - DUSR

cc: J. Dennis, P.E., MA

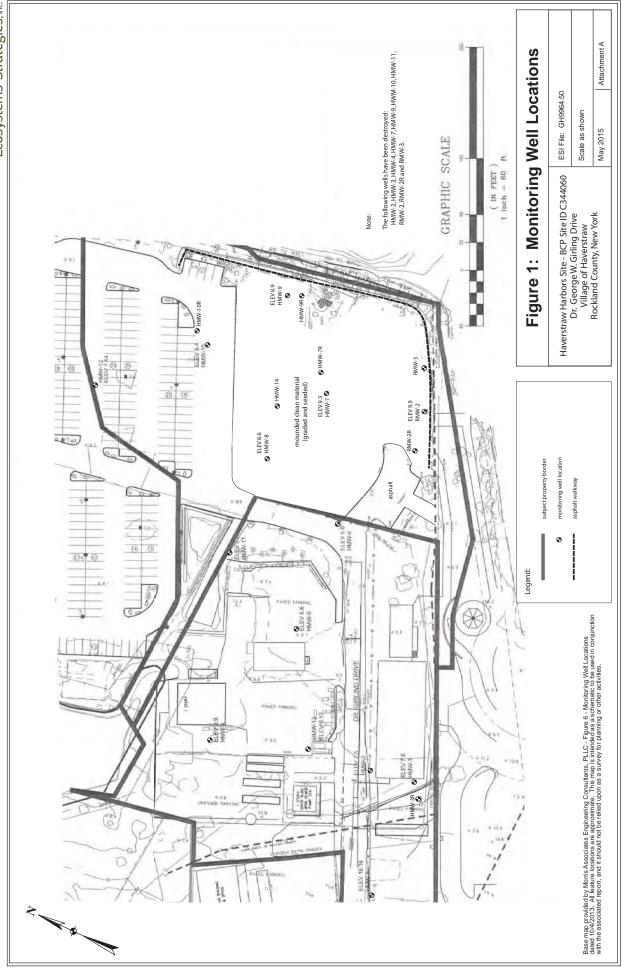
R. Andujar-McNeil, ESI

J. Dziegelewski, GDC

M. Ginsburg, GDC

JDennis@MorrisEngineers.com rosaura@ecosystemsstrategies.com

jdziegelewski@gdcllc.com Mginsburg@gdcllc.com



	2		2	SROUNDW Haverst	ATER MO	ors Site (N	WELL SAN YSDEC Site	GROUNDWATER MONITORING WELL SAMPLING FIELD LOG Haverstraw Harbors Site (NYSDEC Site ID: C344060) Girling Drive, Village of Haverstraw, Rockland County, New York	LD LOG 60) by New Yo	, in	
Date: January 14, 2016	V 14, 20	91			9		Depth to	Depth to well water: 4/3.0 ft	430 #		
Monitoring Well No.: HAW - 3 R PID Reading: O. O. ppm	Well No.	HAW.		Sipowitz	0		Depth to well both Purging Device (pr. Purged Volume:	Purging Device (pump type): Purged Volume:	type): Geop	eopump/ p	Purging Device (pump type): Geopump/ punstalthc
Odor (circle one): slight/moderate/strong;	one): slig	slight/moderat	te/strong;	Sheen (c	Purge ircle one):	Sheen (circle one): slight/moderate/strong	aracteristic arate/strong			LNAPL (circle one): Yee LNAPL thickness (in.);	LNAPL (circle one): Yee/No
Clock Time 24 hr	Water Depth below MP ft	Pump Dial	Purge Rate ml/min	Cum. Volume Purged lilters	Temp °C	Spec. Cond.2 uS/CM	Н	ORP ³ mv	DO mg/L	Turbidty	Comments
916		01.10	1	(1073	2,71	6.68	-73	1.14	35.7	
42 b				3×	10 68	2.69	6.69	9+1	1.05	25.5	
133			\	Jan 19	16.82	2.64	6.70	140	0.48	21.6	
*										ĝ	
130					107 a	2.60	01'9	せー	0.40	9.1	
933					±£'01	2.55	1± 9	bt -	6.82	12.9	
936					10 to	2.53	6.33	- 80	6.39	5.11	
Stabilization Criteria	Criteria				3%	3%	+-0.1	+-10mv	10%	10%	V

^{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)

101

Ecosystems Strategies, mc

51 Dr. Girling Drive, Village of Haverstraw, Rockland County, New York Depth to well water: 3.2 1/ ft GROUNDWATER MONITORING WELL SAMPLING FIELD LOG Haverstraw Harbors Site (NYSDEC Site ID: C344060)

Date: January 22, 2016
Field Personnel R. Andujar-McNeil and E. Sipowitz
Monitoring Well No.:

Purged Water Characteristics:-Sheen (circle one): Slight on oderate/strong

Purging Device (pump type): Geopump/

Depth to well bottom:

gallon

Purged Volume:

LNAPL (circle one): Yes/No

		010	辽									
LNAPL thickness (in.):	Comments	Started sum	Connected to									
LNAPL thick	Turbidty	0.95	060	130	15.0	10.0	250	0.48	0.53	0.43	0.45	10%
	DO mg/L	0.00 0.93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10%
	ORP ³ mv	66-	11/2	he/-	96-130	181-	6.37 -130	-/33	-139	-1172	-113	+-10mv
	На	01.9	184.0	08.9	6.96	6.43	6.37	6.35	06.3	10.0	653 -183	+-0.1
	Spec. Cond.2	4.6	9.39	9.30	61.19	9.49	0.41	14.6	33.4	33.2	34.4	3%
	C (M6 788	8.50	8.62	50.8	8.63	4.99	£ 99	8.40	8.8	8.72	3%
	Cum. Volume Purged lilters											
	Purge Rate ml/min											
	Pump	4.30										
)	Water Depth below MP ft											n Criteria
	Clock Time 24 hr	10:53	25:01	10:58	10:11	11:04	40:11	01:11	11:13	11:16	61-11	Stabilization Criteria

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)

2 of 2

Ecosystems Strategies, Inc.

GROUNDWATER MONITORING WELL SAMPLING FIELD LOG Haverstraw Harbors Site (NYSDEC Site ID: C344060)	51 Dr. Girling Drive, Village of Haverstraw, Rockland County, New York		R. Andujar-McNeil and F. Sipowitz I No.: White Community (Device (pump type): Geopump/ Dem Stuffle Purged Volume: A gallon Purged Volume: A gallon	Purged Water Characteristics:- Sheen (circle one)/slight/moderate/strong	Purge DialCum. Rate IllitersCum. 	4.30 8.08 35.3 6.80 -152 0.0 0.80 Collected a			100 100 100 100 100 100 100 100 100 100
GROU	51 Dr. Girlin				Purge Rate ml/min	30			
4	3	Date: January 12, 2016	Field Personnel R. Andu Monitoring Well No.: PID Reading:	ne);Slight)	Clock Depth F Time below 24 hr MP ft	11:22 9			

he:11

^{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)

^{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)

	a)		51 Dr.	Haverstraw Harbors Site (NYSDEC Site ID: C344060) Girling Drive, Village of Haverstraw, Rockland County, New	traw Harb	Haverstraw Harbors Site (NYSDEC Site ID: C344060) 51 Dr. Girling Drive, Village of Haverstraw, Rockland County, New York	SDEC Site	ID: C34406 and Count	() y, New Yo	논		
Date: Janu Field Perso	Date: January 12, 2016 Field Personnel (R. And	16 ndujar-Mch	Date: January 12, 2016 Field Personnel (R. Andujar-McNeil and F. Sipowitz	Sipowitz			Depth to well water: 10-24 Depth to well bottom:	ell water:	10.99		101	
Monitoring Well No.	Monitoring Well No.:	mdd .	t-01	d			Purging Device (pump type): Geopump/	vice (pump	type): Geopt	/ /dwnd	renstaltic	
Odor (circle	e one): sligi	Odor (circle one): slight (moderate strong;	te/strong;	Sheen (c	Purger	Purged Water Characteristics:- Sheen (circle one) Slight oderate/strong	racteristics: ate/strong			LNAPL (cin	LNAPL (circle one): Yes/No)	
Clock Time 24 hr	Water Depth below MP ft	Pump Dial	Purge Rate ml/min	Cum. Volume Purged lilters	Temp °C	Spec. Cond.2 uS/CM	Hd	ORP ³ mv	DO mg/L	Turbidty	Comments	
12.21		4.33			10:08	12.3	41.9	-109	0.10	3.12	Started Durm	mg@ 12.12
12:24					10.54	284	613	111	00	181	Commeted &	Honba @ 12:1
12:27					80.01	472	6-12	130	0-0	166		
12:30					14.01	4.62	149	-122	0.0	1.23		
12:33					28.01	25.6	11.3	124	0.0	1.53		
12:36					1801	118-3	6.10	130	0.0	1.79		
12.39					10.83	44.4	61.19	127	0.0	1.26		
12:42					16.97	4.42	6.09	128	0.0	1.09		
12:45					10.38	4.39	60.00	139	0.0	1.53		
											Collected son	Shot onan
Ctachillacticalidation	Critoria				20%	700	+01	4-10mv	10%	10%		

Collected add Honale Sumple for MS & NSW.

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)

Jate: Janu	Date: January 12, 2016 Field Personnel R. And	16 Indujar-Mcl	51 Dr.	Haversi Girling Driv ipowitz	rraw Harb	Haverstraw Harbors Site (NYSDEC Site ID: C344060) ling Drive, Village of Haverstraw, Rockland County, Depth to well water:	/SDEC Site raw, Rockl Depth to w Depth to w	Girling Drive, Village of Haverstraw, Rockland County, New York Depth to well water: 4 7.0 ft Depth to well bottom: 13.7.2 ft.	ty, New Yo		4/1/6
Monitoring Wel	ng: 2.0	Monitoring Well No.: Hall W. PlD Reading: 2.0 ppm Odor (circle one): slight/moderate/strong;	te/strong;	Sheen (c	Purged	rged Water Cha	Purging Dev Purged Volu Purged Water Characteristics:- Sheen (circle ong): slight/moderate/strong	Purging Device (pump type): Geopump/ Purged Volume: 227 gallon racteristics:- ate/strong LNAPL (c	gallon gallon	177	LNAPL (circle one): Yes(No
Clock Time 24 hr	Water Depth below MP ft	Pump Dial	Purge Rate ml/min	Cum. Volume Purged lilters	Temp °C	Spec. Cond.2 uS/CM	Нф	ORP ³ mv	DO mg/L	Turbidty	Comments
1100	4	4.25									
159					7511	2.08	9.25	-155	0.43	7 34	
202					44 11	30.5	9.27	b91-	0.23	44.4	
306					571	2.05	42.9	Bt1-	91.0	+8.F	
506					8911	2.05	9.25	-183	0.12	8.15	
21		10.7			1126	2.01	9.25	184	60.0	8.12	
1714					21 11	1.99	9.24	981 -	\$0.0	8.19	
1217					1093	2.01	9.24	181-	90.0	9.01	
1920					11.10	86.1	9.25	189	90.0	9.10	
Stabilization Criteria	on Criteria				3%	3%	+-0.1	+-10mv	10%	10%	

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

Method @ 12:22

uSiemens per cm (same as umhos/cm) at 25°C
 Oxidation reduction potential (ORP)

Start

	0		51 Dr.	Haverst Girling Driv	traw Harb	ors Site (N)	Haverstraw Harbors Site (NYSDEC Site ID: C344060) 51 Dr. Girling Drive, Village of Haverstraw, Rockland County, New York	ID: C34406 and Count	50) y, New Yo	¥		
Date: Jan	Date: January 12, 2016	16 Induiar-Mc	Date: January 12, 2016	inowitz			Depth to w	Depth to well water: 6.43	43 #	. 4		
Monitorin	Monitoring Well No.:	- HANG	all control	Thomas and the same of the sam			Purging De	Purging Device (pump type): Geopump/	type): Geo		punstalaci	
PID Reading: Odor (circle o	ing:	PID Reading:ppm PID Halfunch v Odor (circle one): Slight moderate/strong;	ppm Mad hunchone moderate/strong;		Purge	Water Cha	Purged Water Characteristics:- Sheen (circle one) (slight/proderate/strong	nme:	2 gallon	n LNAPL (circ LNAPL thic	LNAPL (circle one): Yes(No	
Clock Time 24 hr	Water Depth below MP ft	Pump	Purge Rate ml/min	Cum. Volume Purged lilters	ر ر	Spec. Cond.2	Н	ORP ³	DO mg/L	Turbidty	Comments	
13.27		4.38			9.53	827	4.7	28-	20.0	7.50	Started our	pund
13:30					10.18	84-1	6.18	Ex-	00	4. KC	T.)
13:33					9.83	1.53	6-18	ht-	00	15.0		
13:36					886	1.57	51.7	-H	0.0	13.7		
13:39					9.69	1.63	6.22	bt-	0.0	13.3		
13:42	7-3				9.63	1.30	150	18-	0.0	5-11		
13.48					9.83	ht-1	6.33	18-	0.0	9.71.		
13:48					366	1.80	6.8	16-	0.0	1.01		
											Collected	(a)
Stabilizati	Stabilization Criteria				3%	3%	+-0.1	+-10mv	10%	10%		1

^{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)

				Haverst	traw Harbo	JUNDWATER MONITORING WELL SAMPLING FIELD Haverstraw Harbors Site (NYSDEC Site ID: C344060)	GROUNDWATER MONITORING WELL SAMPLING FIELD LOG Haverstraw Harbors Site (NYSDEC Site ID: C344060)	ID: C3440	907 07		
Janua	Date: January 16, 2016	ی	51 Dr.	Girling Dri	ve, Village	51 Dr. Girling Drive, Village of Haverstraw, Rockland County, New York Depth to well water: 5 4 0 ft	traw, Rockl	raw, Rockland County, Depth to well water: 5	ty, New Yo	ork	
Perso	Field Personnel R. Andujar-M Monitoring Well No.: HM PID Reading: 114 7 ppm	O	W - 10 E	Sipowitz	0		Depth to w Purging De Purged Vol	Depth to well bottom: Purging Device (pump typ Purged Volume: 1.5-2	ype): Ge		ounstallic
(circle	one): sligh	Odor (circle one): slight/moderate(strong)	e(strong;)	Sheen (c	Purged circle one): s	Sheen (circle one): slight/moderate/strong	racteristics	range of		LNAPL (circle one): Yes LNAPL thickness (in.);	LNAPL (circle one): Yes/
Clock Time 24 hr	Water Depth below MP ft	Pump	Purge Rate ml/min	Cum. Volume Purged lilters	Temp °C	Spec. Cond.2 uS/CM	Hd	ORP ³ mv	DO mg/L	Turbidty	Comments
00											
0					12,37	2.64	38.9	13-	5.62	0.75	
23					12.58		6.83	86-	0.40	0.52	
5.6					12,33	59.5	6.82	1 100	6.23	0.28	
29					12.50	2.69	18.9	-102	0.30	60.03	
35					12.55	17.71	6.81	-103	91.0	0.29	
321					1260	2.71	6.32	101	0.13	20.0	
ilization	Stabilization Criteria				3%	3%	+-0.1	+-10mv	10%	10%	

Collectude 13:37

2. uSiemens per cm (same as umhos/cm) at 25°C 3. Oxidation reduction potential (ORP)

(R		8				NO @ 9:05	then ba 9:19								60:01	
			my falt c		LNAPL (circle one): Yes(NO)	Comments	Started to pun	Connected to								Collected	
	×		/umin	/4	LNAPL (circle one): Yes	Turbidty	15.4	08. 3	670	5.38	5.09	3.85	60%	3.32	3.20	3.19	10%
D 10G	51 Dr. Girling Drive, Village of Haverstraw, Rockland County, New York	3.81 #	Depth to well bottom: ft.	gallon	" In	DO mg/L	0.63	52.0	033	0 23	61.0	-44 0.06 3.85	80.0	6.04	10.0	0.00	10%
GROUNDWATER MONITORING WELL SAMPLING FIELD LOG Haverstraw Harbors Site (NYSDEC Site ID: C344060)	and Count	Depth to well water: 3-87	Depth to well bottom:	Purged Volume:	o son	ORP ³	3	11-	08-	6r-	-35	hh-	84-	dh-	09-	-82	+-10mv
VELL SAMI SDEC Site	raw, Rockl	Depth to w	Depth to w	Purged Vol	racteristics.	Hd	5.52	5.56	5.60	5.63	5.65	87.5884.0	OF S	048	6.00	0.30	+-0.1
UITORING V	of Haverst				Purged Water Characteristics:- one): slight/moderate/strong	., o.ca	555 7660	7ht0	bhto	254.0	D.72	884.0	364.0	16t0	0.808	1080	3%
ATER MON	re, Village				Sheen (circle one): slight/moderate/strong	Temp	8.40	18.8	8.93	806	9.03	41.6	6.68	W.9	9.28	9.16	3%
ROUNDW	Girling Driv		powitz		Sheen (c	Cum. Volume Purged Iilters						87					
6	51 Dr.	1	eil and F. S		e/strong;	Purge Rate ml/min											
		9	ndujar-McN	mdd	ht/moderate	Pump	4.15			12.4							
	2	Date: January 12, 2016	Field Personnel R. Andujar-McNeil and F. Sipowitz	0.0 B	e);Slig							10					n Criteria
		Date: Janu	Field Person	PID Reading:	Odor (circl	Clock Time 24 hr	82.6	4:31	866	4.42	9.45	W.	3: 80	10:01	60:01	t0:01	Stabilization Criteria

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)

hypheate collected how this well.

BUP-DOILOI B (4)40 ml

PID Reading: ppm Odor (circle one) Slight/moderate/strong;	Field Personnel R. Andujar-McNeil and F. S Monitoring Well No.: HMW W - 121	Dr. Girling Dri	ve, Village	of Haverst	raw, Rockl Depth to w Depth to w Purging De	and Coun	N. O	/dw	punstalhi
1	strong;	Sheen (c	Purged Sircle one):	Water Cha light mode	Purged Volume: Purged Water Characteristics:- Sheen (circle one)/slight/moderate/strong	in me:	gallon L	n LNAPL (circle one): Yes LNAPL thickness (in.):	LNAPL (circle one): Yes(No) LNAPL thickness (in.):
Water Depth Pump below Dial MP ft	Purge Rate ml/min	Cum. Volume Purged lilters	C.	Spec. Cond.2 uS/CM	Н	ORP ³ mv	DO mg/L	Turbidty	Comments
4.22									
			05 t	1.27	6.96	9-	15.0	20.1	
			8.03	1.26	6.93	6-1	0.29	13.4	
			7.94	1.26	6.92	1-	0.12	14.7	
			りたた	1.2+	6.92	V	170.0	12.0	
			ttit	1.26	16.9	2	0.00	13.5	

2. uSiemens per cm (same as umhos/cm) at 25°C 3. Oxidation reduction potential (ORP)

Ecosystems Strategies, Inc.

ESI File: GH9964.44

All data in μg/L (parts per billion, ppb)	Sample ID	HM	W-3R	HM\	W-3R	HM\	N-3R	HM\	N-3R	HM\	N-3R	HM\	N-3R
J= Not Detected at or above indicated value	Sample Date		-07-22)		-10-07)		-01-15)		-04-06)		-07-14)		-01-13)
Data above AWQS shown in Bold	Dilution Factor	1		1		1	,	1		1		1	,
VOCs, 8260	AWQS	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1,2-Tetrachloroethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,1,1-Trichloroethane	5	0.5	Ü	0.5	Ü	0.5	Ü	0.5	Ü	0.2	Ü	0.2	Ü
1,1,2,2-Tetrachloroethane	5	0.5	Ü	0.5	Ü	0.5	Ü	0.5	Ü	0.2	Ü	0.2	Ü
1,1,2-Trichloro-1,2,2-trifluoroethane	5	0.5	Ü	0.5	Ü	0.5	Ū	0.5	Ü	0.2	U	0.2	Ü
1,1,2-Trichloroethane	1	0.5	Ü	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,1-Dichloroethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,1-Dichloroethylene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,1-Dichloropropylene	5	0.5	U	0.5	U	0.5	U	0.5	U	NA		NA	
1,2,3-Trichlorobenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2,3-Trichloropropane	0.04	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2,4-Trichlorobenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2,4-Trimethylbenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2-Dibromo-3-chloropropane	0.04	0.5	U	0.5	U	0.5	U	2	U	0.2	U	0.2	U
1,2-Dibromoethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2-Dichlorobenzene	3	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2-Dichloroethane	0.6	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2-Dichloropropane	1 5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,3,5-Trimethylbenzene 1,3-Dichlorobenzene	5 3	0.5	U	0.5 0.5	U	0.5 0.5	U	0.5	U	0.2	U	0.2	U
1,3-Dichloropropane	5	0.5	U	0.5	U	0.5	U	0.5	U	NA	 	NA	U
1,4-Dichlorobenzene	3	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1.4-Dioxane	NE NE	NA	J	NA		NA	J	NA	_ <u> </u>	40	U	40	U
2,2-Dichloropropane	5	0.5	U	0.5	U	0.5	U	0.5	U	NA	۲	NA	T T
2-Butanone	50	0.5	Ü	0.5	Ü	0.5	U	2	U	0.21		0.2	U
2-Chlorotoluene	5	0.5	U	0.5	Ü	0.5	U	0.5	Ü	NA		NA	
2-Hexanone	50	0.5	Ü	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
4-Chlorotoluene	5	0.5	U	0.5	U	0.5	U	0.5	U	NA		NA	
4-Methyl-2-pentanone	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Acetone	50	2	U	2	U	2	U	2	U	1	U	1	U
Acrolein	5	NA		NA		NA		NA		0.8	U	0.2	U
Acrylonitrile	5	NA		NA		NA		NA		0.2	U	0.2	U
Benzene	1	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Bromobenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	NA		NA	
Bromochloromethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Bromodichloromethane	50	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Bromoform	50	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Bromomethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Carbon disulfide	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Carbon tetrachloride	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Chlorobenzene	5	0.5	U	0.5	U	0.5 0.5	U	0.5 0.5	U	0.2	U	0.2	U
Chloroethane Chloroform	5 7	0.86	U	0.5 0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Chloromethane	5	0.66	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
cis-1,2-Dichloroethylene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
cis-1,3-Dichloropropylene	0.4	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Cyclohexane	NE	NA		NA	Ŭ	NA		NA	- Ŭ	0.2	U	0.2	U
Dibromochloromethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Dibromomethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Dichlorodifluoromethane	5	0.5	Ü	0.5	Ü	0.5	Ü	0.5	U	0.2	Ü	0.2	Ü
Ethyl Benzene	5	0.5	Ü	0.5	Ü	0.5	U	0.5	U	0.2	Ü	0.2	Ü
Hexachlorobutadiene	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	Ü
Isopropylbenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Methyl acetate	NE	NA		NA		NA		NA		0.2	U	0.2	U
Methyl tert-butyl ether (MTBE)	10	0.7		1.4		0.76		0.57		1		0.68	
Methylcyclohexane	NE	NA		NA		NA		NA		0.2	U	0.2	U
Methylene chloride	5	2	U	2	U	2	U	4		1	U	1	U
Naphthalene	10	2	U	2	U	2	U	2	U	NA		NA	<u> </u>
n-Butylbenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
n-Propylbenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
o-Xylene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
p- & m- Xylenes	5	1 0.5	U	1	U	1	U	1	U	0.5	U	0.5	U
p-IsopropyItoluene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
sec-Butylbenzene Styrene	5 5	0.5	U	0.5 0.5	U	0.5	U	0.5 0.5	U	0.2	U	0.2	U
tert-Butyl alcohol (TBA)	NE	NA	U	NA	U	NA	U	NA	U	1.8	J	0.2 1.8	J
tert-Butyl alconol (TBA) tert-Butylbenzene	NE 5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Tetrachloroethylene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Toluene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
trans-1,2-Dichloroethylene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
trans-1,3-Dichloropropylene	0.4	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Trichloroethylene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Trichlorofluoromethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Vinyl chloride	2	0.5	Ü	0.5	Ü	0.25		0.5	U	0.2	U	0.2	Ü
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Ecosystems Strategies, Inc.

ESI File: GH9964.44

All data in μg/L (parts per billion, ppb)	Sample ID	HM	IW-5	HM	W-5	HM	W-5	HM	W-5	HM	IW-5	HM	IW-5
U= Not Detected at or above indicated value	Sample Date	(2014	-07-22)	(2014-	-10-07)	(2015	-01-15)	(2015	-04-06)	(2015	-07-14)	(2016	-01-13)
Data above AWQS shown in Bold	Dilution Factor	1		1		1		1		1		1	
VOCs, 8260	AWQS	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1,2-Tetrachloroethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,1,1-Trichloroethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,1,2,2-Tetrachloroethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,1,2-Trichloro-1,2,2-trifluoroethane 1,1,2-Trichloroethane	5	0.5	U	0.5 0.5	U	0.5 0.5	U	0.5 0.5	U	0.2	U	0.2	U
1,1-Dichloroethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,1-Dichloroethylene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,1-Dichloropropylene	5	0.5	Ü	0.5	Ü	0.5	Ü	0.5	U	NA	Ť	NA	
1,2,3-Trichlorobenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2,3-Trichloropropane	0.04	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2,4-Trichlorobenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2,4-Trimethylbenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2-Dibromo-3-chloropropane	0.04	0.5	U	0.5	U	0.5	U	2	U	0.2	U	0.2	U
1,2-Dibromoethane	5	0.5	U	0.5 0.5	U	0.5 0.5	U	0.5 0.5	U	0.2	U	0.2	U
1,2-Dichlorobenzene 1,2-Dichloroethane	0.6	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2-Dichloropropane	1	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,3,5-Trimethylbenzene	5	0.5	Ü	0.5	Ü	0.5	U	0.5	U	0.2	Ü	0.2	U
1,3-Dichlorobenzene	3	0.5	Ü	0.5	Ü	0.5	Ü	0.5	Ü	0.2	Ü	0.2	Ü
1,3-Dichloropropane	5	0.5	U	0.5	U	0.5	U	0.5	U	NA		NA	
1,4-Dichlorobenzene	3	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,4-Dioxane	NE	NA		NA		NA		NA		40	U	40	U
2,2-Dichloropropane	5	0.5	U	0.5	U	0.5	U	0.5	U	NA		NA	
2-Butanone	50	0.5	U	0.5	U	0.5	U	2	U	0.2	U	0.2	U
2-Chlorotoluene	5	0.5	U	0.5	U	0.5	U	0.5	U	NA 0.2		NA 0.0	- ,,
2-Hexanone 4-Chlorotoluene	50 5	0.5	U	0.5 0.5	U	0.5 0.5	U	0.5	U	0.2 NA	U	0.2 NA	U
4-Chlorotoluerie 4-Methyl-2-pentanone	NA NA	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Acetone	50	1.3	J.B	2	U	2	U	1.5	J	1.9		2.6	Ŭ
Acrolein	5	NA	0,2	NA	- ŭ	NA	Ŭ	NA	Ť	0.2	U	0.2	U
Acrylonitrile	5	NA		NA		NA		NA		0.8	U	0.2	U
Benzene	1	2.7		1.4		0.61		1.1		1.9		1	
Bromobenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	NA		NA	
Bromochloromethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Bromodichloromethane	50	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Bromoform	50	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Bromomethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Carbon disulfide Carbon tetrachloride	NA 5	0.5	U	0.5 0.5	U	0.5 0.5	U	0.5 0.5	U	0.2	U	0.2	U
Chlorobenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Chloroethane	5	0.5	U	0.5	Ü	0.5	U	0.5	U	0.2	U	0.2	U
Chloroform	7	0.5	U	0.5	Ü	0.5	U	0.5	U	0.2	Ü	0.2	Ü
Chloromethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
cis-1,2-Dichloroethylene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
cis-1,3-Dichloropropylene	0.4	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Cyclohexane	NE	NA		NA		NA		NA		0.2	U	0.2	U
Dibromochloromethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Dibromomethane Dichlorodifluoromethane	5 5	0.5	U	0.5 0.5	U	0.5 0.5	U	0.5	U	0.2	U	0.2	U
Ethyl Benzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Hexachlorobutadiene	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Isopropylbenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Methyl acetate	NE	NA		NA		NA	NA	NA		0.2	Ü	0.2	Ü
Methyl tert-butyl ether (MTBE)	10	6.7		2		9.6		9.9		5.3		7.4	
Methylcyclohexane	NE	NA		NA		NA		NA		0.2	U	0.2	U
Methylene chloride	5	2	U	2	U	1.1		4		1	U	1	U
Naphthalene	10	2	U	2	U	2	U	2	U	NA		NA	
n-Butylbenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
n-Propylbenzene o-Xvlene	5	0.5	U	0.5 0.5	U	0.5 0.5	U	0.5	U	0.2	U	0.2	U
p- & m- Xylenes	5 5	0.5 1	U	1	U	1	U	0.5 1	U	0.2 0.5	U	0.2	U
p- & III- Ayleries p-Isopropyltoluene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Styrene	5	0.5	Ü	0.5	Ü	0.5	Ü	0.5	U	0.2	Ü	0.2	Ü
tert-Butyl alcohol (TBA)	NE	NA		NA		NA		NA		15		15	
tert-Butylbenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Tetrachloroethylene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Toluene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
trans-1,2-Dichloroethylene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
trans-1,3-Dichloropropylene	0.4	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Trichloroethylene Trichlorofluoromethane	5 5	0.5	U	0.5 0.5	U	0.5 0.5	U	0.5 0.5	U	0.2	U	0.2	U
Vinyl chloride	2	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
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Ecosystems Strategies, Inc.

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ll data in μg/L (parts per billion, ppb)	Sample ID	HM	IW-6	HM	W-6	НМ	W-6	НМ	W-6	НМ	IW-6	HM	IW-6
= Not Detected at or above indicated value	Sample Date		-07-22)		-10-02)		-01-15)		-04-06)		-07-14)		-01-13)
ata above AWQS shown in Bold	Dilution Factor	1		1	,	1	,	1		1		1	
VOCs, 8260	AWQS	D#	Qualifier	D#	0	Descrit	0	December	0	D#	Qualifier		1
1,1,1,2-Tetrachloroethane	5 AWQ5	Result 0.5	U	Result 0.5	Qualifier U	Result 0.5	Qualifier U	Result 0.5	Qualifier U	Result 0.2	U	Result 0.2	Qualifie. U
1,1,1-Trichloroethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,1,2,2-Tetrachloroethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,1,2-Trichloroethane	1	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,1-Dichloroethane	5	0.5	U	0.5	Ü	0.5	U	0.5	U	0.2	U	0.2	U
1,1-Dichloroethylene	5	0.5	Ü	0.5	Ü	0.5	Ü	0.5	Ü	0.2	U	0.2	Ü
1,1-Dichloropropylene	5	0.5	Ü	0.5	Ü	0.5	Ü	0.5	Ü	NA		NA	۲Ť
1,2,3-Trichlorobenzene	5	0.5	Ü	0.5	U	0.5	Ū	0.5	U	0.2	U	0.2	U
1.2.3-Trichloropropane	0.04	0.5	Ü	0.5	Ü	0.5	Ū	0.5	U	0.2	Ü	0.2	Ü
1,2,4-Trichlorobenzene	5	0.5	Ü	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2,4-Trimethylbenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2-Dibromo-3-chloropropane	0.04	0.5	U	0.5	U	0.5	U	2	U	0.2	U	0.2	U
1,2-Dibromoethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2-Dichlorobenzene	3	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2-Dichloroethane	0.6	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2-Dichloropropane	1	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,3,5-Trimethylbenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,3-Dichlorobenzene	3	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,3-Dichloropropane	5	0.5	U	0.5	U	0.5	U	0.5	U	NA		NA	
1,4-Dichlorobenzene	3	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,4-Dioxane	NE	NA		NA		NA		NA		40	U	40	U
2,2-Dichloropropane	5	0.5	U	0.5	U	0.5	U	0.5	U	NA		NA	
2-Butanone	50	0.5	U	0.5	U	0.5	U	2	U	0.2	U	0.2	U
2-Chlorotoluene	5	0.5	U	0.5	U	0.5	U	0.5	U	NA		NA	
2-Hexanone	50	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
4-Chlorotoluene	5	0.5	U	0.5	U	0.5	U	0.5	U	NA		NA	
4-Methyl-2-pentanone	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Acetone	50	1.4	J,B	1.4		2	U	2	U	1	U	2	J
Acrolein	5	NA		NA		NA		NA		0.8	U	0.2	U
Acrylonitrile	5	NA		NA		NA		NA		0.2	U	0.2	U
Benzene	1	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Bromobenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	NA		NA	
Bromochloromethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Bromodichloromethane	50	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Bromoform	50	0.5	U	0.5	U	0.5		0.5	U	0.2		0.2	U
Bromomethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Carbon disulfide	NA F		U	0.5	U		J U	0.5	U	0.2	U	0.2	U
Carbon tetrachloride	5 5	0.5	U	0.5	U	0.5 0.5	U	0.5	U	0.2	U	0.2	U
Chlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Chloroethane Chloroform	5 7	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Chloromethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
cis-1.2-Dichloroethylene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
cis-1,3-Dichloropropylene	0.4	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Cvclohexane	NE	NA		NA		NA		NA	Ŭ	0.35	J	0.87	⊢ Ŭ
Dibromochloromethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.33	U	0.07	U
Dibromomethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Dichlorodifluoromethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	Ü
Ethyl Benzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Hexachlorobutadiene	0.5	0.5	Ü	0.5	U	0.21	B,J	0.5	U	0.2	Ü	0.2	Ü
Isopropylbenzene	5	0.5	Ü	0.21	J	0.34	J	0.5	U	0.2	Ü	0.3	J
Methyl acetate	NE	NA		NA		NA		NA		0.2	Ü	0.2	U
Methyl tert-butyl ether (MTBE)	10	1.9		2.7		2.3		0.5	U	1.9		2.8	
Methylcyclohexane	NE	NA		NA		NA		NA		0.2	U	0.2	U
Methylene chloride	5	2	U	2	U	2	U	2	U	1	U	1	U
Naphthalene	10	2	U	2	U	2	Ü	2	U	NA		NA	
n-Butylbenzene	5	0.5	U	0.5	U	0.39	J,B	0.5	U	0.2	U	0.2	U
n-Propylbenzene	5	0.5	U	0.5	U	0.22	J	0.5	U	0.2	U	0.2	U
o-Xylene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
p- & m- Xylenes	5	1	U	1	U	1	U	1	U	0.5	U	0.5	U
p-Isopropyltoluene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
sec-Butylbenzene	5	0.5	U	0.31	J	0.77		0.5	U	0.2	U	0.68	
Styrene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
tert-Butyl alcohol (TBA)	NE	NA		NA	J	NA		NA		2.9		0.5	U
tert-Butylbenzene	5	0.32	J	0.32	J	0.39	J	0.5	U	0.25	J	0.41	J
Tetrachloroethylene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Toluene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
trans-1,2-Dichloroethylene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
trans-1,3-Dichloropropylene	0.4	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Trichloroethylene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Trichlorofluoromethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Vinyl chloride	2	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Xylenes, Total	5	1.5	U	1.5	U	1.5	U	1.5	U	0.6	U	0.6	U

Detected concentrations

Concentrations above AWQS

Ecosystems Strategies, Inc.

ESI File: GH9964.44

All data in μg/L (parts per billion, ppb)	Sample ID		N-7R		V-7R		N-7R		N-7R		W-7R		MW-7R)
U= Not Detected at or above indicated value	Sample Date	(2014	-07-22)	(2014-	-11-05)	(2015	-01-15)	(2015-	-04-06)	(2015	-07-14)	(2015	-07-14)
Data above AWQS shown in Bold	Dilution Factor	1		1		1		2		1	1	1	
VOCs, 8260	AWQS	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifie
1,1,1,2-Tetrachloroethane	5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
1,1,1-Trichloroethane	5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
1,1,2,2-Tetrachloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane	5 5	0.5	U	0.5	U	0.5 0.5	U	1	U	0.2	U	0.2	U
1,1,2-Trichloro-1,2,2-trifidoroethane	1	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
1,1-Dichloroethane	5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
1,1-Dichloroethylene	5	0.5	Ü	0.5	Ü	0.5	Ü	1	Ü	0.2	Ü	0.2	Ü
1,1-Dichloropropylene	5	0.5	U	0.5	U	0.5	U	1	U	NA		NA	
1,2,3-Trichlorobenzene	5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
1,2,3-Trichloropropane	0.04	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
1,2,4-Trichlorobenzene	5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
1,2,4-Trimethylbenzene	5	9.5		0.5	U	0.5	U	0.66		0.2	U	0.2	U
1,2-Dibromo-3-chloropropane	0.04	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
1,2-Dibromoethane 1,2-Dichlorobenzene	5 3	0.5	U	0.5 0.5	U	0.5 0.5	U	1	U	0.2	U	0.2	U
1,2-Dichloroethane	0.6	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
1,2-Dichloropropane	1	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
1,3,5-Trimethylbenzene	5	0.5	Ü	0.5	Ü	0.5	U	1	U	0.2	U	0.2	U
1,3-Dichlorobenzene	3	0.5	Ü	0.5	U	0.5	U	1	U	0.2	Ü	0.2	U
1,3-Dichloropropane	5	0.5	U	0.5	U	0.5	U	1	U	NA		NA	
1,4-Dichlorobenzene	3	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
1,4-Dioxane	NE	NA		NA		NA		NA		40	U	40	U
2,2-Dichloropropane	5	0.5	U	0.5	U	0.5	U	1	U	NA		NA	
2-Butanone	50	0.5	U	0.5	U	0.5	U	1	U	0.25	J	0.46	J
2-Chlorotoluene	5	0.5	U	0.5	U	0.5	U	1	U	NA		NA	
2-Hexanone	50	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
4-Chlorotoluene	5	0.5	U	0.5 0.5	U	0.5 0.5	U	1	U	0.2	U	NA 0.2	U
4-Methyl-2-pentanone Acetone	NA 50	2.4	В	1.3	Cal-E,CCV-E,	2	U	3.7	Cal-E,CCV-E,	3.3	U	3.5	U
Acrolein	5	NA	В	NA		NA	0	NA		0.8	U	0.8	U
Acrylonitrile	5	NA		NA		NA		NA		0.0	U	0.2	U
Benzene	1	0.5	U	0.5	U	0.5	U	1	U	0.2	Ü	0.2	Ü
Bromobenzene	5	0.5	U	0.5	Ü	0.5	U	1	U	NA		NA	Ü
Bromochloromethane	5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
Bromodichloromethane	50	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
Bromoform	50	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
Bromomethane	5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
Carbon disulfide	NA	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
Carbon tetrachloride	5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
Chlorobenzene	5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
Chloroethane Chloroform	5 7	0.5	U	0.5 0.5	U	0.5 0.5	U	1	U	0.2	U	0.2	U
Chloromethane	5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
cis-1,2-Dichloroethylene	5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
cis-1,3-Dichloropropylene	0.4	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
Cyclohexane	NE	NA	Ť	NA		NA		NA		7.2	, i	7.4	Ŭ
Dibromochloromethane	5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	ND	U
Dibromomethane	5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	ND	U
Dichlorodifluoromethane	5	0.5	U	0.5	Ü	0.5	Ü	1	Ü	0.33	J	0.3	J
Ethyl Benzene	5	0.5	U	0.5	U	0.5	U	1.2	В	0.2	U	0.2	U
Hexachlorobutadiene	0.5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
Isopropylbenzene	5	15		4.8		2.2		1.8		0.63	.,,	0.62	,.
Methyl acetate	NE 10	NA 4.5		NA 7.5		NA o a		NA 5.0		0.2	U	0.2	U
Methyl tert-butyl ether (MTBE) Methylcyclohexane	10 NE	4.5 NA		7.5 NA		8.3 NA		5.9 NA		8.6 2		8.7 2	-
Methylene chloride	NE 5	2 2	U	NA 2	U	NA 2	U	NA 4	U	1	U	1	U
Naphthalene	10	2	U	2	U	2	U	4	U	NA	"	NA	"
n-Butylbenzene	5	4.6	Ĭ	2.1	Ĭ	1.1	В	0.6	J,B	0.38	J	0.4	J
n-Propylbenzene	5	20		6.7		2.5		1.7	В	0.48	J	0.45	J
o-Xylene	5	0.5	U	0.26	J	0.28	J	0.7	J,B	0.28	J	0.28	J
p- & m- Xylenes	5	1	U	1	U	1	U	2.9	В	0.5	U	0.5	U
p-lsopropyltoluene	5	4.2		0.5	U	0.5	U	1	U	3.5		3.5	
sec-Butylbenzene	5	0.5	U	3		1.8		1.2	В	0.84		0.81	
Styrene	5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
tert-Butyl alcohol (TBA)	NE .	NA		NA		NA 0.7		NA		14		15	
tert-Butylbenzene	5	4.4	.,	3	.,	3.7		2.9	В	4.3	.,	4.3	,,
Tetrachloroethylene	5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
Toluene trans-1,2-Dichloroethylene	5	0.27	J U	0.5	U	0.5	U	0.4	J,B U	0.2	U	0.2	U
trans-1,2-Dichloroethylene trans-1,3-Dichloropropylene	5 0.4	0.5 0.5	U	0.5 0.5	U	0.5 0.5	U	1	U	0.2	U	0.2	U
Trichloroethylene	5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
Trichlorofluoromethane	5	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
Vinyl chloride	2	0.5	U	0.5	U	0.5	U	1	U	0.2	U	0.2	U
,	_	٠.٠		0.0		0.0				V		V	Ü

Ecosystems Strategies, Inc.

ESI File: GH9964.44

All data in μg/L (parts per billion, ppb)	Sample ID		N-7R		N-08		N-08		MW-08)		W-08		W-08
U= Not Detected at or above indicated value	Sample Date	(2016	-01-13)	(2014-	-07-22)	(2014-	-10-07)	(2014	-10-07)	(2015	-01-15)	(2015	-04-06)
Data above AWQS shown in Bold	Dilution Factor	1		1		1		1		1		1	
VOCs, 8260	AWQS	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifie
1,1,1,2-Tetrachloroethane	5	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	5	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane	5 5	0.2	U	0.5 0.5	U	0.5 0.5	U	0.5	U	0.5 0.5	U	0.5 0.5	U
1,1,2-Trichloroethane	1	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	5	0.2	U	1.6	0	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	5	0.2	Ü	0.34	J	0.27	J	0.22	CCV-E, J	0.5	Ü	0.22	J
1,1-Dichloropropylene	5	NA		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	5	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.04	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	5	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trimethylbenzene	5	0.2	U	0.41	J	0.5	U	0.5	U	0.5	U	0.53	В
1,2-Dibromo-3-chloropropane	0.04	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane 1,2-Dichlorobenzene	5 3	0.2	U	0.5 0.5	U	0.5 0.5	U	0.5 0.5	U	0.5 0.5	U	0.5 0.5	U
1,2-Dichloroethane	0.6	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	1	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3,5-Trimethylbenzene	5	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	3	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	Ü
1,3-Dichloropropane	5	NA		0.5	Ü	0.5	Ü	0.5	Ü	0.5	Ü	0.5	Ü
1,4-Dichlorobenzene	3	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane	NE	40	U	NA		NA		NA		NA		NA	
2,2-Dichloropropane	5	NA		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	50	0.2	U	1.3		0.5	U	0.5	U	0.5	U	0.5	U
2-Chlorotoluene	5	NA		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone	50	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Chlorotoluene	5	NA	- ,,	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	NA 50	0.2 2.8	U	0.5 2.1	U B	0.5 2	U	0.5	U	0.5 2	U	0.5 2.3	U CCV-E, CAL-
Acetone Acrolein	50 5	0.2	U	NA	В	NA	U	NA NA	U	NA	U	NA	CCV-E, CAL-
Acroleiti	5	0.2	U	NA NA		NA		NA NA	-	NA NA		NA NA	
Benzene	1	0.2	U	1.3		0.85		0.75		0.74		0.72	
Bromobenzene	5	NA	_ <u> </u>	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromochloromethane	5	0.2	U	0.5	Ü	0.5	U	0.5	U	0.5	Ü	0.5	Ü
Bromodichloromethane	50	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	50	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	5	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon disulfide	NA	0.2	U	0.3	J	0.5	U	0.5	U	0.49	J	0.5	U
Carbon tetrachloride	5	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	5	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	5	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform Chloromethane	7	0.2	U	0.5	U	0.5 0.5	U	0.5 0.5	U	0.5 0.5	U	0.5 0.5	U
cis-1,2-Dichloroethylene	5 5	0.2	U	6.1	U	4.2	U	3.9	CCV-E	3.8	U	4.4	U
cis-1,3-Dichloropropylene	0.4	0.2	U	0.5	U	0.5	U	0.5	U	0.5		0.5	U
Cyclohexane	NE	6.2	l –	NA		NA		NA	⊢ Ŭ	NA		NA	l
Dibromochloromethane	5	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	5	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	5	1.9		0.5	Ü	0.5	Ü	0.5	Ü	0.5	Ü	0.5	Ü
Ethyl Benzene	5	0.2	U	0.38	J	0.5	U	0.5	U	0.5	U	0.74	В
Hexachlorobutadiene	0.5	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	5	3.4	L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl acetate	NE 10	0.2	U	NA 0.22	,	NA 0.47	,	NA 0.44	001/ 5	NA 0.70		NA 0.4	ļ.,
Methyl tert-butyl ether (MTBE)	10 NE	6.8	-	0.23	J	0.47	J	0.44	CCV-E, J	0.76		0.4	J
Methylcyclohexane Methylene chloride	NE 5	1.2	U	NA 2	U	NA 2	U	NA 2	U	NA 4.4		NA 2	U
Naphthalene	10	NA NA		2	U	2	U	2	U	2	U	2	U
n-Butylbenzene	5	1.1		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	5	2.8		0.5	U	0.5	U	0.5	U	0.5	U	0.22	J, B
o-Xylene	5	0.25	J	0.5	Ü	0.5	U	0.5	U	0.5	Ü	0.36	J, B
p- & m- Xylenes	5	0.5	U	0.65	J	1	Ü	1	Ü	1	Ü	1.6	В
p-Isopropyltoluene	5	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	5	2		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	5	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butyl alcohol (TBA)	NE	12		NA		NA		NA		NA		NA	
tert-Butylbenzene	5	4.8		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	5	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	5	0.2	U	0.26	J	0.5	U	0.5	U	0.5	U	0.24	J,B
trans-1,2-Dichloroethylene	5	0.2	U	6.2	U	3.1	U	3	U	3.1 0.5	U	7.4 0.5	U
trans-1,3-Dichloropropylene Trichloroethylene	0.4 5	0.2	U	0.5 23	U	0.5 16	U	0.5 15	U	0.5 12	U	0.5 11	U
Trichlorofluoromethane	5	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	2	0.2	U	0.5	U	1	U	0.87		0.85	<u> </u>	1	
VIII VIII OI II OI IUC	_	٥.۷	U	0.0	J		I .	0.07		0.00	U	2	В

Detected concentrations

Concentrations above AWQS

Table 1: Post-Remediation - VOCs in Groundwater NYSDEC BCP Site ID: C344060

Ecosystems Strategies, Inc.

ESI File: GH9964.44

ll data in μg/L (parts per billion, ppb)	Sample ID	HM	W-08	HM	W-08	HMV	V-9R	HMV	N-9R	HM\	N-9R	HMV	W-9R
= Not Detected at or above indicated value	Sample Date	(2015	-07-14)	(2016	-01-13)	(2014-	-07-22)	(2014	-10-07)	(2015	-01-15)	(2015	-04-06)
ata above AWQS shown in Bold	Dilution Factor	1		1		1		1	·	1	·	1	
VOCs, 8260	AWQS	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifie
1,1,1,2-Tetrachloroethane	5	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	5	0.2	Ü	0.42	J	0.5	Ü	0.5	Ü	0.5	Ü	0.5	Ü
1,1,2,2-Tetrachloroethane	5	0.2	Ü	0.2	Ü	0.5	Ü	0.5	Ü	0.5	Ü	0.5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	0.2	U	0.2	U	0.5	Ū	0.5	Ü	0.5	Ü	0.5	U
1,1,2-Trichloroethane	1	0.2	Ü	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	5	0.2	Ü	5.7		0.5	Ü	0.5	Ü	0.5	Ū	0.5	U
1,1-Dichloroethylene	5	0.36	J	0.35	J	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropylene	5	NA		NA		0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	5	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.04	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	5	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trimethylbenzene	5	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-chloropropane	0.04	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	2	U
1,2-Dibromoethane	5	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	3	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.6	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	1	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3,5-Trimethylbenzene	5	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	3	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	5	NA		NA		0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	3	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane	NE	40	U	40	U	NA 0.5		NA 0.5	U	NA	L	NA	
2,2-Dichloropropane	5	NA		NA		0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	50	0.2	U	0.81	J	0.5	U	0.5	U	0.5	U	2	U
2-Chlorotoluene	5	NA		NA		0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone	50	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Chlorotoluene	5	NA 0.0		NA	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	NA 50	0.2 1.6	U J	0.2	U	0.5 1.1	U J,B	0.5 1.4	U	0.5 2	U	0.5 2	U
Acetone Acrolein	50	0.8	U	0.2	U	NA	J,B	NA		NA	U	NA	U
	5	0.8	U	0.2	U	NA NA		NA NA		NA NA		NA NA	-
Acrylonitrile Benzene	1	0.89	U	1.3	U	0.35	J,B	0.5	U	0.5	U	0.5	U
Bromobenzene	5	NA		NA		0.55	U U	0.5	U	0.5	U	0.5	U
Bromochloromethane	5	0.2	U	0.83		0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	50	0.2	U	0.03	J	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	50	0.2	U	0.2	Ü	0.5	U	0.5	U	0.5	Ü	0.5	Ü
Bromomethane	5	0.2	U	0.2	Ü	0.5	U	0.5	U	0.5	U	0.5	U
Carbon disulfide	NA NA	0.2	Ü	0.33	JB	0.5	Ü	0.5	Ü	0.5	Ü	0.5	Ü
Carbon tetrachloride	5	0.2	Ü	0.2	U	0.5	Ü	0.5	Ü	0.5	Ü	0.5	Ü
Chlorobenzene	5	0.2	Ü	0.2	Ü	0.5	Ü	0.5	Ü	0.5	Ü	0.5	Ü
Chloroethane	5	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	7	0.2	U	0.2	U	0.5	U	0.5	Ü	0.5	Ü	0.5	Ü
Chloromethane	5	0.2	Ü	0.2	U	0.5	U	0.5	U	0.5	Ū	0.5	U
cis-1,2-Dichloroethylene	5	7		14		0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropylene	0.4	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	NE	0.34	J	0.49	J	NA	U	NA		NA		NA	
Dibromochloromethane	5	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	5	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	5	0.2	U	0.74		0.5	U	0.5	U	0.5	U	0.5	U
Ethyl Benzene	5	0.2	U	0.3	J	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	5	0.2	U	0.2	U	0.43	J	0.86		0.74		0.73	
Methyl acetate	NE	0.2	U	2		NA		NA		NA		NA	
Methyl tert-butyl ether (MTBE)	10	0.72	U	1.2		0.9		0.75		1.1		0.59	
Methylcyclohexane	NE	0.2	U	0.2	U	NA		NA		NA		NA	
Methylene chloride	5	1	U	1	U	2	U	2	U	2	U	2.9	
Naphthalene	10	NA		NA		2	U	2	U	2	U	1.1	CCV-E, CA
n-Butylbenzene	5	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	5	0.2	U	0.2	U	0.5	U	0.33	J	0.25	J	0.5	U
o-Xylene	5	0.47	J	0.2	U	0.4	J	0.29	J	0.25	J	0.5	U
p- & m- Xylenes	5	0.5	U	0.5	U	1	U	1	U	1	U	1	U
p-Isopropyltoluene	5	0.2	U	0.2	U	3.6	,,	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	5	0.2	U	0.2	U	0.5	U	0.59	11	0.88	11	0.58	,,
Styrene	5 NE	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butyl alcohol (TBA)	NE E	1.6	J	1.7	J	NA 0.5	11	NA 2.0		NA 2.0		NA 1.4	_
tert-Butylbenzene	5	0.2	U	0.2	U	0.5	U	2.8	-	2.9	,,	1.4	
Tetrachloroethylene	5	0.2	U	0.2	U	0.5	U	0.5	,,	0.5	U	0.5	U
Toluene	5	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethylene	5	11	,,	22	,,	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropylene	0.4	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	5	9.5	,,	6.3	,,	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	5	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	2	1.3	— ,	4.3	,,	0.5	U	0.5	U	0.5	U	0.5	U
Xylenes, Total	5	0.79	J	0.6	U	1.5	U	1.5	U	1.5	U	1.5	1 (

Detected concentrations

Concentrations above AWQS

Ecosystems Strategies, Inc.

ESI File: GH9964.44

All data in μg/L (parts per billion, ppb)	Sample ID	DUP(H	MW-9R)	HMV	N-9R	HMV	N-9R	HMV	V-10R	HMV	V-10R	HMV	V-10R
U= Not Detected at or above indicated value	Sample Date	(2015	-04-06)	(2015-	-07-14)	(2016-	-01-13)	(2014	-07-22)	(2014	-10-07)	(2015	-01-15)
Data above AWQS shown in Bold	Dilution Factor	1		1		1		1		1		1	
VOCs, 8260	AWQS	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1,2-Tetrachloroethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane 1,1-Dichloroethane	5	0.5	U	0.2	U	0.2	U	0.5 0.5	U	0.5 0.5	U	0.5 0.5	U
1,1-Dichloroethylene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropylene	5	0.5	Ü	NA		NA		0.5	U	0.5	U	0.5	Ü
1,2,3-Trichlorobenzene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	Ü	0.5	Ü
1,2,3-Trichloropropane	0.04	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,2,4-Trimethylbenzene	5	0.5	U	0.2	U	0.2	U	4.6		0.5	U	0.5	U
1,2-Dibromo-3-chloropropane	0.04	2	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene 1,2-Dichloroethane	3	0.5 0.5	U	0.2	U	0.2	U	0.5	U	0.5 0.5	U	0.5 0.5	U
1,2-Dichloropropane	0.6	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,3,5-Trimethylbenzene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1.3-Dichlorobenzene	3	0.5	Ü	0.2	Ü	0.2	Ü	0.5	Ü	0.5	Ü	0.5	Ü
1,3-Dichloropropane	5	0.5	Ü	NA		NA		0.5	Ü	0.5	Ü	0.5	Ü
1,4-Dichlorobenzene	3	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane	NE	NA		40	U	40	U	NA		NA		NA	
2,2-Dichloropropane	5	0.5	U	NA		NA		0.5	U	0.5	U	0.5	U
2-Butanone	50	2	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
2-Chlorotoluene	5	0.5	U	NA		NA	ļ ,.	0.5	U	0.5	U	0.38	J
2-Hexanone	50	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
4-Chlorotoluene	5	0.5	U	NA 0.2	U	NA 0.2	U	0.5	U	0.5 0.5	U	0.5 0.5	U
4-Methyl-2-pentanone Acetone	NA 50	2.1	CAL-E, B	2.5	U	2.4	В	1.6	J,B	2	U	2	U
Acrolein	5	NA	CAL-L, B	0.8	U	0.2	U	NA	J,D	NA	0	NA	U
Acrylonitrile	5	NA		0.0	U	0.2	U	NA		NA		NA	
Benzene	1	0.5	U	0.2	Ü	0.2	Ü	0.5	U	0.5	U	0.5	U
Bromobenzene	5	0.5	U	NA		NA		0.5	U	0.5	Ü	0.5	U
Bromochloromethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	50	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Bromoform	50	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Bromomethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Carbon disulfide	NA	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Chloroethane Chloroform	5 7	0.5	U	0.2	U	0.2	U	0.5	J	0.5 0.5	U	0.5 0.5	U
Chloromethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropylene	0.4	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Cyclohexane	NE NE	NA		1.6		1.7		NA		NA		NA	
Dibromochloromethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Dibromomethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	5	0.5	U	0.2	U	0.84		0.5	U	0.5	U	0.5	U
Ethyl Benzene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	5	1.6		1		1		2.8		0.97		0.52	
Methyl acetate	NE 10	NA 6 9		0.2	U	0.2	U	NA 2		NA 1.6		NA 2	
Methyl tert-butyl ether (MTBE) Methylcyclohexane	10 NE	6.8 NA		0.94	U	1.5 0.26	J	3 NA	-	1.6 NA		3 NA	-
Methylene chloride	NE 5	NA 2	U	1	U	1	U	NA 2	U	NA 2	U	3.1	
Naphthalene	10	2.5	CAL-E	NA		NA	<u> </u>	1.6	J	2	U	2	U
n-Butylbenzene	5	0.68	J. 72 Z	0.2	U	0.2	U	2.2		0.91	T T	0.5	U
n-Propylbenzene	5	1.3		0.36	J	0.48	J	0.5	U	0.45		0.24	J
o-Xylene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
p- & m- Xylenes	5	0.5	J	0.5	U	0.5	U	1	U	1	U	1	U
p-Isopropyltoluene	5	0.5	U	3.7		0.2	U	2.2		0.5	U	0.5	U
sec-Butylbenzene	5	1.1		0.87		0.73		0.5	U	1.8		0.74	
Styrene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
tert-Butyl alcohol (TBA)	NE .	NA		2.4		3.2		NA		NA		NA 0.07	
tert-Butylbenzene	5	2.5	.,	3.8	.,	2.4		2	.,	1.7	.,	0.67	,,
Tetrachloroethylene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5 0.5	U	0.5 0.5	U
Toluene trans-1,2-Dichloroethylene	5 5	0.5	U	0.2	U	0.2	U	0.5 0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropylene	0.4	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	2	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Xylenes, Total	5	1.5	Ü	0.6	Ü	0.6	Ü	1.5	Ü	1.5	Ü	1.5	Ü

Ecosystems Strategies, Inc.

ESI File: GH9964.44

All data in μg/L (parts per billion, ppb)	Sample ID		V-10R		/-10R		<i>I</i> -10R		W-13		W-13		W-13
U= Not Detected at or above indicated value	Sample Date	(2015	-04-06)	(2015	-07-14)	(2016-	-01-13)	(2014	-07-22)	(2014	-10-07)	(2015	-01-15)
Data above AWQS shown in Bold	Dilution Factor	1		1		1		1		1		1	
VOCs, 8260	AWQS	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1,2-Tetrachloroethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-trifluoroethane 1,1,2-Trichloroethane	5	0.5	U	0.2	U	0.2 1.6	U	0.5 0.5	U	0.5 0.5	U	0.5 0.5	U
1,1-Dichloroethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropylene	5	0.5	Ü	NA	- ŭ	NA	Ŭ	0.5	U	0.5	Ü	0.5	Ü
1,2,3-Trichlorobenzene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.04	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,2,4-Trimethylbenzene	5	0.4	B,J	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-chloropropane	0.04	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	5	0.5	U	0.2	U	0.2	U	0.5 0.5	U	0.5 0.5	U	0.5 0.5	U
1,2-Dichlorobenzene 1,2-Dichloroethane	0.6	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	1	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,3,5-Trimethylbenzene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	3	0.5	Ü	0.2	Ü	0.2	Ü	0.5	Ü	0.5	Ü	0.5	Ü
1,3-Dichloropropane	5	0.5	U	NA		NA		0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	3	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane	NE	NA		40	U	40	U	NA		NA		NA	
2,2-Dichloropropane	5	0.5	U	NA	.,	NA 0.0	.,	0.5	U	0.5	U	0.5	U
2-Butanone	50	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
2-Chlorotoluene 2-Hexanone	5 50	0.5	U	NA 0.2	U	NA 0.2	U	0.5 0.5	U	0.5 0.5	U	0.5 0.5	U
4-Chlorotoluene	5	0.5	U	NA	0	NA	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	NA NA	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Acetone	50	1.7	CCV-E, CAL-E, J	1.8	J	1.5	JB	2	U	2	U	2.7	
Acrolein	5	NA		0.8	U	0.2	U	NA		NA		NA	
Acrylonitrile	5	NA		0.2	U	0.2	U	NA		NA		NA	
Benzene	1	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Bromobenzene	5	0.5	U	NA		NA		0.5	U	0.5	U	0.5	U
Bromochloromethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane Bromoform	50 50	0.5	U	0.2	U	0.2	U	0.5 0.5	U	0.5 0.5	U	0.5 0.5	U
Bromomethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Carbon disulfide	NA NA	0.5	U	0.2	Ü	0.2	Ü	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	5	0.5	U	0.2	Ü	0.2	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	5	0.5	U	0.2	U	0.2	U	27		12		7.8	
Chloroethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Chloroform	7	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Chloromethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropylene Cyclohexane	0.4 NE	0.5 NA	U	0.2 1.4	U	0.2 1.7	U	0.5 NA	-	0.5 NA	U	0.5 NA	-
Dibromochloromethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Dibromomethane	5	0.5	U	0.2	Ü	0.2	Ü	0.5	U	0.5	Ü	0.5	U
Dichlorodifluoromethane	5	0.5	Ü	0.2	Ü	0.2	Ü	0.5	Ü	0.5	Ü	0.5	U
Ethyl Benzene	5	0.65	В	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	5	1.1		0.48	J	0.68		0.5	U	0.5	U	0.5	U
Methyl acetate	NE 10	NA		0.2	U	0.2	U	NA		NA		NA 4.5	
Methyl tert-butyl ether (MTBE)	10	2.9		2.3	U	3.5 0.99		2.2		3.2		1.5 NA	-
Methylcyclohexane Methylene chloride	NE 5	NA 2	U	0.2	U	1	U	NA 2	U	NA 2	U	3.1	_
Naphthalene	10	2	U	NA		NA	U	2	U	2	U	2	U
n-Butylbenzene	5	0.64	В	0.34	J	0.58		0.5	U	0.5	Ü	0.5	U
n-Propylbenzene	5	1.3	В	0.64		0.69		0.5	U	0.5	Ü	0.5	Ü
o-Xylene	5	0.46	J,B	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
p- & m- Xylenes	5	1.6	В	0.5	U	0.5	U	1	U	1	U	1	U
p-Isopropyltoluene	5	0.5	U	0.66		0.2	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	5	1	В	0.6	.,	0.97		0.5	U	0.5	U	0.5	U
Styrene tert-Butyl alcohol (TBA)	5 NE	0.5 NA	U	0.2 3.4	U	0.2 5.8	U	0.5 NA	U	0.5 NA	U	0.5 NA	U
tert-Butyl alconol (TBA)	NE 5	0.97	В	0.83		1.2		0.5	U	0.5	U	0.5	U
Tetrachloroethylene	5	0.5	U	0.83	U	0.2	U	0.5	U	0.5	U	0.5	U
Toluene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethylene	5	0.5	Ü	0.2	Ü	0.2	Ü	0.5	U	0.5	Ü	0.5	U
trans-1,3-Dichloropropylene	0.4	0.5	Ü	0.2	Ü	0.2	Ü	0.5	Ü	0.5	Ü	0.5	Ü
Trichloroethylene	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	5	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	2	0.5	U	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Xylenes, Total	5	2.1	В	0.6	U	0.6	U	1.5	U	1.5	U	1.5	U

Ecosystems Strategies, Inc.

ESI File: GH9964.44

data in μg/L (parts per billion, ppb)	Sample ID		W-13		W-13		W-13	_ `	MW-13)		W-14		W-14
Not Detected at or above indicated value	Sample Date	(2015	-04-06)	(2015	-07-14)		-01-13)		-01-13)	(2014	-07-22)	(2016	-01-13)
ta above AWQS shown in Bold	Dilution Factor	1		1		1		1		1	1	1	1
VOCs, 8260	AWQS	Result	Qualifier	Result	Qualifier	Result	Qualifier			Result	Qualifier	Result	Qualifi
1,1,1,2-Tetrachloroethane	5	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
1,1,1-Trichloroethane	5	0.5	U	0.2	U	0.2	U	0.2	U	0.5 0.5	U	0.5 0.5	U
1,1,2,2-Tetrachloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane	5 5	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
1,1,2-Trichloroethane	1	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
1,1-Dichloroethane	5	0.5	Ü	0.2	Ü	0.2	Ü	0.2	Ü	0.5	Ü	0.5	Ü
1,1-Dichloroethylene	5	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
1,1-Dichloropropylene	5	0.5	U	NA		NA		NA		0.5	U	0.5	U
1,2,3-Trichlorobenzene	5	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.04	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene 1,2,4-Trimethylbenzene	5 5	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	J
1,2-Dibromo-3-chloropropane	0.04	2	U	0.2	U	0.2	U	0.2	U	0.43	U	0.5	U
1,2-Dibromoethane	5	0.5	Ü	0.2	Ü	0.2	Ü	0.2	Ü	0.5	U	0.5	U
1,2-Dichlorobenzene	3	0.5	Ü	0.2	Ü	0.2	Ü	0.2	Ü	0.5	Ü	0.5	Ü
1,2-Dichloroethane	0.6	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
1,2-Dichloropropane	1	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
1,3,5-Trimethylbenzene	5	0.5	U	0.2	U	0.2	U	0.2	U	0.3	J	0.24	J
1,3-Dichlorobenzene	3	0.5	U	0.2 NA	U	0.2 NA	U	0.2 NA	U	0.5 0.5	U	0.5 0.5	U
1,3-Dichloropropane 1,4-Dichlorobenzene	5 3	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
1,4-Dicriloroberizerie	NE	NA	J	40	U	40	U	40	U	NA	-	NA	1
2,2-Dichloropropane	5	0.5	U	NA	T T	NA		NA	Ĭ	0.5	U	0.5	U
2-Butanone	50	2	U	0.2	U	0.2	U	0.2	U	0.64		0.5	U
2-Chlorotoluene	5	0.5	U	NA		NA		NA		0.5	U	0.5	U
2-Hexanone	50	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
4-Chlorotoluene	5	0.5	U	NA 0.0	- ,,	NA 0.0	- , ,	NA 0.0		0.5	U	0.5	U
4-Methyl-2-pentanone Acetone	NA 50	0.5 2	U	0.2	U J	0.2 1.5	U JB	0.2 1.2	U JB	0.5 1.8	J,B	0.5 2	U
Acrolein	5	NA	0	0.2	U	0.2	U	0.2	U	NA	J,D	NA	0
Acrylonitrile	5	NA		0.2	U	0.2	U	0.2	U	NA		NA	
Benzene	1	0.5	U	0.2	Ü	0.2	Ü	0.2	Ü	0.96		0.26	J
Bromobenzene	5	0.5	U	NA		NA		NA		0.5	U	0.5	U
Bromochloromethane	5	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
Bromodichloromethane	50	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
Bromoform	50	0.5	U	0.2	U	0.2	U	0.2	U	0.5 0.5	U	0.5 0.5	U
Bromomethane Carbon disulfide	5 NA	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
Carbon tetrachloride	5	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
Chlorobenzene	5	12	Ů	17	- ŭ	17	Ů	17	Ů	0.5	Ü	0.5	Ü
Chloroethane	5	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
Chloroform	7	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
Chloromethane	5	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	5	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
cis-1,3-Dichloropropylene Cyclohexane	0.4 NE	0.5 NA	U	0.2	U	0.2	U	0.2	U	0.5 NA	U	0.5 NA	U
Dibromochloromethane	5	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
Dibromomethane	5	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
Dichlorodifluoromethane	5	0.5	Ü	0.2	Ü	0.2	Ü	0.2	Ü	0.5	Ü	0.5	Ü
Ethyl Benzene	5	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
Isopropylbenzene	5	0.5	U	0.2	U	0.2	U	0.2	U	9.5		5.8	
Methyl acetate	NE 10	NA 1.2		0.2	U	0.2	U	0.2	U	NA 5.2		NA 9.2	001/
Methyl tert-butyl ether (MTBE) Methylcyclohexane	10 NE	1.2 NA		1.4 0.2	U	1.9 0.2	U	1.9 0.2	U	5.3 NA		8.2 NA	CCV
Methylene chloride	5	1.7	J	1	U	1	U	1	U	2	U	2	U
Naphthalene	10	2	Ü	NA	T -	NA		NA		1.1	J	2	U
n-Butylbenzene	5	0.5	U	0.2	U	0.2	U	0.2	U	3.3		1.7	
n-Propylbenzene	5	0.5	U	0.2	U	0.2	U	0.2	U	10		5.1	
o-Xylene	5	0.5	U	0.2	U	0.2	U	0.2	U	0.63	L .	0.41	J
p- & m- Xylenes	5	1	U	0.5	U	0.5	U	0.5	U	0.63	J	0.67	J
p-Isopropyltoluene sec-Butylbenzene	5 5	0.5	U	0.2	U	0.2	U	0.2	U	2.6 0.5	U	0.5 3.2	U
Styrene	5	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
tert-Butyl alcohol (TBA)	NE NE	NA		4.5	١Ť	7.3		8.3		NA	T T	NA	۲
tert-Butylbenzene	5	0.5	U	0.2	U	0.2	U	0.2	U	1.9		1.1	U
Tetrachloroethylene	5	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
Toluene	5	0.5	U	0.2	U	0.2	U	0.2	U	0.32	J	0.5	L
trans-1,2-Dichloroethylene	5	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
trans-1,3-Dichloropropylene	0.4	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
Trichloroethylene Trichlorofluoromethane	5 5	0.5	U	0.2	U	0.2	U	0.2	U	0.5 0.5	U	0.5 0.5	U
Trichlorofluoromethane Vinyl chloride	2	0.5	U	0.2	U	0.2	U	0.2	U	0.5	U	0.5	U
Xylenes, Total	5	1.5	U	0.6	U	0.2	U	0.6	U	1.3	J	1.1	J

Table 1: Post-Remediation - VOCs in Groundwater NYSDEC BCP Site ID: C344060

Ecosystems Strategies, Inc.

ESI File: GH9964.44

ll data in μg/L (parts per billion, ppb)	Sample ID	HM	W-14	DUP(H	MW-14)	HM	N-14	HMV	W-14	HMV	N-14	RMV	N-2R
= Not Detected at or above indicated value	Sample Date		-01-15)	,	-01-15)		-04-06)		-07-14)		01-13)		-07-22)
ata above AWQS shown in Bold	Dilution Factor	(2010		1	01 10)	1	04 00)	1		1		1	
									I			<u> </u>	1
VOCs, 8260	AWQS	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifie
1,1,1,2-Tetrachloroethane	5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5 0.5	U
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane	5	0.5	U	0.5	U		U	0.2	U	0.2	U	0.5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	5 5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
1,1,2-Trichloroethane	1	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
1,1-Dichloroethane	5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
1,1-Dichloroethylene	5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.3	J
1,1-Dichloropropylene	5	0.5	U	0.5	U	0.5	U	NA	-	NA		0.5	U
1,2,3-Trichlorobenzene	5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
1.2.3-Trichloropropane	0.04	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
1,2,4-Trichlorobenzene	5	0.5	Ü	0.5	Ü	0.5	U	0.2	U	0.2	U	0.5	Ü
1,2,4-Trimethylbenzene	5	0.37	J	0.33	J	0.48	J,B	0.41	J	0.2	Ü	0.5	Ü
1,2-Dibromo-3-chloropropane	0.04	0.5	Ü	0.5	Ū	0.5	U	0.2	Ü	0.2	Ü	0.5	Ü
1,2-Dibromoethane	5	0.5	Ü	0.5	Ü	0.5	U	0.2	Ü	0.2	Ü	0.5	Ü
1,2-Dichlorobenzene	3	0.5	Ü	0.5	Ū	0.5	Ü	0.2	Ü	0.2	Ū	0.5	Ü
1,2-Dichloroethane	0.6	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
1,2-Dichloropropane	1	0.5	Ü	0.5	Ü	0.5	U	0.2	Ü	0.2	Ü	0.5	Ü
1,3,5-Trimethylbenzene	5	0.5	Ü	0.5	Ū	0.22	J,B	2.1		0.2	Ü	0.5	Ü
1,3-Dichlorobenzene	3	0.5	Ü	0.5	Ü	0.5	U	0.2	U	0.2	Ü	0.5	Ü
1,3-Dichloropropane	5	0.5	U	0.5	U	0.5	U	NA		NA		0.5	U
1,4-Dichlorobenzene	3	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
1,4-Dioxane	NE	NA		NA		NA		40	U	40	U	NA	
2,2-Dichloropropane	5	0.5	U	0.5	U	0.5	U	NA		NA		0.5	U
2-Butanone	50	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
2-Chlorotoluene	5	0.5	U	0.5	U	0.5	U	NA		NA		0.5	U
2-Hexanone	50	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
4-Chlorotoluene	5	0.5	U	0.5	U	0.5	U	NA		NA		0.5	U
4-Methyl-2-pentanone	NA	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
Acetone	50	2	U	2	U	1.4	CCV-E, CAL-E, J	3.2		1.5	JB	17	В
Acrolein	5	NA		NA		NA		8.0	U	0.2	U	NA	
Acrylonitrile	5	NA		NA		NA		0.2	U	0.2	U	NA	
Benzene	1	0.33	J	0.35	J	0.51		0.35	J	0.2	U	0.31	J
Bromobenzene	5	0.5	U	0.5	U	0.5	U	NA		NA		0.5	U
Bromochloromethane	5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
Bromodichloromethane	50	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
Bromoform	50	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
Bromomethane	5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
Carbon disulfide	NA .	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
Carbon tetrachloride	5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
Chlorobenzene	5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5 0.5	U
Chloroethane Chloroform	5 7	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
Chloromethane	5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
cis-1.2-Dichloroethylene	5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
cis-1,3-Dichloropropylene	0.4	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	Ü
Cyclohexane	NE	NA		NA		NA		13	Ŭ	1.5	U	NA	
Dibromochloromethane	5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
Dibromomethane	5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
Dichlorodifluoromethane	5	0.5	U	0.5	U	0.5	U	0.84	۲	0.2	U	0.5	Ü
Ethyl Benzene	5	0.5	U	0.5	U	0.66	В	0.2	U	0.2	U	0.5	Ü
Hexachlorobutadiene	0.5	0.5	U	0.5	U	0.5	U	0.2	Ü	0.2	U	0.5	U
Isopropylbenzene	5	4.6		4.5		2.4		7.1		0.2	U	1.4	
Methyl acetate	NE	NA		NA		NA		0.2	U	0.2	U	NA	
Methyl tert-butyl ether (MTBE)	10	2.3		2.6		1.2		3.6		0.2	U	1.9	
Methylcyclohexane	NE	NA		NA		NA		8.2		0.84		NA	
Methylene chloride	5	2	U	2	U	2	U	1	U	1	U	2	U
Naphthalene	10	2	U	2	U	2	U	NA		NA		6.1	
n-Butylbenzene	5	0.87	В	0.87	В	0.44	J,B	1		0.2	U	0.9	
n-Propylbenzene	5	3.8		3.8		2.4	В	5.8		0.2	U	0.78	
o-Xylene	5	0.4	J	0.41	J	0.56	В	0.47		0.2	U	0.4	J
p- & m- Xylenes	5	0.61	J	0.59	J	1.9	В	0.5	U	0.5	U	1	U
p-Isopropyltoluene	5	0.5	U	0.5	U	0.5	U	2		0.2	U	0.93	
sec-Butylbenzene	5	1.9	L	1.9		0.97	В	2.6		0.2	U	2.9	
Styrene	5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
tert-Butyl alcohol (TBA)	NE	NA		NA		NA		2.3		0.5	U	NA	
tert-Butylbenzene	5	0.76	L	0.75		0.61	В	1.2		0.2	U	0.5	<u> </u>
Tetrachloroethylene	5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
Toluene	5	0.21	J	0.5	U	0.25	J,B	0.26	J	0.2	U	0.31	J
trans-1,2-Dichloroethylene	5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
trans-1,3-Dichloropropylene	0.4	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	
Trichloroethylene	5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
Trichlorofluoromethane	5	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
Vinyl chloride	2	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.5	U
Xylenes, Total	5	1	J	1	J	2.4	В	0.96	J	0.6	U	0.86	J

Table 1: Post-Remediation - VOCs in Groundwater NYSDEC BCP Site ID: C344060

Ecosystems Strategies, Inc.
ESI File: GH9964.44

All data in μg/L (parts per billion, ppb)	Sample ID	DUP(R	MW-2R)
U= Not Detected at or above indicated value	Sample Date		-07-22)
Data above AWQS shown in Bold	Dilution Factor	1	
VOCs, 8260	AWQS	Result	Qualifier
1,1,1,2-Tetrachloroethane	5	0.5	U
1,1,1-Trichloroethane	5	0.5	Ü
1,1,2,2-Tetrachloroethane	5	0.5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	0.5	U
1,1,2-Trichloroethane	1	0.5	U
1,1-Dichloroethane	5	0.5	U
1,1-Dichloroethylene	5	0.5	U
1,1-Dichloropropylene	5	0.5	U
1,2,3-Trichlorobenzene 1,2,3-Trichloropropane	5 0.04	0.5 0.5	U
1,2,4-Trichlorobenzene	5	0.5	U
1,2,4-Trimethylbenzene	5	0.5	U
1,2-Dibromo-3-chloropropane	0.04	0.5	Ü
1,2-Dibromoethane	5	0.5	U
1,2-Dichlorobenzene	3	0.5	U
1,2-Dichloroethane	0.6	0.5	U
1,2-Dichloropropane	1	0.5	U
1,3,5-Trimethylbenzene	5	0.5	U
1,3-Dichlorobenzene	3	0.5	U
1,3-Dichloropropane	5	0.5	U
1,4-Dichlorobenzene 1,4-Dioxane	3 NE	0.5 NA	U
2,2-Dichloropropane	5	0.5	U
2-Butanone	50	0.5	Ü
2-Chlorotoluene	5	0.5	U
2-Hexanone	50	0.5	U
4-Chlorotoluene	5	0.5	U
4-Methyl-2-pentanone	NA	0.5	U
Acetone	50	18	В
Acrolein	5	NA	
Acrylonitrile	5	NA 0.28	,
Benzene Bromobenzene	5	0.26	J U
Bromochloromethane	5	0.5	U
Bromodichloromethane	50	0.5	Ü
Bromoform	50	0.5	Ü
Bromomethane	5	0.5	U
Carbon disulfide	NA	0.5	U
Carbon tetrachloride	5	0.5	U
Chlorobenzene	5	0.5	U
Chloroethane	5	0.5	U
Chloroform	7	0.5	U
Chloromethane cis-1,2-Dichloroethylene	5	0.5	U
cis-1,3-Dichloropropylene	0.4	0.5	U
Cyclohexane	NE	NA	
Dibromochloromethane	5	0.5	U
Dibromomethane	5	0.5	U
Dichlorodifluoromethane	5	0.5	U
Ethyl Benzene	5	0.5	U
Hexachlorobutadiene	0.5	0.5	U
Isopropylbenzene	5	1.4	
Methyl actate	NE 10	NA 1.0	
Methyl tert-butyl ether (MTBE)	10 NE	1.8 NA	
Methylcyclohexane Methylene chloride	5 5	2	U
Naphthalene	10	6.3	0
n-Butylbenzene	5	0.82	
n-Propylbenzene	5	0.77	
o-Xylene	5	0.39	J
p- & m- Xylenes	5	1	U
p-IsopropyItoluene	5	0.91	
sec-Butylbenzene	5	0.5	U
Styrene	5	0.5	U
tert-Butyl alcohol (TBA)	NE .	NA 0.5	,,
tert-Butylbenzene	5	0.5	U
Tetrachloroethylene Toluene	5 5	0.5	J
trans-1,2-Dichloroethylene	5	0.5	U
trans-1,3-Dichloropropylene	0.4	0.5	U
Trichloroethylene	5	0.5	Ü
Trichlorofluoromethane	5	0.5	Ü
Vinyl chloride	2	0.5	U
Xylenes, Total	5	0.81	J

All data in μg/L (parts per billion, ppb)	Sample ID	Trip	Blank	Trip	Blank	Trip I
U= Not Detected at or above indicated value	Sample Date	(2014-	-07-22)	(2014	-10-07)	(2014-
Data above AWQS shown in Bold	Dilution Factor					
VOCs, 8260	AWQS	Result	Qualifier	Result	Qualifier	Result
1,1,1,2-Tetrachloroethane	5	0.5	U	0.5	U	0.5
1,1,1-Trichloroethane	5	0.5	Ü	0.5	Ü	0.5
1,1,2,2-Tetrachloroethane	5	0.5	U	0.5	U	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	5	0.5	Ü	0.5	Ü	0.5
1,1,2-Trichloroethane	1	0.5	U	0.5	Ū	0.5
1,1-Dichloroethane	5	0.5	Ū	0.5	Ū	0.5
1,1-Dichloroethylene	5	0.5	U	0.5	U	0.5
1,1-Dichloropropylene	5	0.5	U	0.5	Ū	0.5
1,2,3-Trichlorobenzene	5	0.5	U	0.5	U	0.5
1,2,3-Trichloropropane	0.04	0.5	U	0.5	U	0.5
1,2,4-Trichlorobenzene	5	0.5	U	0.5	Ū	0.5
1,2,4-Trimethylbenzene	5	0.5	U	0.5	U	0.5
1,2-Dibromo-3-chloropropane	0.04	0.5	U	0.5	U	0.5
1,2-Dibromoethane	5	0.5	U	0.5	Ü	0.5
1,2-Dichlorobenzene	3	0.5	Ü	0.5	Ü	0.5
1,2-Dichloroethane	0.6	0.5	U	0.5	Ū	0.5
1,2-Dichloropropane	1	0.5	Ū	0.5	Ū	0.5
1,3,5-Trimethylbenzene	5	0.5	Ü	0.5	Ü	0.5
1,3-Dichlorobenzene	3	0.5	U	0.5	Ū	0.5
1,3-Dichloropropane	5	0.5	Ū	0.5	U	0.5
1,4-Dichlorobenzene	3	0.5	Ü	0.5	Ü	0.5
1,4-Dioxane	NE	NA		NA		NA
2,2-Dichloropropane	5	0.5	U	0.5	U	0.5
2-Butanone	50	0.5	U	0.5	U	0.5
2-Chlorotoluene	5	0.5	U	0.5	U	0.5
2-Hexanone	50	0.5	U	0.5	U	0.5
4-Chlorotoluene	5	0.5	U	0.5	U	0.5
4-Methyl-2-pentanone	NA	0.5	U	0.5	U	0.5
Acetone	50	2	U	2	U	2
Acrolein	5	NA		NA		NA
Acrylonitrile	5	NA		NA		NA
Benzene	1	0.5	U	0.5	U	0.5
Bromobenzene	5	0.5	U	0.5	U	0.5
Bromochloromethane	5	0.5	U	0.5	U	0.5
Bromodichloromethane	50	0.5	U	0.5	U	0.5
Bromoform	50	0.5	U	0.5	U	0.5
Bromomethane	5	0.5	U	0.5	U	0.5
Carbon disulfide	NA	0.5	U	0.5	U	0.5
Carbon tetrachloride	5	0.5	U	0.5	U	0.5
Chlorobenzene	5	0.5	U	0.5	U	0.5
Chloroethane	5	0.5	U	0.5	U	0.5
Chloroform	7	0.5	U	0.5	U	1.4
Chloromethane	5	0.5	U	0.5	U	0.5
cis-1,2-Dichloroethylene	5	0.5	U	0.5	U	0.5
cis-1,3-Dichloropropylene	0.4	0.5	U	0.5	U	0.5
Cyclohexane	NE	NA		NA		NA
Dibromochloromethane	5	0.5	U	0.5	U	0.5
Dibromomethane	5	0.5	U	0.5	U	0.5
Dichlorodifluoromethane	5	0.5	U	0.5	U	0.5
Ethyl Benzene	5	0.5	U	0.5	U	0.5

Hexachlorobutadiene	0.5	0.5	U	0.5	U	0.5
Isopropylbenzene	5	0.5	U	0.5	U	0.5
Methyl acetate	NE	NA		NA		NA
Methyl tert-butyl ether (MTBE)	10	0.5	U	0.5	U	0.5
Methylcyclohexane	NE	NA		NA		NA
Methylene chloride	5	2	U	2	U	2
Naphthalene	10	2	U	2	U	2
n-Butylbenzene	5	0.5	U	0.5	U	0.5
n-Propylbenzene	5	0.5	U	0.5	U	0.5
o-Xylene	5	0.5	U	0.5	U	0.5
p- & m- Xylenes	5	1	U	1	U	1
p-Isopropyltoluene	5	0.5	U	0.5	U	0.5
sec-Butylbenzene	5	0.5	U	0.5	U	0.5
Styrene	5	0.5	U	0.5	U	0.5
tert-Butyl alcohol (TBA)	NE	NA		NA		NA
tert-Butylbenzene	5	0.5	U	0.5	U	0.5
Tetrachloroethylene	5	0.5	U	0.5	U	0.5
Toluene	5	0.5	U	0.5	U	0.5
trans-1,2-Dichloroethylene	5	0.5	U	0.5	U	0.5
trans-1,3-Dichloropropylene	0.4	0.5	U	0.5	U	0.5
Trichloroethylene	5	0.5	U	0.5	U	0.5
Trichlorofluoromethane	5	0.5	U	0.5	U	0.5
Vinyl chloride	2	0.5	U	0.5	U	0.5
Xylenes, Total	5	1.5	U	1.5	U	1.5

Detected concentrations

Concentrations above AWQS

3lank	Trip	Blank	Trip l	Blank	Trip	Blank	TB-20	160113
11-05)		-1-15)		04-06)		-07-22)		01-13)
11 00)	(2010	1 10)	(2010	0.00)	(2010	0. 22)	1	01 10)
Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	Ü	0.5	Ü	NA		NA	
U	0.5	Ü	0.5	U	0.2	U	0.2	U
U	0.5	Ü	0.5	Ü	0.2	U	0.2	U
U	0.5	Ü	0.5	Ü	0.2	U	0.2	U
U	0.5	Ü	0.5	Ü	0.2	Ü	0.2	Ü
U	0.5	U	2	U	0.2	U	0.2	U
U	0.5	Ü	0.5	Ü	0.2	U	0.2	U
U	0.5	Ü	0.5	Ü	0.2	Ü	0.2	Ü
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	Ū	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	NA		NA	
U	0.5	U	0.5	U	0.2	U	0.2	U
	NA		NA		40	U	40	U
U	0.5	U	0.5	U	NA		NA	
U	0.5	U	2	U	0.2	U	0.2	U
U	0.5	U	0.5	U	NA		NA	
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	NA		NA	
U	0.5	U	0.5	U	0.2	U	0.2	U
U	2	U	1.4	CAL-E, J	1	U	2.9	В
	NA		NA		0.8	U	0.2	U
	NA		NA		0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	NA		NA	
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
11	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5 0.5	U	0.5 0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
	NA	U	NA	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U

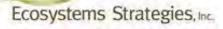
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
	NA		NA		0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
	NA		NA		0.2	U	0.2	U
U	1.9	J	1.5	J	1	U	1	U
U	2	U	2	U	NA		NA	
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.5	U	0.2	U
U	1	U	1	U	0.2	U	0.5	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
	NA		NA		1	U	1.3	J
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	0.5	U	0.5	U	0.2	U	0.2	U
U	1.5	U	1.5	U	0.6	U	0.6	U

Table 2: Post-Remediation - SVOCs in Groundwater

All data in µg/L

Guidance: NYSDEC TOGS 1.1.1

Elevated concentrations in **Bold and Yellow**



GH9964.50 July 2015

		HMW-3R		
SVOCs	Guidance	(2014-11-05)		
(USEPA Method 8270)	Level	Result	Flag	RL
2-Methylnaphthalene	NE	ND		5.00
Acenaphthene	20	ND		0.0500
Acenaphthylene	NE	ND		0.0500
Anthracene	50	ND		0.0500
Benzo(a)anthracene	0.002	ND		0.0500
Benzo(a)pyrene	NE	ND		0.0500
Benzo(b)fluoranthene	0.002	ND		0.0500
Benzo(g,h,i)perylene	NE	ND		0.0500
Benzo(k)fluoranthene	0.002	ND		0.0500
Chrysene	0.002	ND		0.0500
Dibenzo(a,h)anthracene	NE	ND		0.0500
Fluoranthene	50	ND		0.0500
Fluorene	50	ND		0.0500
Indeno(1,2,3-cd)pyrene	0.002	ND		0.0500
Naphthalene	10	ND		0.0500
Phenanthrene	50	ND		0.0500
Pyrene	50	ND		0.0500



Table 3: Pre-Remediation - VOCs in Groundwater

												Sam	ple Identifi	cation										
	Regulatory Criteria/ Guidance Level µq/L	_	HMW-2	-	HMW-4	Ξ	HMW-5	+	- 1-		_ -	_ -	4	ŀ	ŀ	⋟⊢	_ -	- 1-	4	:	f			
		2007	2007	2007	2007	2007	Oct-2013	2007	2012 Ja	Jan-2013 Ap	Apr-2013 Jul-3	Jul-2013 Oct-2013	2013 2007	7 2012	2 Jan-2013	3 Apr-2013	3 Jul-2013	3 Oct-2013	7	2012	Jan-2013	Apr-2013	Jul-2013	Oct-2013
1,1,1,2-Tetrachloroethane	2	9 9	2	2 2	2 2	2 2	2 2	2	9 9	9 9	+	+	+	+	+	9 9	9 9	9 9	2 2	2 2	2 2	2 2	2	9 9
1,1,1-Iricnioroetnane	o u	2 9	2 2	2 9	2 2	2 2	2 9	2	2 2	2 2	+	+	$^{+}$	+	+	2 2	2 9	2 2	2 2	2 2	2 2	2 2	2 2	2 2
1 1 2-Trichloro-1 2 2-trifluoroethene	חני	2 9	2 2	2 9	2 2	2 2	2 9	2 2	2 2	2 2	+	+	+	+	+	2 2	2 2	2 2	2 2	2 2	2 2	Q Q	2 2	2 2
1,1,2-Trichloroethane	, -	2	Q	2	2	2	2	Q.	9	Q.	+	N QN	+	Q Q	+	9	9	9	2	2	2	Q	9	Q
1,1-Dichloroethane	5	QN	ΩN	QN	ΟN	QN	QN	ND	QN	QN	Н	Н	Н	Н	Н	Q	Q	Q	QN	ΩN	ND	QN	QN	QN
1,1-Dichloroethylene	c ı	9 9	2	2 :	2	2 :	2 :	2	2 5	9 5	+	+	+	+	+	2 2	9 9	2 9	2	2 2	2 5	2 5	9 9	2 5
1,1-Dichloropropylene	o u	2 9	2 2	2 9	2 2	2 2	2 9	2 2	2 2	2 2	+	+	$^{+}$	+	+	2 2	2 9	2 2	2 2	2 2	2 2	2 2	2 2	2 2
1,2,3-1richloropenzene	0.04	2 9	2 2	2 2	2 2	2 2	2 2	2 2	2 9	2 2				+	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2
1,2,3-Trimethylbenzene	5	9	2	2	2	2	2	9	2	Q.	<u> </u>	N ON	+	2	<u> </u>	9	9	9	2	Q	2	Q	9	Q
1,2,4-Trichlorobenzene	2	Q	Q	2	Q	Q	2	Q	Q	QN	-	-		H	L	Q	Q	Q	R	QN	QN	QN	Q	QN
1,2,4-Trimethylbenzene	5	Q	QN	QN	QN	QN	QN	QN	QN	QN			Н	H		QN	QN	Q	0.8 J	QN	QN	QN	QN	QN
1,2-Dibromo-3-chloropropane	0.04	QN	QN	QV	QN	QN	Q	QN	QN	QN	Н	Н	Н	Н	Н	Q	QV	Q	QN	QN	QN	QN	Q	QN
1,2-Dibromoethane	5	QN	ΔN	QN	QN	QN	QN	ND	QN	QN	N ON	ND ON	ON O	ON	ON	Q	Q	Q	QN	QN	QN	QN	QN	QN
1,2-Dichlorobenzene	e ;	9 !	2	2	2	2	2	2	2 5	Q :	+	+	\dashv	\dashv	-	2	9	2	2	2	2	Q :	9	2
1,2-Dichloroethane	9.0	2 2	2	2 2	2	2	2 2	2	2	2	+	+	+	+	+	2 2	2	2	19	2	Q S	QN .	2	
trans 1.2-Dichloroethylene	n 4	2 2	2 2	2 9	2	2	2 9	2	2 9		ł	+	$^{+}$	+	+	2 2	2 2	2 2	2 2	2	4.4	CO.Z	0.7	1.0 /
trans-1,z-Dichioroetnylene	חים	2 9	2 2	2 9	2 2	2 2	2 9		2 2	2 2	+	+	+	+		2	2 2	2 2	2 2	2 2	2 0	Q Q	4.0	C CN
1.2-Dichloropropane	o -	2 2	S	2 2	2 2	2 2	2 2	2 2	2 2	2 2	ł	ł	+	+	ł	2	9 9	2 2	2 2	2 2	2	Q Q	2 2	2 2
1.3.5-Trimethylbenzene	. 2	9	2	9	2	2	2	Q	2	9	<u> </u>	ł	ł	╁	+	2	9	2	ł	Q	2	Q	9	2
1,3-Dichlorobenzene	o eo	9	Q	2	2	2	2	2	2	Q.	H	t	H	H	ŀ	9	9	9	ł	Q	2	Q	9	2
1,3-Dichloropropane	2	9	Q	2	Q	Q	₽	QV	Q	Q		H		H		Q	Q	9		QV	QN	QN	Q	Q
1,4-Dichlorobenzene	3	Q	QN	Q	QN	QV	Q	QN	Q	Q	N ON	ND ON	H	QN C	QN C	R	Q	Q		QN	Q	QN	Q	QN
1-Chlorohexane	5	QN	QN	QV	QN	QN	QV	QN	QN	QN	Н	Н	Н	Н	H	Q	Q	Q	QN	QN	QN	QN	Q	QN
2,2-Dichloropropane	5	Q	QN	Q	QN	QN	Q	QN	Q	Q		Н	\dashv	Н		Q	Q	Q		QN	QN	QN	QN	QN
2-Butanone	20	2	Q	2	Q	2	Q	9	2	Q.	Q.	Q		2	2	8.2 J	2	₽!		Q	2	Q	Q	2
2-Chlorotoluene	5 .	2 2	2	2 2	2	2	2 2	2	2 2	2	+	+	+	+	+	2	2	2	+	2	2	ON C	2	2
4-chlorotoluene	0 2	2 9	2 2	2 9	2	2	2 9	2	2 2	2 2		+		+	+	75	N - V	2 2	2 2	12 CT	2 2	ND V	- C &	2 2
Renzene	30	2 9	2 2	2 2	2 2	0.62	2 9	2 2	2 2	2 2	1	, .	+	+	-	Z CN	- S	2 2	-	10.1	2 2	CC.	C Z C	2 2
Bromobenzene	- 22	2 2	S	2 2	2 2	ND CN	2 2	2 2	2 2	2 2	+	$^{+}$	$^{+}$	+	+	2	9	2 2	+	GN	2	2 2	9	2 2
Bromochloromethane	2 0	9	2	9	9	9	2	9	2	9	ł	N ON	2 2	ł	2	9	9	9	2	Q	2	2	9	2
Bromodichloromethane	50	9	Q	2	Q	2	2	Q	2	Q	+	t	H	ł	ŀ	Q	9	9	H	QV	QV	QN	Q	Q
Bromoform	50	QN	ND	QN	QN	QN	QN	QN	QN	QN	H	H	H	H	L	Q	Q	Q	QN	QN	QN	QN	QN	QN
Bromomethane	5	QN	ND	QN	QN	QN	QN	ΩN	QN	ND		ND ON	ON O	ON O	_	QN	QN	QN	QN	ND	QN	ND	QN	QN
Carbon tetrachloride	5	Q	QN	Q	QN	QN	Q	QN	Q	QN		H	\dashv			QN	Q	Q	QN	QN	QN	QN	QN	QN
Chlorobenzene	2	9	2	2	2	2	2	2	2	2	1	+	+	\dashv	_	2	2	2	1	2	2	2	2	2
Chloroethane	1 2	9 9	2	2 5	2 5	2 5	2 9	2	2 2	9 9			2 2	2 2	2 2	2 2	2 2	2 9	+	2	2 2	Q Z	2 2	2 2
Chloromothan	~ ıt	2 9	2 2	2 9	2 2	2 2	2 9	2	2 2	2 2	+	t	+	+	+	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 9
Cis-1.3-Dichloropropylene	0.4	9	2	9	9	9	9	2	2 2	9	ł	t	H	╁	QN	2	9	2	+	6.2	9	2	9	2 2
Dibromochloromethane	5	9	Q	2	Q	2	2	Q	Q	Q	H	+	ł	+	ŀ	Q	9	9	ŀ	QV	QV	QN	Q	Q
Dibromomethane	5	Q	QN	Q	QN	QN	Q	QN	Q	Q	N ON	N Q	ON O	L	Ē	Q	Q	Q	QN	QN	QN	QN	Q	QN
Dichlorodifluoromethane	5	Q	QN	3.4 J	QN	QN	Q	Q	Q	QN	ND ON	N Q	\dashv	QN O	QN	Q	Q	Q	Q	QN	QN	QN	QN	QN
Ethylbenzene	5	2 2	2	2 2	2	2	2 2	2	2	2		2 2	+	+	+	2	2	2	$^{+}$	2	2	ON C	2	2
Isonronylbenzene	0.5	2 9	2 2	2 9	2 2	2 2	2 2	0.96.1	2 9	2 2	+			NO 2	+	33.	33.1	36.1	2 2	2 2	2 2	2 2	2 2	2 2
Methylene chloride	2	9	Q	2	2	2	2	QN	2	Q.	+	QN QN	+	H	H	Q	P	2	H	Q	2	Q	9	2
Methyl tert-butyl ether (MTBE)	10	QN	4.5 J	0.57J	0.41 J	23	15	11	3.2 J	QN	N DN	H	H	5.1	4.4 J	3.8 J	4.2 J	9.9		QN	QN	QN	QN	QN
Naphthalene	10	Q	QN	Q	QN	QN	Q	1.7 J	QN	QN	\dashv		\dashv		Н	Q	Q	Q	1.1 J	QN	QN	QN	QN	QN
n-Butylbenzene	2	2 2	2	2 2	2 2	2	2 2	2 2	2 2	2			z °	1.8		2 2	2 2	2 2	2 2	2 2	2	Q Q	2	2 9
Xvlenes (o.m.p)	ם ומ	2 2	Q Q	2 2	2 2	2 2	2 2	2 2	2 2	2 2	1			ON C	ON ON	2	2	2	13.1	2 2	2 2	20	2 2	2 2
p-Isopropyltoluene	2	9	Q	2	2	2	2	2	2	Q.	L	_		ł	.,	2	9	3.2 J	-	Q	2	Q	9	Q
sec-Butylbenzene	5	QN	ND	QN	QN	QN	QN	1.4 J	QN	QN	H	H	D 2.9	_	H	2.6 J	Q	3.3 J		QN	QN	QN	QN	QN
Styrene	5	9	Q	2	Q.	Q	2	9	2	Q.		N Q	_	Q.	\dashv	2	₽!	2	Q.	Q	2	Q.	2	2
tert-Butylbenzene	2	2 5	2	2 9	2 5	2 5	2 5	2 5	2 5	2 5	+	+	2	+	+	3.6 J	2 9	3.2 J	+	2 2	2	2	2 9	2 5
Toluene	22	2 9	2 2	2 2	0.68.	2 2	2 2	2 2	2 9	2 2	+	+	$^{+}$	+	+	2 2	2 2	2 2	C	2 2	2 2	2 2	2 2	2 2
trans-1,3-Dichloropropylene	0.4	Q	Q	2	P	Q	2	Q	Q	Q	-	-		H	H	R	Q	Q	H	2.7 J	Q	QN	Q	Q
Trichloroethylene	5	Q	QN	Q	QN	QN	Q	Q	Q	QN	Q .	QN QN	QN O	QN	QN	9	Q	2	H	40	25	27	46	23
Trichlorofluoromethane Vinyl chlorida	2	9 9	2	2 2	2 2	2	2 2	2 2	2 9	25	+	+	+	+	+	2 9	2 2	2 2	QN S		2	2 2	2 2	2 2
Notes:	7	N.	Š	Š	Š	Š	Ñ	Š	j -	-	1	1	1	1	┨	į	ة	į	+	2000	į	į	į	j

Regulatory Criteria/Guidance levels based on Title 6 NYCPR Part 703 Water Quality Standards or NYSDEC Division of Water TOGS 1.1.1 (June 1989) and subsequent NYSDEC Memoranda, as appropriate.

J. Data indicate the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.

B. Analysis is found in the associated analysis batch bank.

ND = NAD beneficial in the associated analysis batch bank.

ND = NAD beneficial in the associated analysis batch bank.

Blue shade indicates detectable concentrations.

Boll and yellow state indicates exceedance of applicable regulatory criteria.



Table 3 (cont'd): Pre-Remediation - VOCs in Groundwater

	Je jacita Cristal Incident																							
	Guidance Level µg/L	H	6-MMH	1	HMW-10		+	W-11		HW	W-12			HW			1	⋛┞	W-2				lank	
	:	2007	2012	2007	2012	May-2013		2012	2012	Jan-2013	Apr-2013	Jul-2013	Jan-2013	Apr-2013	3	Oct-2013	2007		May-2013	Jul-2013	Jan-2013	013	Jul-2013	Oct-2013
1,1,1,2-1etrachioroethane	n L	2	2 2	2 2	2 2	2 9	2 2	2	2	2 2	2 2		2	2 2	2 5	2	2	2 2	2	Q Q	2	2	2 2	2 2
1,1,1-1richioroetnane	o u	2 2	2 2	2 2	2 2	2 9	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	ON C	2 2	2 2	2 2	2 2
1.1.2,z-letrachloroethane	0 10	20	2 2	2 2	2 2	2 2	2 2	2 2	2 9	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	Q Q	2 2	2 2	22	2 2
1,1,2-Trichloroethane		Q	Q	2	Q	9	Q	Q	2	9	Q	QN	9	QN	Q	9	9	Q	Q	Q	Q	Q	Q	2
1,1-Dichloroethane	5	QN	QN	Q	QN	Q	Q	Q	Q	Q	QN	QN	QV	Q	Q	Q	Q	QN	QN	ΩN	QN	QN	QN	Q
1,1-Dichloroethylene	2	2	Q :	2	2	9	2	2	9	2	2	Q.	2	Q.	2	9	2	Q :	2	Q.	2	2	2	2
1,1-Dichloropropylene	י ט	2 2	2 2	2 9	2 2	2 9	2 2	2 2	2 9	2 9	2 5		2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 9
1.2.3-Trichloropropane	0.04	2 2	2	2	QV	2	2 2	2 9	9	2 2	2 2	Q	2 2	9	2 2	2 9	9	9	2 2	Q	2 2	2 2	2 2	2 2
1,2,3-Trimethylbenzene	5	ND	QN	Q	QN	Q	QN	Q	Q	Q	QN	ND	Q	Q	ND	Q	Q	QN	QN	ND	Q	QN	ND	Q
1,2,4-T richlor obenzene	5	QN	ΩN	QN	QN	Q	ΩN	Q	QN	QN	QN	ND	QN	QN	QN	QN	QN	ΩN	QN	ΩN	QN	QN	QN	QN
1,2,4-Trimethylbenzene	5	QN	QN	Q	QN	Q	QN	Q	Q	Q	QN	QN	QN	Q	Q	Q	Q	1.3 J	QN	QN	QN	QN	QN	QN
1,2-Dibromo-3-chloropropane	0.04	2	2	9 9	Q :	9 9	2	2	9	2 5	2	2	2	9 9	2 5	9 9	9	Q :	2	Q.	2	9	2	2
1,2-Dibromoethane	2	2	2	2 2		2 2	2 2	2 2	2 2	2 2	2		2 2	2 9	2 5	2 5	2 2	2 5	2 2	Q C	2 2	2 2	2 2	2 2
1,2-Dichlorosthans	3	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 9	2 5		2 2	2 2	2 2	2 2	2 2	2 2	2 2	Q Q	2 2	2 2	2 2	2 9
cis-1.2-Dichloroethylene	5. 2.	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	9 9	2 2	Q Q	2	9	2 2	2 2	2 2	2 2	2 2	Q Q	2 2	2 2	2	2 2
trans-1,2-Dichloroethylene	o 10	N S	Q.	2 2	2	2	2 2	2 9	2 9	2 2	2	Q.	9	Q.	2 2	2 9	9	9	2 2	Q.	2 2	2 2	S Q	2 2
1,2-Dichloroethylene (total)	2	Q	Q	2	Q	9	Q	9	2	Q	Q	QV	2	QN	Q	9	9	Q	Q	Q	Q	Q	ND ND	Q
1,2-Dichloropropane	- 1	QN.	QN.	2	QN.	2	Q .	2	2	Q :	QN.	QN	2	QN.	Q.	Q.	Q .	QN.	QN S	QN	QN S	QN S	QN.	Q S
1,3,5-1 rimethylbenzene	a c	2	2 2	2 2	2	2 5	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 5	2 2	2 5	J.3.J	2 2	2 2	2 2	2 2	2 2	2 5
1,3-Dichloropenzene	m u	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 5	2 2	2 2	2 2	2 2	2 2	ON C	2 2	2 2	2 2	2 2
1,3-Dichloropane	0 60	2 2	2 2	2 5	2 2	2 2	2 2	2 2	2 2	2 5	2 5	Q Q	2 5	2 2	2 2	2 2	2 2	2 2	2 2	Q Q	2 2	2 2	2 2	2 2
1-Chlorohexane	2	Q	Q	2	Q	2	2	2	9	2	Q	Q	2	9	Q	2	9	Q	2	Q	2	2	Q	2
2,2-Dichloro propane	5	ND	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	ND	QN
2-Butanone	50	QN	ΩN	QN	QN	Q	ΩN	Q	QN	QN	QN	ND	QN	QN	QN	QN	QN	ΩN	QN	ΩN	QN	QN	QN	QN
2-Chlorotoluene	5	QN	QN	Q	QN	Q	QN	Q	Q	Q	QN	QN	QN	QN	Q	Q	Q	QN	QN	QN	QN	QN	QN	QN
4-Chlorotoluene	ıc [2	2 :	2 :	2	2 9	2 :	2	9 9	2	Q C	2	2 5	2	2 5	2 :	9 9	2 :	9 9	Q :	2	2 5	2	2 5
Acetone	50	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 5		2 2	3.3 J	2 2	2 2	ON 22	ON D	ND 3	2 5	e CN	2 2	2 2	2 2
Bromobenzene	- 14	2 0	Q.	2	9	3.1 J.B	Q.	2	2 2	2	QN	QN	2	9	2 2	2 2	Q	QN	QN	QN C	2 2	4.8.J.B	2 2	2 2
Bromochloromethane	2	Q	Q	2	QV	Q	Q	2	9	Q	Q	QN	9	9	Q	Q	9	Q	5.7 B	2	Q	Q	Q	2
Bromodichloromethane	50	QN	QN	Q	QN	Q	QN	Q	QV	Q	QN	ND	QN	Q	QN	Q	QN	ΩN	QN	ΩN	QN	QN	QN	QN
Bromoform	50	ND	QN	QV	QN	Q	QN	Q	Q	QN	QN	QN	Q	QN	QN	QN	Q	QN	QV	QN	QN	QN	ND	QN
Bromomethane	ıc u	2	2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2		2 2	2	2 2	2 2	2	2	2 2	Q Q	2 2	2 2	2 2	2 2
Chlorobanzana	ח ער	2 9	2 2	2 2	2 2	2 9	2 2	2	2 2	2 2	2 2	2 2	4	18	18	24	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2
Chloroethane	o 10	2 2	Q.	2 2	2 2	2 2	2 0	2 2	2 2	2 2	2 02	QN	9	QN	Q.	Q Q	2 2	Q.	2 2	Q Q	2 2	2 2	2 0	2 2
Chloroform	7	ND	QN	Q	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	4.0 J	QN
Chloromethane	5	QN	QN	Q	QN	Q	Q	Q	Ω!	QN :	QN	QN	Q	QN	QN :	QN :	QN.	QN	QN :	QN	QN	QN	QN	Q.
Cis-1,3-Dichloropropylene	0.4	2 2	2	2 9	2	2 9	2 2	2 9	9 9	2 2	2 5	2	2 9	2 5	2 5	2 5	9 9	2	2 9	Q 2	2 5	2 2	2 5	2 5
Dibromomethane	o rc	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 9	2 2	2 2		2 2	2 2	2 2	2 2	2 2	Z C	2 2	O C	2 2	2 2	2 2	2 2
Dichlorodifluoromethane	2	Q	QV	2	Q	9	Q	9	2	Q	Q	QV	2	QN	Q	9	9	Q	Q	Q	Q	Q	ND ND	Q
Ethylbenzene	5	QN	QN	Q	QN	Q	Q	Q	Q	QN	QN	ND	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN
Hexachlorobutadiene	0.5	₽.	Q.	₽ 5	2	2	2	9	9	2	2	Q	9	2	2	9	₽;	Q .	2	Q.	2	2	2	2
Isopropylbenzene	so u	3.2 J	Q 2	13	2.7 J	2 2	5.1	2 2	2 2	2 2	2 2		2 2	2 2	2 2	2 2	4. 0	1.4 J	2 2	Q Q	2 2	2 2	2 2	2 2
Methyl tert-butyl ether (MTBE)	10	N O	Q	2.2 J	2.9 J	2	5.1	2 2	1.8.1	1.2 J	2	QV	9	2	2 2	3.0 J	3.8	3.8 J	3.7.1	L 4.4	2 2	2 2	N S	2
Naphthalene	10	ND	QN	0.81 J	Н	Q	QN	Q	QN	QN	QN	QN	QN	Q	QN	QN	QN	ND	QN	QN	QN	QN	ND	QN
n-Butylbenzene	2	QN	QN	2	QN.	2	Q.	Ω!	2	Q.	QN	QN	Q !	QN.	Ω.	Q.	Q.	QN.	QN .	QN	QN !	QN.	QN	Q.
n-Propylbenzene	ı, o	N C	2	2 c	2.4 J	2 9	2 2	2 2	2 2	2 2	2 2		2 2	2 9	2 2	2 2	2 2	2.4 J	3.0 J	Q Q	2 2	2 2	2 2	2 9
p-Isopropyltoliene	ט יט	2 2	20	QN ON	2 2	2	2 2	2 2	2 9	2 2	2 2	Q	2 2	20	2 2	2 2	2 2	2 2	2 2	20	2 2	2 2	2 2	2 2
sec-Butylbenzene	2	3.2 J	Q	7	2.7 J	2	Q	2	Q	2	Q	QN	9	Q	Q	9	Q	1.2 J	Q	Q	Q	2	Q	2
Styrene	5	QN	QN	Q	Н	Q	Q	Q	Q	Q	QN	QN	QV	Q	Q	Q	Q	QN	QN	ΩN	QN	QN	QN	Q
tert-Butylbenzene	ıc u	1.6 J	2	2.9 J	+	2 2	2	2 2	9 9	2 2	2 2	2	2	2	9 9	2 2	2	2	2 2	2	2 2	2 2	2	2 2
Toluene	0 10	2	2	2 2	22	2 2	2 2	2 2	2 9	2 2	2 2	Q	2 2	2 2	2 2	2 2	2 2	20	2 2	Q	2 2	2 2	20	2 2
trans-1,3-Dichloropropylene	0.4	ND	QN	Q	QN	Q	QN	Q	Q	Q	QN	ND	Q	QN	ND	Q	Q	QN	QN	QN	Q	QN	ND	Q
Trichloroethylene	2	QN	QN	2	QN	Q	QN	Ω!	Ω!	Q.	QN	QN	Q	₽!	Q.	Q	Q	QN	QN :	QN	QN	QN	QN	Q.
Trichlorofluoromethane Vinyl chloride	2	99	98	99	22	99	99	99	99	99	99	Q Q	99	99	99	99	99	22	99	Q Q	99	99	99	99
Notes:	4	į	į	į	į	ž.	į	į	j	3	1	į	į	į	j	į	į	1	}	}	j	j	į	į

Regulatory Criteria/Guidance levels based on Title 6 NYCRR Part 703 Water Quality Standards or NYSDEC Division of Water TOGS 1.1.1 (June 1999) and subsequent NYSDEC Memorands, as appropriate.

J. Data Indicate the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value. ND = NAV Detected

Blue shade indicates detectable concentrations.

Blue shade indicates detectable concentrations.

Blade and vegows whate indicates exceedance of applicable regulatory criteria.



Technical Report

prepared for:

Ecosystems Strategies, Inc.

24 Davis Avenue Poughkeepsie NY, 12603

Attention: Rosaura Andujar-McNeil

Report Date: 01/21/2016

Client Project ID: GH9964

York Project (SDG) No.: 16A0405

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

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Report Date: 01/21/2016 Client Project ID: GH9964 York Project (SDG) No.: 16A0405

Ecosystems Strategies, Inc.

24 Davis Avenue Poughkeepsie NY, 12603

Attention: Rosaura Andujar-McNeil

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 January 14, 2016 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 Notes 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 attachment to this report, and case narrative if applicable.

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

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

York Sample ID	Client Sample ID	<u>Matrix</u>	Date Collected	Date Received
16A0405-01	HMW-3R	Water	01/13/2016	01/14/2016
16A0405-02	HMW-5	Water	01/13/2016	01/14/2016
16A0405-03	HMW-6	Water	01/13/2016	01/14/2016
16A0405-04	HMW-7R	Water	01/13/2016	01/14/2016
16A0405-05	HMW-8	Water	01/13/2016	01/14/2016
16A0405-06	HMW-9R	Water	01/13/2016	01/14/2016
16A0405-07	HMW-10R	Water	01/13/2016	01/14/2016
16A0405-08	HMW-13	Water	01/13/2016	01/14/2016
16A0405-09	HMW-14	Water	01/13/2016	01/14/2016
16A0405-10	DUP-20160113	Water	01/13/2016	01/14/2016
16A0405-11	TB-20160113	Water	01/13/2016	01/14/2016

General Notes for York Project (SDG) No.: 16A0405

- 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 samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
- 6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
- 7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
- 8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By:

Belf

Date: 01/21/2016

Benjamin Gulizia Laboratory Director





Client Sample ID: HMW-3R York Sample ID: 16A0405-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received16A0405GH9964WaterJanuary 13, 2016 9:38 am01/14/2016

Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:

Sample Notes:

CAS No	o. 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,NE	01/19/2016 08:40 LAC-NY10854,NJDEI	01/19/2016 17:03	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 LAC-NY10854,NJDEI	01/19/2016 17:03	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 LAC-NY10854,NJDEI	01/19/2016 17:03	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,NE	01/19/2016 08:40 LAC-NY10854,NJDEI	01/19/2016 17:03	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 LAC-NY10854,NJDEI	01/19/2016 17:03	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 LAC-NY10854,NJDEI	01/19/2016 17:03	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 LAC-NY10854,NJDEI	01/19/2016 17:03	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/19/2016 08:40 10854,NJDEP	01/19/2016 17:03	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/19/2016 08:40 10854,NJDEP	01/19/2016 17:03	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/19/2016 08:40 10854,NJDEP	01/19/2016 17:03	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 LAC-NY10854,NJDEI	01/19/2016 17:03	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 LAC-NY10854,NJDEI	01/19/2016 17:03	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 LAC-NY10854,NJDEI	01/19/2016 17:03	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 LAC-NY10854,NJDEF	01/19/2016 17:03	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 LAC-NY10854,NJDEF	01/19/2016 17:03	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 LAC-NY10854,NJDEF	01/19/2016 17:03	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 LAC-NY10854,NJDEF	01/19/2016 17:03	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 LAC-NY10854,NJDEF	01/19/2016 17:03	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 LAC-NY10854,NJDEF	01/19/2016 17:03	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	160	1	EPA 8260C Certifications:	NELAC-NY	01/19/2016 08:40 10854,NJDEP	01/19/2016 17:03	SS
78-93-3	2-Butanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 LAC-NY10854,NJDEI	01/19/2016 17:03	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 LAC-NY10854,NJDEI	01/19/2016 17:03	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH NE	01/19/2016 08:40 LAC-NY10854,NJDEF	01/19/2016 17:03	SS

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Client Sample ID: HMW-3R

York Sample ID:

16A0405-01

York Project (SDG) No. 16A0405 Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u> January 13, 2016 9:38 am Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

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

CAS No	o. Parameter	Result	Flag Uni	Reported t LOD/MD		Dilution	Reference	Date/Time Date/Time e Method Prepared Analyzed	Analyst
67-64-1	Acetone	ND	ug/L	1.0	2.0	1	EPA 8260C Certifications:	01/19/2016 08:40 01/19/2016 17:03 CTDOH,NELAC-NY10854,NJDEP	SS
107-02-8	Acrolein	ND	ug/L	0.20	2.0	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
107-13-1	Acrylonitrile	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
71-43-2	Benzene	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
74-97-5	Bromochloromethane	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
75-27-4	Bromodichloromethane	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
75-25-2	Bromoform	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
74-83-9	Bromomethane	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
75-15-0	Carbon disulfide	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
56-23-5	Carbon tetrachloride	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
108-90-7	Chlorobenzene	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
75-00-3	Chloroethane	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
67-66-3	Chloroform	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
74-87-3	Chloromethane	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
156-59-2	cis-1,2-Dichloroethylene	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
10061-01-5	cis-1,3-Dichloropropylene	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
110-82-7	Cyclohexane	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
124-48-1	Dibromochloromethane	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
74-95-3	Dibromomethane	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
75-71-8	Dichlorodifluoromethane	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
100-41-4	Ethyl Benzene	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
87-68-3	Hexachlorobutadiene	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
98-82-8	Isopropylbenzene	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
79-20-9	Methyl acetate	ND	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
	DECEMBELL DOWE	STRATEORE	OT 00045			(202) 225 /		FAV (202) 257 0466	

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Log-in Notes:

Client Sample ID: HMW-3R **York Sample ID:**

16A0405-01

York Project (SDG) No. 16A0405

Client Project ID GH9964

Matrix Water

Collection Date/Time January 13, 2016 9:38 am

Sample Notes:

Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

460-00-4

Surrogate: p-Bromofluorobenzene

99.2 %

Sample Prepar	red by Method: EPA 5030B											
CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M		te/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	0.68		ug/L	0.20	0.50	1	EPA 8260C	01/19/	/2016 08:40	01/19/2016 17:03	SS
								Certifications:	CTDOH,NELAC-N	√Y10854,NJD	DEP	
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: N	01/19/ NELAC-NY10854,N	/2016 08:40 NJDEP	01/19/2016 17:03	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	01/19/ CTDOH,NELAC-N	/2016 08:40 Y10854,NJDI	01/19/2016 17:03 EP	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	01/19/ CTDOH,NELAC-N	/2016 08:40 Y10854,NJDI	01/19/2016 17:03 EP	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/ CTDOH,NELAC-N	/2016 08:40 Y10854,NJDI	01/19/2016 17:03 EP	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: N	01/19/ NELAC-NY10854	/2016 08:40	01/19/2016 17:03	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications:	01/19/ NELAC-NY10854	/2016 08:40	01/19/2016 17:03	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/ CTDOH,NELAC-N	/2016 08:40 Y10854,NJDI	01/19/2016 17:03 EP	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	01/19/ CTDOH,NELAC-N	/2016 08:40 Y10854,NJDI	01/19/2016 17:03 EP	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/ CTDOH,NELAC-N	/2016 08:40 Y10854,NJDI	01/19/2016 17:03 EP	SS
75-65-0	tert-Butyl alcohol (TBA)	1.8	J	ug/L	0.50	2.0	1	EPA 8260C Certifications:	01/19/ NELAC-NY10854,	/2016 08:40 ,NJDEP	01/19/2016 17:03	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	01/19/ CTDOH,NELAC-N	/2016 08:40 Y10854,NJD	01/19/2016 17:03 EP	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/ CTDOH,NELAC-N	/2016 08:40 Y10854,NJDI	01/19/2016 17:03 EP	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/ CTDOH,NELAC-N	/2016 08:40 Y10854,NJDI	01/19/2016 17:03 EP	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/ CTDOH,NELAC-N	/2016 08:40 Y10854,NJDI	01/19/2016 17:03 EP	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/ CTDOH,NELAC-N	/2016 08:40 Y10854,NJDI	01/19/2016 17:03 EP	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/ CTDOH,NELAC-N	/2016 08:40 Y10854,NJDI	01/19/2016 17:03 EP	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/ CTDOH,NELAC-N	/2016 08:40 Y10854,NJDI	01/19/2016 17:03 EP	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/ CTDOH,NELAC-N	/2016 08:40 Y10854,NJDI	01/19/2016 17:03 EP	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications:	01/19/ CTDOH,NJDEP	/2016 08:40	01/19/2016 17:03	SS
	Surrogate Recoveries	Result		Acc	eptance Rang	ge						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	94.6 %			69-130							
2037-26-5	Surrogate: Toluene-d8	101 %			81-117							

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79-122

FAX (203) 35<u>7-0166</u> Page 6 of 60



Client Sample ID: HMW-5 **York Sample ID:**

16A0405-02

York Project (SDG) No. 16A0405

Client Project ID GH9964

Matrix Water

Collection Date/Time January 13, 2016 11:24 am Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepare	ed by Method: EPA 5030B										
CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference I	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:	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36 EP	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36 EP	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36 EP	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:	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36 EP	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36 EP	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36 EP	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36 EP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 NELAC-NY10854,NJDEP	01/19/2016 17:36	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 NELAC-NY10854,NJDEP	01/19/2016 17:36	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 08:40 NELAC-NY10854,NJDEP	01/19/2016 17:36	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36 EP	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	2.0	1	EPA 8260C	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36 EP	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36 EP	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36 EP	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	160	1	EPA 8260C	01/19/2016 08:40 NELAC-NY10854,NJDEP	01/19/2016 17:36	SS
78-93-3	2-Butanone	ND		ug/L	0.20	2.0	1	EPA 8260C	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36 EP	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	2.0	1	EPA 8260C	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJE	01/19/2016 17:36	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 08:40 CTDOH,NELAC-NY10854,NJD	01/19/2016 17:36	SS
67-64-1	Acetone	2.6	CCV-E	g ug/L	1.0	2.0	1	EPA 8260C	01/19/2016 08:40	01/19/2016 17:36	SS
								Certifications:	CTDOH,NELAC-NY10854,NJI	DEP	

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Client Sample ID: HMW-5

York Sample ID:

16A0405-02

York Project (SDG) No. 16A0405

Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u> January 13, 2016 11:24 am Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

<u>Log-in Notes:</u>	Sample Notes:
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CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Date/Time Date/Time e Method Prepared Analyzed Ana	nalyst
107-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
71-43-2	Benzene	1.0		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 08:40	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP	
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/19/2016 17:36 S CTDOH,NELAC-NY10854,NJDEP	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/19/2016 17:36 S CTDOH,NELAC-NY10854,NJDEP	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/19/2016 17:36 S CTDOH,NELAC-NY10854,NJDEP	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/19/2016 17:36 S CTDOH,NELAC-NY10854,NJDEP	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40	SS

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Log-in Notes:

Client Sample ID: HMW-5 **York Sample ID:**

16A0405-02

York Project (SDG) No. 16A0405

Client Project ID GH9964

Matrix Water

Collection Date/Time January 13, 2016 11:24 am

Sample Notes:

Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

17060-07-0

2037-26-5

460-00-4

Surrogate: 1,2-Dichloroethane-d4

Surrogate: p-Bromofluorobenzene

Surrogate: Toluene-d8

	red by Method: EPA 5030B				Reported to					Date/Time	Date/Time	
CAS N	o. Parameter	Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference	Method	Prepared	Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	7.4		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 08:40	01/19/2016 17:36	SS
								Certifications:	CTDOH,N	ELAC-NY10854,NJD		
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 08:40 Y10854,NJDEP	01/19/2016 17:36	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 17:36 P	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 17:36 P	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 17:36 P	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 08:40 Y10854	01/19/2016 17:36	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 08:40 Y10854	01/19/2016 17:36	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 17:36 P	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 17:36 P	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 17:36 P	SS
75-65-0	tert-Butyl alcohol (TBA)	15		ug/L	0.50	2.0	1	EPA 8260C		01/19/2016 08:40	01/19/2016 17:36	SS
								Certifications:	NELAC-N	Y10854,NJDEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 17:36 P	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 17:36 P	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 17:36 P	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 17:36 P	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 17:36 P	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 17:36 P	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 17:36 P	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 17:36 P	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications:	CTDOH,N.	01/19/2016 08:40 IDEP	01/19/2016 17:36	SS
	Surrogate Recoveries	Result		Acc	eptance Rang	e						

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69-130

81-117

79-122

101 %

100 %

94.7 %

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Client Sample ID: HMW-6 **York Sample ID:**

16A0405-03

York Project (SDG) No. 16A0405

Client Project ID GH9964

Matrix Water

Collection Date/Time January 13, 2016 10:54 am Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample	Prepared	hv	Method:	$FP\Delta$	5030B	

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference		/Time pared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	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:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 NELAC-NY10854,NJI	016 08:40 DEP	01/19/2016 18:07	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 NELAC-NY10854,NJI	016 08:40 DEP	01/19/2016 18:07	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 NELAC-NY10854,NJI	016 08:40 DEP	01/19/2016 18:07	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	160	1	EPA 8260C Certifications:	01/19/20 NELAC-NY10854,NJI	016 08:40 DEP	01/19/2016 18:07	SS
78-93-3	2-Butanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY1	016 08:40 0854,NJDI	01/19/2016 18:07 EP	SS
67-64-1	Acetone	2.0	CCV-E,	ug/L	1.0	2.0	1	EPA 8260C Certifications:	01/19/20 CTDOH,NELAC-NY	16 08:40 10854.NJD	01/19/2016 18:07 EP	SS

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Client Sample ID: HMW-6 **York Sample ID:**

16A0405-03

York Project (SDG) No. 16A0405

Client Project ID GH9964

Matrix Water

Collection Date/Time January 13, 2016 10:54 am Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference		ate/Time Analyzed	Analyst
107-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 CTDOH,NELAC-NY10854,NJDEP	19/2016 18:07	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 CTDOH,NELAC-NY10854,NJDEP	19/2016 18:07	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 CTDOH,NELAC-NY10854,NJDEP	19/2016 18:07	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 NELAC-NY10854,NJDEP	19/2016 18:07	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 CTDOH,NELAC-NY10854,NJDEP	19/2016 18:07	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 CTDOH,NELAC-NY10854,NJDEP	19/2016 18:07	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 CTDOH,NELAC-NY10854,NJDEP	19/2016 18:07	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 CTDOH,NELAC-NY10854,NJDEP	19/2016 18:07	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 CTDOH,NELAC-NY10854,NJDEP	19/2016 18:07	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 CTDOH,NELAC-NY10854,NJDEP	19/2016 18:07	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 CTDOH,NELAC-NY10854,NJDEP	19/2016 18:07	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 CTDOH,NELAC-NY10854,NJDEP	19/2016 18:07	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 CTDOH,NELAC-NY10854,NJDEP	19/2016 18:07	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 CTDOH,NELAC-NY10854,NJDEP	19/2016 18:07	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 CTDOH,NELAC-NY10854,NJDEP	19/2016 18:07	SS
110-82-7	Cyclohexane	0.87		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 NELAC-NY10854,NJDEP	19/2016 18:07	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 CTDOH,NELAC-NY10854,NJDEP	19/2016 18:07	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 NELAC-NY10854,NJDEP	19/2016 18:07	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 NELAC-NY10854,NJDEP	19/2016 18:07	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 CTDOH,NELAC-NY10854,NJDEP	19/2016 18:07	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 NELAC-NY10854,NJDEP	19/2016 18:07	SS
98-82-8	Isopropylbenzene	0.30	J	ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 08:40 01/1 CTDOH,NELAC-NY10854,NJDEP	19/2016 18:07	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		19/2016 18:07	SS

FAX (203) 35<u>7-0166</u> 120 RESEARCH DRIVE STRATFORD, CT 06615 (203) 325-1371

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Client Sample ID: HMW-6 **York Sample ID:**

16A0405-03

York Project (SDG) No. 16A0405

Client Project ID GH9964

Matrix Water

Collection Date/Time January 13, 2016 10:54 am Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	1ethod	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	2.8		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 08:40	01/19/2016 18:07	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	Certifications: EPA 8260C	CTDOH,N	ELAC-NY10854,NJD 01/19/2016 08:40	01/19/2016 18:07	SS
				-					NELAC-NY	710854,NJDEP		
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 18:07 EP	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 18:07 EP	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 18:07 EP	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/19/2016 08:40	01/19/2016 18:07	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	NELAC-NY	01/19/2016 08:40	01/19/2016 18:07	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 18:07	SS
135-98-8	sec-Butylbenzene	0.68		ug/L	0.20	0.50	1	EPA 8260C	JIDOH,NI	01/19/2016 08:40	01/19/2016 18:07	SS
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	ЕP	
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 18:07 EP	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	2.0	1	EPA 8260C Certifications:	NELAC-NY	01/19/2016 08:40 /10854,NJDEP	01/19/2016 18:07	SS
98-06-6	tert-Butylbenzene	0.41	J	ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 08:40	01/19/2016 18:07	SS
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP	
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 18:07 EP	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 18:07 EP	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 18:07 EP	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: (CTDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 18:07 EP	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 18:07 EP	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 18:07 EP	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 18:07 EP	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications:	CTDOH,NJ	01/19/2016 08:40 DEP	01/19/2016 18:07	SS
	Surrogate Recoveries	Result		Acce	eptance Rang	e						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	98.2 %			69-130							
2037-26-5	Surrogate: Toluene-d8	101 %			81-117							
460-00-4	Surrogate: p-Bromofluorobenzene	99.6 %			79-122							

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Client Sample ID: HMW-7R

York Sample ID: 16A0405-04

York Project (SDG) No. 16A0405

Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u> January 13, 2016 12:48 pm Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

					Reported to				Date/Time	Date/Time	
CAS No	o. Parameter	Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference M		Analyzed	Analys
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/19/2016 08:40 0 TDOH,NELAC-NY10854,NJDEP	1/19/2016 18:38	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	01/19/2016 08:40 0 TDOH,NELAC-NY10854,NJDEP	1/19/2016 18:38	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	01/19/2016 08:40 0 TDOH,NELAC-NY10854,NJDEP	1/19/2016 18:38	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: C	01/19/2016 08:40 0 TDOH,NELAC-NY10854,NJDEP	1/19/2016 18:38	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	01/19/2016 08:40 0 FDOH,NELAC-NY10854,NJDEP	1/19/2016 18:38	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	01/19/2016 08:40 0 TDOH,NELAC-NY10854,NJDEP	1/19/2016 18:38	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/19/2016 08:40 0 TDOH,NELAC-NY10854,NJDEP	1/19/2016 18:38	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NI	01/19/2016 08:40 0 ELAC-NY10854,NJDEP	1/19/2016 18:38	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NI	01/19/2016 08:40 0 ELAC-NY10854,NJDEP	1/19/2016 18:38	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NI	01/19/2016 08:40 0 ELAC-NY10854,NJDEP	1/19/2016 18:38	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C1	01/19/2016 08:40 0 TDOH,NELAC-NY10854,NJDEP	1/19/2016 18:38	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: C1	01/19/2016 08:40 0 TDOH,NELAC-NY10854,NJDEP	1/19/2016 18:38	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	01/19/2016 08:40 0 TDOH,NELAC-NY10854,NJDEP	1/19/2016 18:38	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C1	01/19/2016 08:40 0 TDOH,NELAC-NY10854,NJDEP	1/19/2016 18:38	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	01/19/2016 08:40 0 TDOH,NELAC-NY10854,NJDEP	1/19/2016 18:38	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C1	01/19/2016 08:40 0 TDOH,NELAC-NY10854,NJDEP	1/19/2016 18:38	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C1	01/19/2016 08:40 0 TDOH,NELAC-NY10854,NJDEP	1/19/2016 18:38	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		1/19/2016 18:38	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		1/19/2016 18:38	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	160	1	EPA 8260C		1/19/2016 18:38	SS
78-93-3	2-Butanone	ND		ug/L	0.20	2.0	1	EPA 8260C		1/19/2016 18:38	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	2.0	1	EPA 8260C		1/19/2016 18:38	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 08:40 0	1/19/2016 18:38	SS
57-64-1	Acetone	2.8	CCV-E	E ug/L	1.0	2.0	1	Certifications: C1 EPA 8260C	TDOH,NELAC-NY10854,NJDEP 01/19/2016 08:40 0	1/19/2016 18:38	SS
								Certifications: C	TDOH,NELAC-NY10854,NJDEP		

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Log-in Notes:

Client Sample ID: HMW-7R **York Sample ID:** 16A0405-04

York Project (SDG) No. 16A0405

87-68-3

98-82-8

79-20-9

Hexachlorobutadiene

Isopropylbenzene

Methyl acetate

ND

ND

Client Project ID GH9964

Matrix Water

Certifications:

EPA 8260C

EPA 8260C

Certifications:

EPA 8260C Certifications:

Certifications:

0.50

0.50

0.50

Collection Date/Time January 13, 2016 12:48 pm

Sample Notes:

Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

CAS N	o. 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	2.0	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 18:38 P	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 18:38 P	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 18:38 P	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 08:40 Y10854,NJDEP	01/19/2016 18:38	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 18:38 P	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 18:38 P	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 18:38 P	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 18:38 P	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 18:38 P	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 18:38 P	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 18:38 P	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 18:38 P	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 18:38 P	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 18:38 P	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 18:38 P	SS
110-82-7	Cyclohexane	6.2		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 08:40 Y10854,NJDEP	01/19/2016 18:38	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 18:38 P	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 08:40 Y10854,NJDEP	01/19/2016 18:38	SS
75-71-8	Dichlorodifluoromethane	1.9		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 08:40 Y10854,NJDEP	01/19/2016 18:38	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 08:40	01/19/2016 18:38	SS

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0.20

0.20

0.20

ug/L

ug/L

ug/L

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CTDOH,NELAC-NY10854,NJDEP

CTDOH,NELAC-NY10854,NJDEP

NELAC-NY10854,NJDEP

NELAC-NY10854,NJDEP

01/19/2016 08:40

01/19/2016 18:38

SS

SS



Log-in Notes:

Client Sample ID: HMW-7R **York Sample ID:**

16A0405-04

York Project (SDG) No. 16A0405

Client Project ID GH9964

Matrix Water

Collection Date/Time January 13, 2016 12:48 pm

Sample Notes:

Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Surrogate: Toluene-d8

17060-07-0

2037-26-5

460-00-4

Surrogate Recoveries

Surrogate: 1,2-Dichloroethane-d4

Surrogate: p-Bromofluorobenzene

Sample Prepared by Method: EPA 5030B

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time ethod Prepared		Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	6.8		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 08:-	40 01/19/2016 18:38	SS
								Certifications: C	CTDOH,NELAC-NY10854,	NJDEP	
108-87-2	Methylcyclohexane	1.2		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 08:	40 01/19/2016 18:38	SS
								Certifications: N	NELAC-NY10854,NJDEP		
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: C	01/19/2016 08: TDOH,NELAC-NY10854,N		SS
104-51-8	n-Butylbenzene	1.1		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 08:	40 01/19/2016 18:38	SS
								Certifications: C	CTDOH,NELAC-NY10854,	NJDEP	
103-65-1	n-Propylbenzene	2.8		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 08:-	40 01/19/2016 18:38	SS
								Certifications: C	CTDOH,NELAC-NY10854,	NJDEP	
95-47-6	o-Xylene	0.25	J	ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 08:4	40 01/19/2016 18:38	SS
								Certifications: N	NELAC-NY10854		
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: N	01/19/2016 08: ELAC-NY10854	40 01/19/2016 18:38	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	01/19/2016 08: TDOH,NELAC-NY10854,N		SS
135-98-8	sec-Butylbenzene	2.0		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 08:4	40 01/19/2016 18:38	SS
								Certifications: C	CTDOH,NELAC-NY10854,	NJDEP	
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	01/19/2016 08: TDOH,NELAC-NY10854,N		SS
75-65-0	tert-Butyl alcohol (TBA)	12		ug/L	0.50	2.0	1	EPA 8260C	01/19/2016 08:-	40 01/19/2016 18:38	SS
								Certifications: N	NELAC-NY10854,NJDEP		
98-06-6	tert-Butylbenzene	4.8		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 08:4	40 01/19/2016 18:38	SS
								Certifications: C	CTDOH,NELAC-NY10854,	NJDEP	
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	01/19/2016 08: TDOH,NELAC-NY10854,N		SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	01/19/2016 08: TDOH,NELAC-NY10854,N		SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	01/19/2016 08: TDOH,NELAC-NY10854,N		SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	01/19/2016 08: TDOH,NELAC-NY10854,N		SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	01/19/2016 08: TDOH,NELAC-NY10854,N		SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	01/19/2016 08: TDOH,NELAC-NY10854,N		SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 08: TDOH,NELAC-NY10854,N	40 01/19/2016 18:38	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	01/19/2016 08:		SS

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Acceptance Range

69-130

81-117

79-122

Result

95.8 %

98.9 %

95.0 %

FAX (203) 35<u>7-0166</u>

Certifications:

CTDOH,NJDEP

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Client Sample ID: HMW-8

York Sample ID: 10

16A0405-05

York Project (SDG) No. 16A0405 Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u> January 13, 2016 12:22 pm Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared	d 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,N	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 19:10 EP	SS
71-55-6	1,1,1-Trichloroethane	0.42	J	ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOUN	01/19/2016 08:40	01/19/2016 19:10	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		IELAC-NY10854,NJD 01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 19:10	SS
	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 19:10 EP	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 19:10 EP	SS
75-34-3	1,1-Dichloroethane	5.7		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 08:40	01/19/2016 19:10	SS
75-35-4	1,1-Dichloroethylene	0.35	ī	ug/L	0.20	0.50	1	Certifications: EPA 8260C	CTDOH,N	01/19/2016 08:40	O1/19/2016 19:10	SS
73-33-4	1,1-Dichiol octayiene	0.35	J	ug/L	0.20	0.50	1	Certifications:	CTDOH,N	JELAC-NY10854,NJD		33
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 08:40 Y10854,NJDEP	01/19/2016 19:10	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 08:40 Y10854,NJDEP	01/19/2016 19:10	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 08:40 Y10854,NJDEP	01/19/2016 19:10	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 19:10 EP	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	CTDOH,N	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 19:10 EP	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 19:10 EP	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 19:10 EP	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 19:10 EP	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 19:10 EP	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 19:10 EP	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 19:10 EP	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 19:10 EP	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	160	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 08:40 Y10854,NJDEP	01/19/2016 19:10	SS
78-93-3	2-Butanone	0.81	SCAL- E, J	ug/L	0.20	2.0	1	EPA 8260C Certifications:	CTDOH,N	01/19/2016 08:40 WELAC-NY10854,NJD	01/19/2016 19:10 EP	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	CTDOH,N	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 19:10 EP	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 19:10 EP	SS

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Client Sample ID: HMW-8

York Sample ID: 16A0405-05

York Project (SDG) No. 16A0405

Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u> January 13, 2016 12:22 pm Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

	ed by Method: EPA 5030B	<u>, c</u>						<u> </u>	e i tote.	<u> </u>		
CAS No		Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	lethod	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	2.0	CCV-E	ug/L	1.0	2.0	1	EPA 8260C		01/19/2016 08:40	01/19/2016 19:10	SS
								Certifications: 0	CTDOH,NI	ELAC-NY10854,NJD	EP	
07-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: C	TDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 19:10 EP	SS
07-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	TDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 19:10 EP	SS
1-43-2	Benzene	1.3		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 08:40	01/19/2016 19:10	SS
								Certifications: (CTDOH,NI	ELAC-NY10854,NJD	EP	
4-97-5	Bromochloromethane	0.83		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 08:40	01/19/2016 19:10	SS
								Certifications:	NELAC-N	Y10854,NJDEP		
5-27-4	Bromodichloromethane	0.23	J	ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 08:40	01/19/2016 19:10	SS
								Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP	
5-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	TDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 19:10 EP	SS
4-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	TDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 19:10 EP	SS
5-15-0	Carbon disulfide	0.33	J, B	ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 08:40	01/19/2016 19:10	SS
								Certifications: 0	CTDOH,NI	ELAC-NY10854,NJD	EP	
6-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	TDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 19:10 EP	SS
08-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	TDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 19:10 EP	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	TDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 19:10 EP	SS
7-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	TDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 19:10 EP	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	TDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 19:10 EP	SS
56-59-2	cis-1,2-Dichloroethylene	14		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 08:40	01/19/2016 19:10	SS
								Certifications: 0	CTDOH,NI	ELAC-NY10854,NJD	EP	
0061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	TDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 19:10 EP	SS
10-82-7	Cyclohexane	0.49	J	ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 08:40	01/19/2016 19:10	SS
	·	****						Certifications:	NELAC-N	Y10854,NJDEP		
24-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	TDOH,NE	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 19:10 EP	SS
4-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: N	ELAC-NY	01/19/2016 08:40 710854,NJDEP	01/19/2016 19:10	SS
5-71-8	Dichlorodifluoromethane	0.74		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 08:40	01/19/2016 19:10	SS
		****						Certifications:	NELAC-N	Y10854,NJDEP		
00-41-4	Ethyl Benzene	0.30	J	ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 08:40	01/19/2016 19:10	SS
								Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP	
7-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: N	ELAC-NY	01/19/2016 08:40 710854,NJDEP	01/19/2016 19:10	SS
8-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 08:40	01/19/2016 19:10	SS
-	150p10p1100n2on0	.10					-		TDOH,NE	LAC-NY10854,NJDE		

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Client Sample ID: HMW-8

York Sample ID:

16A0405-05

York Project (SDG) No. 16A0405 Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u> January 13, 2016 12:22 pm Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

	ed by Method: EPA 5030B	D 1/	TO .	WT *4	Reported to			D. C	M 41 1	Date/Time	Date/Time	
CAS No		Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference	Method	Prepared	Analyzed	Analyst
79-20-9	Methyl acetate	2.0		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 08:40 Y10854,NJDEP	01/19/2016 19:10	SS
634-04-4	Methyl tert-butyl ether (MTBE)	1.2		ug/L	0.20	0.50	1	EPA 8260C	NELAC-N	01/19/2016 08:40	01/19/2016 19:10	SS
034 04 4	Methyl tert butyl ether (M1B2)	1,2		ug/L	0.20	0.50	1	Certifications:	CTDOH,N	ELAC-NY10854,NJD		55
08-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 08:40 Y10854,NJDEP	01/19/2016 19:10	SS
5-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDF	01/19/2016 19:10 EP	SS
04-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 19:10 EP	SS
03-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 19:10 EP	SS
5-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 08:40 Y10854	01/19/2016 19:10	SS
79601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 08:40 Y10854	01/19/2016 19:10	SS
9-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 19:10 EP	SS
35-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDF	01/19/2016 19:10 EP	SS
00-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDI	01/19/2016 19:10 EP	SS
5-65-0	tert-Butyl alcohol (TBA)	1.7	J	ug/L	0.50	2.0	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 08:40 Y10854,NJDEP	01/19/2016 19:10	SS
8-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 19:10 EP	SS
27-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDE	01/19/2016 19:10 EP	SS
08-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDF	01/19/2016 19:10 EP	SS
6-60-5	trans-1,2-Dichloroethylene	22		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 08:40	01/19/2016 19:10	SS
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP	
0061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDI		SS
0-01-6	Trichloroethylene	6.3		ug/L	0.20	0.50	1	EPA 8260C	OTTO OVEN	01/19/2016 08:40	01/19/2016 19:10	SS
	m:11 4 1				0.20	0.50		Certifications:	CTDOH,N	ELAC-NY10854,NJD		99
5-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 08:40 ELAC-NY10854,NJDF		SS
5-01-4	Vinyl Chloride	4.3		ug/L	0.20	0.50	1	EPA 8260C	CTDOLLN	01/19/2016 08:40	01/19/2016 19:10	SS
330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	Certifications: EPA 8260C	CTDOH,N.	ELAC-NY10854,NJD 01/19/2016 08:40	01/19/2016 19:10	SS
	Surrogate Recoveries	Result		1.00	eptance Rang	e		Certifications:	CIDOII,N.	DLI		
7060-07-0	Surrogate: 1,2-Dichloroethane-d4	100 %		Atti	69-130							
000 07-0	Surroguie. 1,2-Dichioroeinane-u4	100 /0			07-130							
037-26-5	Surrogate: Toluene-d8	98.0 %			81-117							

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Client Sample ID: HMW-8 York Sample ID: 16A0405-05

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received16A0405GH9964WaterJanuary 13, 2016 12:22 pm01/14/2016

Sample Information

Client Sample ID: HMW-9R York Sample ID: 16A0405-06

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received16A0405GH9964WaterJanuary 13, 2016 1:50 pm01/14/2016

Volatile Organics, 8260 - Comprehensive

<u>Log-in Notes:</u> <u>Sample Notes:</u>

Sample Prepared by Method: EPA 5030B

CAS No	o. 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,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 EP	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 EP	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 EP	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,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 EP	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 EP	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 EP	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 EP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 17:04 Y10854,NJDEP	01/20/2016 00:18	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 17:04 Y10854,NJDEP	01/20/2016 00:18	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 17:04 Y10854,NJDEP	01/20/2016 00:18	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 EP	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 EP	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 EP	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 SP	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 SP	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 EP	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 EP	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 EP	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 EP	SS

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Client Sample ID: HMW-9R

York Sample ID:

16A0405-06

York Project (SDG) No. 16A0405 Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u>
January 13, 2016 1:50 pm

Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

	rganics, 8200 - Comprehensi ed by Method: EPA 5030B	<u>ve</u>			Log III	totes.		Sam	pic mote	.3.		
CAS No		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	160	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 17:04 Y10854,NJDEP	01/20/2016 00:18	SS
78-93-3	2-Butanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
67-64-1	Acetone	2.4	В	ug/L	1.0	2.0	1	EPA 8260C		01/19/2016 17:04	01/20/2016 00:18	SS
								Certifications:	CTDOH,N	ELAC-NY10854,NJD		
107-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/19/2016 17:04 Y10854,NJDEP	01/20/2016 00:18	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
110-82-7	Cyclohexane	1.7		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 17:04 Y10854,NJDEP	01/20/2016 00:18	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDI	01/20/2016 00:18 EP	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/19/2016 17:04 Y10854,NJDEP	01/20/2016 00:18	SS

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Client Sample ID: HMW-9R

York Sample ID:

16A0405-06

York Project (SDG) No. 16A0405 Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u>
January 13, 2016 1:50 pm

Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes: Sa	nple Notes:
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	0.84		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 17:04	01/20/2016 00:18	SS
								Certifications:	NELAC-N	Y10854,NJDEP		
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 P	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/19/2016 17:04 /10854,NJDEP	01/20/2016 00:18	SS
98-82-8	Isopropylbenzene	1.0		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 17:04	01/20/2016 00:18	SS
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP	
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/19/2016 17:04 /10854,NJDEP	01/20/2016 00:18	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	1.5		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 17:04	01/20/2016 00:18	SS
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	ΞP	
08-87-2	Methylcyclohexane	0.26	J	ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 17:04	01/20/2016 00:18	SS
								Certifications:	NELAC-N	Y10854,NJDEP		
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 P	SS
04-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 P	SS
03-65-1	n-Propylbenzene	0.48	J	ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 17:04	01/20/2016 00:18	SS
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	ΞP	
5-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/19/2016 17:04 710854	01/20/2016 00:18	SS
79601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications:	NELAC-NY	01/19/2016 17:04 710854	01/20/2016 00:18	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 P	SS
35-98-8	sec-Butylbenzene	0.73		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 17:04	01/20/2016 00:18	SS
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP	
00-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 P	SS
5-65-0	tert-Butyl alcohol (TBA)	3.2	CCV-E	ug/L	0.50	2.0	1	EPA 8260C		01/19/2016 17:04	01/20/2016 00:18	SS
								Certifications:	NELAC-N	Y10854,NJDEP		
8-06-6	tert-Butylbenzene	2.4		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 17:04	01/20/2016 00:18	SS
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EΡ	
27-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 P	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 P	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 P	SS
0061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 P	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 P	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH NE	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 P	SS

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Client Sample ID: HMW-9R

York Sample ID: 16A0405-06

York Project (SDG) No. 16A0405

Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u>
January 13, 2016 1:50 pm

<u>Date Received</u> 01/14/2016

Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

	<u>Log-in</u>	Notes:
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Sample Notes:

CAS N	lo. 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,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:18 EP	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications:	CTDOH,NJ	01/19/2016 17:04 DEP	01/20/2016 00:18	SS
	Surrogate Recoveries	Result		Acce	ptance Rang	e						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	98.5 %			69-130							
2037-26-5	Surrogate: Toluene-d8	98.2 %			81-117							
460-00-4	Surrogate: p-Bromofluorobenzene	102 %			79-122							

Sample Information

Client Sample ID: HMW-10R

York Sample ID:

16A0405-07

York Project (SDG) No. 16A0405

Client Project ID GH9964 Matrix Water Collection Date/Time
January 13, 2016 1:37 pm

<u>Date Received</u> 01/14/2016

Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Date/Tim Prepare		Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17: CTDOH,NELAC-NY10854,1		SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17: CTDOH,NELAC-NY10854,1		SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17: CTDOH,NELAC-NY10854,1		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:	01/19/2016 17: CTDOH,NELAC-NY10854,1		SS
79-00-5	1,1,2-Trichloroethane	1.6		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17: CTDOH,NELAC-NY10854		SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17: CTDOH,NELAC-NY10854,1		SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17: CTDOH,NELAC-NY10854,1		SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17: NELAC-NY10854,NJDEP	04 01/20/2016 00:48	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17: NELAC-NY10854,NJDEP	04 01/20/2016 00:48	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17: NELAC-NY10854,NJDEP	04 01/20/2016 00:48	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17: CTDOH,NELAC-NY10854,I		SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	01/19/2016 17: CTDOH,NELAC-NY10854,1		SS

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Client Sample ID: HMW-10R

York Sample ID: 16A

16A0405-07

York Project (SDG) No. 16A0405

Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u>
January 13, 2016 1:37 pm

Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

71/14/20

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Sample Prepared by Method: EPA 5030B	Sample	Ртерагеи	bу	Method:	EPA 5030B	
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CAS N	o. 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:		01/19/2016 17:04 AC-NY10854,NJDE	01/20/2016 00:48 P	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		01/19/2016 17:04 AC-NY10854,NJDE	01/20/2016 00:48 P	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		01/19/2016 17:04 AC-NY10854,NJDE	01/20/2016 00:48 P	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		01/19/2016 17:04 .AC-NY10854,NJDE	01/20/2016 00:48 P	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		01/19/2016 17:04 AC-NY10854,NJDE	01/20/2016 00:48 P	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		01/19/2016 17:04 .AC-NY10854,NJDE	01/20/2016 00:48 P	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		01/19/2016 17:04 AC-NY10854,NJDE	01/20/2016 00:48 P	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	160	1	EPA 8260C Certifications:	NELAC-NY1	01/19/2016 17:04 0854,NJDEP	01/20/2016 00:48	SS
78-93-3	2-Butanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:		01/19/2016 17:04 .AC-NY10854,NJDE	01/20/2016 00:48 P	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:		01/19/2016 17:04 AC-NY10854,NJDE	01/20/2016 00:48 P	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		01/19/2016 17:04 .AC-NY10854,NJDE	01/20/2016 00:48 P	SS
67-64-1	Acetone	1.5	J, B	ug/L	1.0	2.0	1	EPA 8260C Certifications:		01/19/2016 17:04 LAC-NY10854,NJDE	01/20/2016 00:48	SS
107-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C		01/19/2016 17:04 .AC-NY10854,NJDE	01/20/2016 00:48	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		01/19/2016 17:04 AC-NY10854,NJDE	01/20/2016 00:48 P	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		01/19/2016 17:04 AC-NY10854,NJDE	01/20/2016 00:48 P	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY1	01/19/2016 17:04 0854,NJDEP	01/20/2016 00:48	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		01/19/2016 17:04 AC-NY10854,NJDE	01/20/2016 00:48 P	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		01/19/2016 17:04 AC-NY10854,NJDE	01/20/2016 00:48 P	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		01/19/2016 17:04 AC-NY10854,NJDE	01/20/2016 00:48 P	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		01/19/2016 17:04 AC-NY10854,NJDE	01/20/2016 00:48 P	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		01/19/2016 17:04 AC-NY10854,NJDE	01/20/2016 00:48 P	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		01/19/2016 17:04 AC-NY10854,NJDE	01/20/2016 00:48 P	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 17:04 AC-NY10854,NJDE	01/20/2016 00:48	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 17:04 .AC-NY10854,NJDE	01/20/2016 00:48	SS

120 RESEARCH DRIVE STRATFORD, CT 06615 (203) 325-1371 FAX (203) 35<u>7-0166</u>

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Client Sample ID: HMW-10R

York Sample ID: 16A0405-07

York Project (SDG) No. 16A0405

Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u>
January 13, 2016 1:37 pm

Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

	d by Method: EPA 5030B				Reported to				Date/Time	Date/Time	
CAS No	o. Parameter	Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference N	1ethod Prepared	Analyzed	Analyst
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJD	01/20/2016 00:48 EP	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJD	01/20/2016 00:48 EP	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJD	01/20/2016 00:48 EP	SS
110-82-7	Cyclohexane	1.7		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 17:04	01/20/2016 00:48	SS
								Certifications:	NELAC-NY10854,NJDEP		
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJD	01/20/2016 00:48 EP	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 NELAC-NY10854,NJDEP	01/20/2016 00:48	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 NELAC-NY10854,NJDEP	01/20/2016 00:48	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJD	01/20/2016 00:48 FP	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 17:04	01/20/2016 00:48	SS
98-82-8	Isopropylbenzene	0.68		ug/L	0.20	0.50	1	Certifications: N EPA 8260C	NELAC-NY10854,NJDEP 01/19/2016 17:04	01/20/2016 00:48	SS
,0020	зоргорушение	0.00		45.2	0.20	0.50	1		CTDOH,NELAC-NY10854,NJI		55
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 NELAC-NY10854,NJDEP	01/20/2016 00:48	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	3.5		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 17:04	01/20/2016 00:48	SS
								Certifications:	CTDOH,NELAC-NY10854,NJI	DEP	
108-87-2	Methylcyclohexane	0.99		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 17:04	01/20/2016 00:48	SS
75.00.2	M 4 1 11 11	MD		/T	1.0	2.0	1		NELAC-NY10854,NJDEP	01/20/2016 00-49	cc
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJD	01/20/2016 00:48 EP	SS
104-51-8	n-Butylbenzene	0.58		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 17:04	01/20/2016 00:48	SS
	D 11								CTDOH,NELAC-NY10854,NJI		
103-65-1	n-Propylbenzene	0.69		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJI	01/20/2016 00:48	SS
95-47-6	o Vydono	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 17:04	01/20/2016 00:48	SS
)3- 4 7-0	o-Xylene	ND		ug/L	0.20	0.50	1		NELAC-NY10854	01/20/2010 00:40	55
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications:	01/19/2016 17:04 NELAC-NY10854	01/20/2016 00:48	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJD	01/20/2016 00:48 EP	SS
135-98-8	sec-Butylbenzene	0.97		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 17:04	01/20/2016 00:48	SS
								Certifications:	CTDOH,NELAC-NY10854,NJI	DEP	
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJD	01/20/2016 00:48 EP	SS
75-65-0	tert-Butyl alcohol (TBA)	5.8	CCV-E	ug/L	0.50	2.0	1	EPA 8260C	01/19/2016 17:04	01/20/2016 00:48	SS
								Certifications:	NELAC-NY10854,NJDEP		
98-06-6	tert-Butylbenzene	1.2		ug/L	0.20	0.50	1	EPA 8260C	01/19/2016 17:04	01/20/2016 00:48	SS
								Certifications:	CTDOH,NELAC-NY10854,NJI	DEP	

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Client Sample ID: HMW-10R

York Sample ID: 16A0405-07

York Project (SDG) No. 16A0405 Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u>
January 13, 2016 1:37 pm

<u>Date Received</u> 01/14/2016

Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

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- 6	ισ_in	Notes:
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Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:48	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:48	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:48 P	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:48	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:48 P	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:48	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 00:48 P	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications:	CTDOH,N.	01/19/2016 17:04 DEP	01/20/2016 00:48	SS
	Surrogate Recoveries	Result		Acce	ptance Rang	e						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	101 %			69-130							
2037-26-5	Surrogate: Toluene-d8	101 %			81-117							
460-00-4	Surrogate: p-Bromofluorobenzene	99.5 %			79-122							

Sample Information

Client Sample ID: HMW-13

Client Project ID

York Sample ID:

Collection Date/Time

16A0405-08

Date Received

16A0405

York Project (SDG) No.

GH9964

Water January 13, 2016 11:09 am

Matrix

01/14/2016

Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

otes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time Method Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJE	01/20/2016 01:19 DEP	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJE	01/20/2016 01:19 DEP	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJE	01/20/2016 01:19 DEP	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:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJE	01/20/2016 01:19 DEP	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJE	01/20/2016 01:19 DEP	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJE	01/20/2016 01:19 DEP	SS

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Client Sample ID: HMW-13 **York Sample ID:**

16A0405-08

York Project (SDG) No. 16A0405

Client Project ID GH9964

Matrix Water

Collection Date/Time January 13, 2016 11:09 am Date Received 01/14/2016

Volatile Organics 8260 - Comprehensive

	Volatile Organics, 8260 - Comprehensive ample Prepared by Method: EPA 5030B				Log-in		Sample Notes:					
CAS N		Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference 1	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEF	01/20/2016 01:19	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/19/2016 17:04 710854,NJDEP	01/20/2016 01:19	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/19/2016 17:04 710854,NJDEP	01/20/2016 01:19	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/19/2016 17:04 710854,NJDEP	01/20/2016 01:19	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEF	01/20/2016 01:19	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEI	01/20/2016 01:19	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEI	01/20/2016 01:19	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEF	01/20/2016 01:19	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEF	01/20/2016 01:19	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEI	01/20/2016 01:19	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEI	01/20/2016 01:19	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEI	01/20/2016 01:19	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEF	01/20/2016 01:19	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	160	1	EPA 8260C Certifications:	NELAC-NY	01/19/2016 17:04 /10854,NJDEP	01/20/2016 01:19	SS
78-93-3	2-Butanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEF	01/20/2016 01:19	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEF	01/20/2016 01:19	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEF	01/20/2016 01:19	SS
67-64-1	Acetone	1.5	J, B	ug/L	1.0	2.0	1	EPA 8260C Certifications:	CTDOH,N	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 01:19 P	SS
107-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEF	01/20/2016 01:19	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEF	01/20/2016 01:19	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEF	01/20/2016 01:19	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C		01/19/2016 17:04 710854,NJDEP	01/20/2016 01:19	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEF	01/20/2016 01:19	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/19/2016 17:04 ELAC-NY10854,NJDEF	01/20/2016 01:19	SS

FAX (203) 35<u>7-0166</u> 120 RESEARCH DRIVE STRATFORD, CT 06615 (203) 325-1371

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Log-in Notes:

Client Sample ID: HMW-13 **York Sample ID:**

16A0405-08

York Project (SDG) No. 16A0405

Client Project ID GH9964

Matrix Water

Collection Date/Time January 13, 2016 11:09 am

Sample Notes:

Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

104-51-8

103-65-1

95-47-6

n-Butylbenzene

n-Propylbenzene

o-Xylene

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Date/Time Method Prepared	Date/Time Analyzed	Analyst
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJDE	01/20/2016 01:19 P	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJDE	01/20/2016 01:19 P	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJDE	01/20/2016 01:19 P	SS
108-90-7	Chlorobenzene	17		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJDI	01/20/2016 01:19 EP	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJDE	01/20/2016 01:19 P	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJDE	01/20/2016 01:19 P	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJDE	01/20/2016 01:19 P	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJDE	01/20/2016 01:19 P	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJDE	01/20/2016 01:19 P	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 NELAC-NY10854,NJDEP	01/20/2016 01:19	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJDE	01/20/2016 01:19 P	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 NELAC-NY10854,NJDEP	01/20/2016 01:19	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 NELAC-NY10854,NJDEP	01/20/2016 01:19	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJDE	01/20/2016 01:19 P	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 NELAC-NY10854,NJDEP	01/20/2016 01:19	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJDE	01/20/2016 01:19 P	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 NELAC-NY10854,NJDEP	01/20/2016 01:19	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	1.9		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 CTDOH,NELAC-NY10854,NJDI	01/20/2016 01:19 EP	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/19/2016 17:04 NELAC-NY10854,NJDEP	01/20/2016 01:19	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	01/19/2016 17:04	01/20/2016 01:19	SS

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0.20

0.20

0.50

0.50

0.50

ug/L

ug/L

ug/L

ND

ND

ND

FAX (203) 35<u>7-0166</u>

CTDOH,NELAC-NY10854,NJDEP

CTDOH,NELAC-NY10854,NJDEP

CTDOH,NELAC-NY10854,NJDEP

NELAC-NY10854

Certifications:

EPA 8260C

Certifications:

EPA 8260C

Certifications:

EPA 8260C

Certifications:

SS



Client Sample ID: HMW-13

York Sample ID:

16A0405-08

York Project (SDG) No. 16A0405

Client Project ID GH9964 Matrix Water Collection Date/Time
January 13, 2016 11:09 am

<u>Date Received</u> 01/14/2016

Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

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	$\alpha\sigma_{-1}$	Notes:	
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Sample Notes:

o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications:	NELAC-N	01/19/2016 17:04 Y10854	01/20/2016 01:19	SS
p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 01:19 EP	SS
sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 01:19 EP	SS
Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 01:19 EP	SS
tert-Butyl alcohol (TBA)	7.3	CCV-E	ug/L	0.50	2.0	1	EPA 8260C		01/19/2016 17:04	01/20/2016 01:19	SS
							Certifications:	NELAC-N	Y10854,NJDEP		
tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 01:19 EP	SS
Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 01:19 EP	SS
Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 01:19 EP	SS
trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 01:19 EP	SS
trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 01:19 EP	SS
Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 01:19 EP	SS
Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 01:19 EP	SS
Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/19/2016 17:04 ELAC-NY10854,NJDE	01/20/2016 01:19 EP	SS
* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications:	CTDOH,N.	01/19/2016 17:04 IDEP	01/20/2016 01:19	SS
Surrogate Recoveries	Result		Acc	eptance Rang	e						
Surrogate: 1,2-Dichloroethane-d4	99.6 %			69-130							
Surrogate: Toluene-d8	97.3 %			81-117							
Surrogate: p-Bromofluorobenzene	100 %			79-122							
	p- & m- Xylenes p-Isopropyltoluene sec-Butylbenzene Styrene tert-Butyl alcohol (TBA) tert-Butylbenzene Tetrachloroethylene Toluene trans-1,2-Dichloroethylene trans-1,3-Dichloropropylene Trichloroethylene Trichlorofluoromethane Vinyl Chloride * Xylenes, Total Surrogate Recoveries Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8	p- & m- Xylenes ND p-Isopropyltoluene ND sec-Butylbenzene ND Styrene ND tert-Butyl alcohol (TBA) 7.3 tert-Butylbenzene ND Tetrachloroethylene ND Toluene ND trans-1,2-Dichloroethylene ND Trichloroethylene ND Trichloroethylene ND Trichlorofluoromethane ND Trichlorofluoromethane ND Surrogate Recoveries Result Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8 99.6 % Surrogate: Toluene-d8	p-& m- Xylenes ND p-Isopropyltoluene ND sec-Butylbenzene ND Styrene ND tert-Butyl alcohol (TBA) 7.3 CCV-E tert-Butylbenzene ND Tetrachloroethylene ND Toluene ND trans-1,2-Dichloroethylene ND Trichloroethylene ND Trichloroethylene ND Trichlorofluoromethane ND * Xylenes, Total ND Surrogate: 1,2-Dichloroethane-d4 Surrogate: 1,2-Dichloroethane-d8 97.3 %	p- & m- Xylenes ND ug/L p-Isopropyltoluene ND ug/L sec-Butylbenzene ND ug/L Styrene ND ug/L tert-Butyl alcohol (TBA) 7.3 CCV-E ug/L tert-Butylbenzene ND ug/L Tetrachloroethylene ND ug/L trans-1,2-Dichloroethylene ND ug/L trans-1,3-Dichloropropylene ND ug/L Trichloroethylene ND ug/L Trichloroethylene ND ug/L trans-1,3-Dichloropropylene ND ug/L Trichlorofluoromethane ND ug/L Surrogate Recoveries Result Access Surrogate: 1,2-Dichloroethane-d4 99.6 % Surrogate: Toluene-d8 97.3 %	December (a) Result (b) Flag (b) Units (c) LOD/MDL (c) p- & m- Xylenes ND ug/L 0.50 p-Isopropyltoluene ND ug/L 0.20 see-Butylbenzene ND ug/L 0.20 Styrene ND ug/L 0.50 tert-Butyl alcohol (TBA) 7.3 CCV-E ug/L 0.50 tert-Butylbenzene ND ug/L 0.20 Tetrachloroethylene ND ug/L 0.20 Toluene ND ug/L 0.20 trans-1,2-Dichloroethylene ND ug/L 0.20 trans-1,3-Dichloropropylene ND ug/L 0.20 Trichloroethylene ND ug/L 0.20 Vinyl Chloride ND ug/L 0.20 *Xylenes, Total ND ug/L 0.60 *Xylenes, Total ND ug/L 0.60 *Xylenes, Total ND ug/L 0.60 *Xurrogate: 1,2-Dichloroethane-d8 97.3 % <t< td=""><td> Parameter Result Flag Units LÓD/MDL LOQ </td><td> ND</td><td> Parameter Result Flag Units LóD/MDL LOQ Dilution Reference </td><td> Parameter Result Flag Units LODMINI LOQ Dilution Reference Method </td><td> Parameter</td><td> P. & m. Xylenes</td></t<>	Parameter Result Flag Units LÓD/MDL LOQ	ND	Parameter Result Flag Units LóD/MDL LOQ Dilution Reference	Parameter Result Flag Units LODMINI LOQ Dilution Reference Method	Parameter	P. & m. Xylenes

Sample Information

Client Sample ID: HMW-14

York Sample ID:

16A0405-09

York Project (SDG) No. 16A0405

Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u> January 13, 2016 2:34 pm

Sample Notes:

Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

								D (70)	TO . (777)	
					Reported to			Date/Time	Date/Time	
CAS No.	Parameter	Result	Flag	Units	LOD/MDL LOQ	Dilution	Reference Method	Prepared	Analyzed	Analyst

Log-in Notes:

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Client Sample ID: HMW-14

York Sample ID:

16A0405-09

York Project (SDG) No. 16A0405

67-64-1

Acetone

Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u> January 13, 2016 2:34 pm Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Me	Date/Time thod Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43 EP	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43 EP	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43 EP	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: CT	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43 EP	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43 EP	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43 EP	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43 EP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NE	01/20/2016 08:51 LAC-NY10854,NJDEP	01/20/2016 11:43	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NE	01/20/2016 08:51 LAC-NY10854,NJDEP	01/20/2016 11:43	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NE	01/20/2016 08:51 LAC-NY10854,NJDEP	01/20/2016 11:43	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43 EP	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CT	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43 EP	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43 EP	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43 EP	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	160	1	EPA 8260C	01/20/2016 08:51 LAC-NY10854,NJDEP	01/20/2016 11:43	SS
78-93-3	2-Butanone	ND		ug/L	0.20	2.0	1	EPA 8260C	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43 EP	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	2.0	1	EPA 8260C	01/20/2016 08:51 DOH,NELAC-NY10854,NJD	01/20/2016 11:43	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/20/2016 08:51 DOH NELAC-NY10854 NID	01/20/2016 11:43	SS

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1.0

2.0

J, B ug/L

1.5

Certifications:

EPA 8260C

Certifications:

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CTDOH,NELAC-NY10854,NJDEP

CTDOH,NELAC-NY10854,NJDEP



Client Sample ID: HMW-14

<u>York Sample ID:</u> 16A0405-09

York Project (SDG) No. 16A0405 Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u> January 13, 2016 2:34 pm Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive Sample Prepared by Method: EPA 5030B			<u>Log-in Notes:</u>					Sample Notes:				
CAS No		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	2.0	1	EPA 8260C Certifications:	CTDOH.NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 P	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	,	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 P	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/20/2016 08:51 Y10854,NJDEP	01/20/2016 11:43	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 P	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 P	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 P	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 P	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 P	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 P	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 P	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 P	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 P	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 P	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 P	SS
110-82-7	Cyclohexane	1.5		ug/L	0.20	0.50	1	EPA 8260C		01/20/2016 08:51	01/20/2016 11:43	SS
124 40 1					0.20	0.50		Certifications:	NELAC-N	Y10854,NJDEP	01/20/2016 11:43	aa
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE		SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/20/2016 08:51 Y10854,NJDEP	01/20/2016 11:43	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/20/2016 08:51 Y10854,NJDEP	01/20/2016 11:43	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 P	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/20/2016 08:51 Y10854,NJDEP	01/20/2016 11:43	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 P	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/20/2016 08:51 Y10854,NJDEP	01/20/2016 11:43	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 P	SS

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Client Sample ID: **HMW-14** **York Sample ID:** 16A0405-09

York Project (SDG) No. 16A0405

Client Project ID GH9964

Matrix Water

Collection Date/Time January 13, 2016 2:34 pm Date Received 01/14/2016

460-00-4

Surrogate: p-Bromofluorobenzene

96.8 %

	Organics, 8260 - Comprehensive ed by Method: EPA 5030B				Log-in	Notes:		San	iple Note	<u>s:</u>		
CAS N	•	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Referenc	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-87-2	Methylcyclohexane	0.84		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/20/2016 08:51 Y10854,NJDEP	01/20/2016 11:43	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 EP	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 EP	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 EP	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/20/2016 08:51 Y10854	01/20/2016 11:43	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications:	NELAC-N	01/20/2016 08:51 Y10854	01/20/2016 11:43	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDF	01/20/2016 11:43 EP	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDF	01/20/2016 11:43 EP	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 EP	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	2.0	1	EPA 8260C Certifications:	NELAC-N	01/20/2016 08:51 Y10854,NJDEP	01/20/2016 11:43	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDF	01/20/2016 11:43 EP	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 EP	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 EP	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 EP	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 11:43 EP	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDF	01/20/2016 11:43 EP	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDF	01/20/2016 11:43 EP	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	01/20/2016 08:51 ELAC-NY10854,NJDF	01/20/2016 11:43 EP	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications:	CTDOH,N.	01/20/2016 08:51 IDEP	01/20/2016 11:43	SS
	Surrogate Recoveries	Result		Acce	eptance Rang	e						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	96.7 %			69-130							
2037-26-5	Surrogate: Toluene-d8	100 %			81-117							

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Client Sample ID: DUP-20160113 **York Sample ID:** 16A0405-10

Date Received York Project (SDG) No. Client Project ID Matrix Collection Date/Time GH9964 January 13, 2016 12:00 pm 16A0405 Water 01/14/2016

Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

67-64-1

Acetone

Log-in Notes:

Sample Notes:

CAS No	o. 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,NE	01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14 EP	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14 EP	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14 EP	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,NE	01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14 EP	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14 EP	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14 EP	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14 EP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/20/2016 08:51 710854,NJDEP	01/20/2016 12:14	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/20/2016 08:51 /10854,NJDEP	01/20/2016 12:14	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/20/2016 08:51 /10854,NJDEP	01/20/2016 12:14	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14 EP	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14 EP	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14 EP	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14 EP	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14 EP	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14 EP	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14 EP	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14 EP	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	160	1	EPA 8260C Certifications:		01/20/2016 08:51 /10854,NJDEP	01/20/2016 12:14	SS
78-93-3	2-Butanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:		01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14 EP	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:		01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		01/20/2016 08:51 ELAC-NY10854,NJDI	01/20/2016 12:14	SS
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Certifications:

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CTDOH,NELAC-NY10854,NJDEP



Log-in Notes:

Client Sample ID: DUP-20160113

<u>York Sample ID:</u> 16A0405-10

York Project (SDG) No. 16A0405 Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u> January 13, 2016 12:00 pm

Sample Notes:

Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

	mple Prepared by Method: EPA 5030B					totes.		Sample Notes.				
CAS N		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	2.0	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 LAC-NY10854,NJDE	01/20/2016 12:14	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 LAC-NY10854,NJDE	01/20/2016 12:14 PP	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 LAC-NY10854,NJDE	01/20/2016 12:14 P	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/20/2016 08:51 10854,NJDEP	01/20/2016 12:14	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 LAC-NY10854,NJDE	01/20/2016 12:14 P	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 LAC-NY10854,NJDE	01/20/2016 12:14 P	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 LAC-NY10854,NJDE	01/20/2016 12:14 P	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 LAC-NY10854,NJDE	01/20/2016 12:14 P	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 LAC-NY10854,NJDE	01/20/2016 12:14 P	SS
108-90-7	Chlorobenzene	17		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/20/2016 08:51 ELAC-NY10854,NJD	01/20/2016 12:14 EP	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 LAC-NY10854,NJDE	01/20/2016 12:14	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 LAC-NY10854,NJDE	01/20/2016 12:14 PP	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 LAC-NY10854,NJDE	01/20/2016 12:14	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 LAC-NY10854,NJDE	01/20/2016 12:14	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 LAC-NY10854,NJDE	01/20/2016 12:14 P	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/20/2016 08:51 10854,NJDEP	01/20/2016 12:14	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 LAC-NY10854,NJDE	01/20/2016 12:14 P	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/20/2016 08:51 10854,NJDEP	01/20/2016 12:14	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/20/2016 08:51 10854,NJDEP	01/20/2016 12:14	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 LAC-NY10854,NJDE	01/20/2016 12:14 P	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/20/2016 08:51 10854,NJDEP	01/20/2016 12:14	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	01/20/2016 08:51 LAC-NY10854,NJDE	01/20/2016 12:14 PP	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	01/20/2016 08:51 10854,NJDEP	01/20/2016 12:14	SS

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Client Sample ID: DUP-20160113

York Sample ID: 16A0405-10

York Project (SDG) No. 16A0405

Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u> January 13, 2016 12:00 pm Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

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Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Me	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	1.9		ug/L	0.20	0.50	1	EPA 8260C	01/20/2016 08:5		SS
100.07.2		110			0.20	0.50			TDOH,NELAC-NY10854,N		SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NE	01/20/2016 08:5 ELAC-NY10854,NJDEP	1 01/20/2016 12:14	55
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CT	01/20/2016 08:5 TDOH,NELAC-NY10854,N		SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:5 TDOH,NELAC-NY10854,N.		SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:5 TDOH,NELAC-NY10854,N.		SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NE	01/20/2016 08:5 ELAC-NY10854	1 01/20/2016 12:14	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NE	01/20/2016 08:5 ELAC-NY10854	1 01/20/2016 12:14	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:5 TDOH,NELAC-NY10854,N.		SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:5 TDOH,NELAC-NY10854,N.		SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:5 TDOH,NELAC-NY10854,N.		SS
75-65-0	tert-Butyl alcohol (TBA)	8.3		ug/L	0.50	2.0	1	EPA 8260C	01/20/2016 08:5	1 01/20/2016 12:14	SS
									ELAC-NY10854,NJDEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:5 TDOH,NELAC-NY10854,N		SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:5 TDOH,NELAC-NY10854,N.		SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:5 TDOH,NELAC-NY10854,N.		SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:5 TDOH,NELAC-NY10854,N.		SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:5 TDOH,NELAC-NY10854,N.		SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:5 TDOH,NELAC-NY10854,N.		SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:5 TDOH,NELAC-NY10854,N		SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CT	01/20/2016 08:5 TDOH,NELAC-NY10854,N.		SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CT	01/20/2016 08:5 TDOH,NJDEP	1 01/20/2016 12:14	SS
	Surrogate Recoveries	Result		Acco	eptance Rang	e					
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	100 %			69-130						
2037-26-5	Surrogate: Toluene-d8	97.0 %			81-117						
460-00-4	Surrogate: p-Bromofluorobenzene	101 %			79-122						

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Client Sample ID: TB-20160113

York Sample ID: 16A

16A0405-11

York Project (SDG) No. 16A0405

Client Project ID GH9964 Matrix Water <u>Collection Date/Time</u> January 13, 2016 12:00 pm Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

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Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Date/Time e Method Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	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:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 NELAC-NY10854,NJDEP	01/20/2016 12:45	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 NELAC-NY10854,NJDEP	01/20/2016 12:45	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 NELAC-NY10854,NJDEP	01/20/2016 12:45	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	160	1	EPA 8260C Certifications:	01/20/2016 08:51 NELAC-NY10854,NJDEP	01/20/2016 12:45	SS
78-93-3	2-Butanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51 CTDOH,NELAC-NY10854,NJDE	01/20/2016 12:45	SS
67-64-1	Acetone	2.9	В	ug/L	1.0	2.0	1	EPA 8260C	01/20/2016 08:51	01/20/2016 12:45	SS
	DESEADOU DOIVE	STDATEO!					202) 225 4	Certifications:	CTDOH,NELAC-NY10854,NJDE		

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Client Sample ID: TB-20160113 **York Sample ID:**

16A0405-11

York Project (SDG) No. 16A0405

Client Project ID GH9964

Matrix Water

Collection Date/Time January 13, 2016 12:00 pm Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

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CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Date/Time Date/Time e Method Prepared Analyzed	Analyst
107-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	01/20/2016 08:51	SS

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Log-in Notes:

Client Sample ID: TB-20160113 **York Sample ID:**

16A0405-11

York Project (SDG) No. 16A0405

Client Project ID GH9964

Matrix Water

Collection Date/Time January 13, 2016 12:00 pm

Sample Notes:

Date Received 01/14/2016

Volatile Organics, 8260 - Comprehensive

460-00-4

Surrogate: p-Bromofluorobenzene

98.5 %

Sample Prepar	red by Method: EPA 5030B											
CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Referenc	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/20/2016 08:51 Y10854,NJDEP	01/20/2016 12:45	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	CTDOH,N	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 12:45 EP	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 12:45 EP	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 12:45 EP	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	01/20/2016 08:51 Y10854	01/20/2016 12:45	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications:	NELAC-N	01/20/2016 08:51 Y10854	01/20/2016 12:45	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 12:45 EP	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 12:45 EP	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 12:45 EP	SS
75-65-0	tert-Butyl alcohol (TBA)	1.3	J	ug/L	0.50	2.0	1	EPA 8260C Certifications:	NELAC-N	01/20/2016 08:51 IY10854,NJDEP	01/20/2016 12:45	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 12:45 EP	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 12:45 EP	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 12:45 EP	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 12:45 EP	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 12:45 EP	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 12:45 EP	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 12:45 EP	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	01/20/2016 08:51 ELAC-NY10854,NJDE	01/20/2016 12:45 EP	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications:	CTDOH,N.	01/20/2016 08:51 JDEP	01/20/2016 12:45	SS
	Surrogate Recoveries	Result		Acc	eptance Rang	e						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	100 %			69-130							
2037-26-5	Surrogate: Toluene-d8	99.8 %			81-117							
	<u> </u>				•							

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Analytical Batch Summary

Batch ID: BA60665	Preparation Method:	EPA 5030B	Prepared By:	BGS
YORK Sample ID	Client Sample ID	Preparation Date		
16A0405-01	HMW-3R	01/19/16		
16A0405-02	HMW-5	01/19/16		
16A0405-03	HMW-6	01/19/16		
16A0405-04	HMW-7R	01/19/16		
16A0405-05	HMW-8	01/19/16		
BA60665-BLK1	Blank	01/19/16		
BA60665-BS1	LCS	01/19/16		
BA60665-BSD1	LCS Dup	01/19/16		
BA60665-MS1	Matrix Spike	01/19/16		
BA60665-MSD1	Matrix Spike Dup	01/19/16		
Batch ID: BA60698	Preparation Method:	EPA 5030B	Prepared By:	BGS
YORK Sample ID	Client Sample ID	Preparation Date		
16A0405-06	HMW-9R	01/19/16		
16A0405-07	HMW-10R	01/19/16		
16A0405-08	HMW-13	01/19/16		
BA60698-BLK1	Blank	01/19/16		
BA60698-BS1	LCS	01/19/16		
BA60698-BSD1	LCS Dup	01/19/16		
Batch ID: BA60725	Preparation Method:	EPA 5030B	Prepared By:	BGS
YORK Sample ID	Client Sample ID	Preparation Date		
16A0405-09	HMW-14	01/20/16		
16A0405-10	DUP-20160113	01/20/16		
16A0405-11	TB-20160113	01/20/16		
BA60725-BLK1	Blank	01/20/16		
BA60725-BS1	LCS	01/20/16		
BA60725-BSD1	LCS Dup	01/20/16		

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Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Batch BA60665 - EPA 5030B				
Blank (BA60665-BLK1)				Prepared & Analyzed: 01/19/2016
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	"	
,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	"	
,1,2-Trichloroethane	ND	0.50	II .	
,1-Dichloroethane	ND	0.50	11	
,1-Dichloroethylene	ND	0.50	11	
,2,3-Trichlorobenzene	ND	0.50	"	
,2,3-Trichloropropane	ND	0.50	11	
,2,4-Trichlorobenzene	ND	0.50	11	
,2,4-Trimethylbenzene	ND	0.50	"	
,2-Dibromo-3-chloropropane	ND	2.0	"	
,2-Dibromoethane	ND	0.50	"	
,2-Dichlorobenzene	ND	0.50	"	
,2-Dichloroethane	ND	0.50	"	
,2-Dichloropropane	ND	0.50	"	
,3,5-Trimethylbenzene	ND	0.50	11	
,3-Dichlorobenzene	ND	0.50	"	
,4-Dichlorobenzene	ND	0.50	11	
4-Dioxane	ND	160	"	
-Butanone	ND	2.0	11	
Hexanone	ND	2.0	11	
Methyl-2-pentanone	ND ND	0.50	"	
cetone	ND ND	2.0	11	
crolein	ND	2.0	"	
crylonitrile			"	
enzene	ND	0.50	"	
romochloromethane	ND	0.50	"	
romodichloromethane	ND ND	0.50	"	
romoform	ND ND	0.50	"	
romomethane		0.50	"	
arbon disulfide	ND	0.50	"	
	0.31	0.50	"	
arbon tetrachloride	ND	0.50	"	
hlorobenzene hloroethane	ND	0.50	"	
hloroform	ND	0.50	"	
hloromethane	ND	0.50	"	
	ND	0.50	"	
s-1,2-Dichloroethylene	ND	0.50	"	
s-1,3-Dichloropropylene	ND	0.50	"	
yclohexane	ND	0.50	"	
ibromochloromethane	ND	0.50		
ibromomethane	ND	0.50	"	
ichlorodifluoromethane	ND	0.50	"	
thyl Benzene	ND	0.50	"	
exachlorobutadiene	0.22	0.50	"	
opropylbenzene	ND	0.50	"	
Iethyl acetate	ND	0.50	"	
Iethyl tert-butyl ether (MTBE)	ND	0.50	"	
lethylcyclohexane	ND	0.50	"	
fethylene chloride	ND	2.0	"	
-Butylbenzene	ND	0.50	"	

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$\label{lem:compounds} \textbf{Volatile Organic Compounds by GC/MS-Quality Control Data}$

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Batch BA60665 - EPA 5030B							
Blank (BA60665-BLK1)						Prej	pared & Analyzed: 01/19/2016
n-Propylbenzene	ND	0.50	ug/L				
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	2.0	"				
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	"				
		1.3					
Surrogate: 1,2-Dichloroethane-d4	9.77		"	10.0	97.7	69-130	
Surrogate: Toluene-d8	10.0		"	10.0	100	81-117	
Surrogate: p-Bromofluorobenzene	9.67		"	10.0	96.7	79-122	
LCS (BA60665-BS1)						Prej	pared & Analyzed: 01/19/2016
1,1,1,2-Tetrachloroethane	10		ug/L	10.0	105	82-126	
1,1,1-Trichloroethane	11		"	10.0	112	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	113	54-165	
1,1,2-Trichloroethane	10		"	10.0	102	82-123	
1,1-Dichloroethane	12		"	10.0	116	82-129	
1,1-Dichloroethylene	12		"	10.0	122	68-138	
1,2,3-Trichlorobenzene	10		"	10.0	102	76-136	
1,2,3-Trichloropropane	10		"	10.0	104	77-128	
1,2,4-Trichlorobenzene	11		"	10.0	107	76-137	
1,2,4-Trimethylbenzene	11		"	10.0	110	82-132	
1,2-Dibromo-3-chloropropane	10		"	10.0	104	45-147	
1,2-Dibromoethane	10		"	10.0	101	83-124	
1,2-Dichlorobenzene	10		"	10.0	104	79-123	
1,2-Dichloroethane	10		"	10.0	105	73-132	
1,2-Dichloropropane	10		"	10.0	105	78-132	
1,3,5-Trimethylbenzene	11		"	10.0	110	80-131	
1,3-Dichlorobenzene	11		"	10.0	109	86-122	
1,4-Dichlorobenzene	10		,,	10.0	104	85-124	
1,4-Dioxane	440		"	200	221	10-349	
2-Butanone			"				
2-Hexanone	12 6.9		"	10.0 10.0	116 69.0	49-152 51-146	
4-Methyl-2-pentanone			"				Low Bias
Acetone Acetone	5.6		"	10.0	56.1	57-145	LOW DIAS
Acrolein	8.0		,,	10.0	79.6	14-150	
Acrolein Acrylonitrile	10		,,	10.0	102	10-153	
	13		"	10.0	133	51-150	
Benzene	11		"	10.0	112	85-126	
Bromochloromethane	11			10.0	114	77-128	
Bromodichloromethane	10		"	10.0	105	79-128	
Bromoform	10		"	10.0	102	78-133	
Bromomethane	15		"	10.0	154	43-168	

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Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Batch BA60665 - EPA 5030B

Surrogate: 1,2-Dichloroethane-d4

Surrogate: p-Bromofluorobenzene

Surrogate: Toluene-d8

LCS (BA60665-BS1)

Carbon disulfide	13	ug/L	10.0	127	68-146
Carbon tetrachloride	12	"	10.0	116	77-141
Chlorobenzene	11	"	10.0	107	88-120
Chloroethane	11	"	10.0	113	65-136
Chloroform	11	"	10.0	109	82-128
Chloromethane	11	"	10.0	110	43-155
cis-1,2-Dichloroethylene	12	"	10.0	117	83-129
cis-1,3-Dichloropropylene	11	"	10.0	108	80-131
Cyclohexane	11	"	10.0	111	63-149
Dibromochloromethane	11	"	10.0	105	80-130
Dibromomethane	10	"	10.0	103	72-134
Dichlorodifluoromethane	10	"	10.0	103	44-144
Ethyl Benzene	11	"	10.0	109	80-131
Hexachlorobutadiene	12	"	10.0	116	67-146
Isopropylbenzene	11	"	10.0	111	76-140
Methyl acetate	11	"	10.0	113	51-139
Methyl tert-butyl ether (MTBE)	11	"	10.0	107	76-135
Methylcyclohexane	11	"	10.0	110	72-143
Methylene chloride	11	"	10.0	107	55-137

n-Butylbenzene 79-132 12 10.0 117 n-Propylbenzene 11 10.0 78-133 112 o-Xylene 11 10.0 108 78-130 p- & m- Xylenes 22 20.0 112 77-133 p-Isopropyltoluene 11 10.0 114 81-136 sec-Butylbenzene 11 10.0 112 79-137 Styrene 12 10.0 116 67-132 tert-Butyl alcohol (TBA) 9.4 10.0 94.1 25-162 tert-Butylbenzene 11 10.0 110 77-138 Tetrachloroethylene 11 10.0 108 82-131 Toluene 11 10.0 108 80-127 trans-1,2-Dichloroethylene 11 10.0 115 80-132 trans-1,3-Dichloropropylene 11 10.0 106 78-131 Trichloroethylene 11 10.0 107 82-128 Trichlorofluoromethane 11 10.0 111 67-139 Vinyl Chloride 11 10.0 115 58-145

10.0

10.0

10.0

96.4

98.9

99.6

69-130

81-117

79-122

9.64

9.89

9.96

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Prepared & Analyzed: 01/19/2016



$\label{lem:compounds} \textbf{Volatile Organic Compounds by GC/MS-Quality Control Data}$

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

,								
Batch BA60665 - EPA 5030B								
LCS Dup (BA60665-BSD1)					Prepa	red & Analyzed: 01/19/2	016	
1,1,1,2-Tetrachloroethane	11	ug/L	10.0	109	82-126	3.46	30	
1,1,1-Trichloroethane	11	"	10.0	115	78-136	2.47	30	
1,1,2,2-Tetrachloroethane	11	"	10.0	106	76-129	3.83	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11	"	10.0	113	54-165	0.177	30	
1,1,2-Trichloroethane	11	"	10.0	106	82-123	3.84	30	
1,1-Dichloroethane	12	"	10.0	120	82-129	2.88	30	
1,1-Dichloroethylene	12	"	10.0	124	68-138	1.14	30	
1,2,3-Trichlorobenzene	10	"	10.0	102	76-136	0.294	30	
1,2,3-Trichloropropane	10	"	10.0	104	77-128	0.384	30	
1,2,4-Trichlorobenzene	11	"	10.0	108	76-137	0.838	30	
1,2,4-Trimethylbenzene	11	"	10.0	109	82-132	0.365	30	
1,2-Dibromo-3-chloropropane	9.6	"	10.0	95.6	45-147	8.90	30	
1,2-Dibromoethane	10	"	10.0	105	83-124	3.60	30	
1,2-Dichlorobenzene	11	"	10.0	106	79-123	2.10	30	
1,2-Dichloroethane	11	"	10.0	107	73-132	1.89	30	
1,2-Dichloropropane	11	"	10.0	108	78-126	2.91	30	
1,3,5-Trimethylbenzene	11	"	10.0	111	80-131	0.453	30	
1,3-Dichlorobenzene	11	"	10.0	109	86-122	0.276	30	
1,4-Dichlorobenzene	10	"	10.0	104	85-124	0.0966	30	
1,4-Dioxane	470	"	200	234	10-349	5.72	30	
2-Butanone	12	"	10.0	125	49-152	7.57	30	
2-Hexanone	8.4	"	10.0	84.0	51-146	19.6	30	
4-Methyl-2-pentanone	5.9	"	10.0	58.7	57-145	4.53	30	
Acetone	8.7	"	10.0	87.2	14-150	9.11	30	
Acrolein	11	"	10.0	107	10-153	5.56	30	
Acrylonitrile	9.0	"	10.0	89.6	51-150	38.8	30	Non-dir.
Benzene	11	"	10.0	114	85-126	1.87	30	
Bromochloromethane	12	"	10.0	116	77-128	2.52	30	
Bromodichloromethane	11	"	10.0	106	79-128	1.61	30	
Bromoform	11	"	10.0	106	78-133	3.27	30	
Bromomethane	15	"	10.0	149	43-168	3.24	30	
Carbon disulfide	13	"	10.0	128	68-146	0.628	30	
Carbon tetrachloride	12	"	10.0	116	77-141	0.516	30	
Chlorobenzene	11	"	10.0	109	88-120	1.57	30	
Chloroethane	11	"	10.0	114	65-136	0.616	30	
Chloroform	11	"	10.0	114	82-128	4.21	30	
Chloromethane	11	"	10.0	110	43-155	0.00	30	
cis-1,2-Dichloroethylene	12	"	10.0	119	83-129	1.78	30	
cis-1,3-Dichloropropylene	11	"	10.0	111	80-131	2.74	30	
Cyclohexane	11	"	10.0	111	63-149	0.271	30	
Dibromochloromethane	11	"	10.0	108	80-130	2.81	30	
Dibromomethane	11	"	10.0	107	72-134	4.38	30	
Dichlorodifluoromethane	10	"	10.0	100	44-144	2.36	30	
Ethyl Benzene	11	"	10.0	110	80-131	0.274	30	
Hexachlorobutadiene	11	"	10.0	114	67-146	1.22	30	
Isopropylbenzene	11	"	10.0	110	76-140	0.452	30	
Methyl acetate	12	"	10.0	115	51-139	1.49	30	
Methyl tert-butyl ether (MTBE)	11	"	10.0	112	76-135	3.93	30	
Methylcyclohexane	11	"	10.0	108	70-133	1.84	30	
Methylene chloride	11	"	10.0	109	55-137	2.41	30	
n-Butylbenzene	12	"	10.0	116	79-132	0.257	30	
ii Daiyiooniiono	12		10.0	110	17-134	0.437	30	

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Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Spike

Source*

Reporting

### Ref BA60665 - EPA 5030B ### Action BA60665 - EPA 5030B			Reporting	Spike	Source*		%REC			KrD	
Propulse	Analyte	Result	Limit Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Angle Angl	Batch BA60665 - EPA 5030B										
Sylane	LCS Dup (BA60665-BSD1)						Prep	ared & Analy	zed: 01/19/	2016	
Am Nythems	n-Propylbenzene	11	ug/L	10.0		112	78-133		0.893	30	
	o-Xylene	11	"	10.0		110	78-130		1.74	30	
1	p- & m- Xylenes	23	"	20.0		113	77-133		0.845	30	
yeare the property of the prop	p-Isopropyltoluene	11	"	10.0		114	81-136		0.702	30	
retulyishanched (TIAA) 10 " 100 " 100 " 25.462 6.38 " 30 " 11 " 100 " 10	sec-Butylbenzene	11	"	10.0		110	79-137		1.44	30	
set butyphomone	Styrene	12	"	10.0		118	67-132		1.88	30	
transhorechylene 11	tert-Butyl alcohol (TBA)	10	"	10.0		100	25-162		6.38		
Selection		11	"	10.0		110	77-138				
ame 1.2-Dichloroethylene 11	Tetrachloroethylene					108					
1	Toluene					109					
ricklonedsylvene											
richlordincomethane 11											
Triny Chloride 11 " 100 " 113 S8-45 149 30 maragenee 1.2-Dichloroechame-44 100 " 100 99.0 S8-117 maragenee 1.2-Dichloroechame-48 9.90 " 100 99.4 79.222 maragenee 1.6-Dichloroechame 9.94 " 100 99.4 79.222 maragenee 1.6-Dichloroechame 9.94 " 100 ND											
arrogate: 1,2-Dichloroethane-d4 10.0 " 10.0 69-130 arrogate: 1,2-Dichloroethane-d8 9.90 " 10.0 99.0 81-117 arrogate: p-Bromoflumohenemen 9.94 " 10.0 99.0 81-117 Afatris Spike (BA.60665-MS1) *Source sample: I6A0405-04 (HMW-7R) " Prepared & Analyzed: 01/19/2016 1,12-Tethachloroethane 11 " 10.0 ND 98.6 45-161 1,12-Tethaloroethane 11 " 10.0 ND 10.7 70-146 1,12-Tethaloroethane (Freen 113) 8.9 " 10.0 ND 97.0 59-146 1,12-Tethaloroethane (Freen 113) 8.9 " 10.0 ND 97.0 59-146 1,1-Dichloroethane 11 " 10.0 ND 97.0 59-146 1,1-Dichloroethane 11 " 10.0 ND 91.0 59-146 1,1-Dichloroethane 11 " 10.0 ND 91.0 41-16 1,1-Dichloroethane 10 " 10.0 ND 93.6 72-122 2,4-Trichloroethane 9.4<											
Property Proceedings Process	Vinyl Chloride	11	"	10.0		113	58-145		1.49	30	
Natrix Spike (BAG0665-NS1)	Surrogate: 1,2-Dichloroethane-d4	10.0	"	10.0		100	69-130				
Prepared & Analyzed: 01/19/2016 Prep	Surrogate: Toluene-d8	9.90	"	10.0		99.0	81-117				
1,1,2-Tetrachiorochiane	Surrogate: p-Bromofluorobenzene	9.94	"	10.0		99.4	79-122				
1,1-Trichloroethane	Matrix Spike (BA60665-MS1)	*Source sample: 16	5A0405-04 (HMW-7R)				Prep	ared & Analy	zed: 01/19/	2016	
1,1-Trichloroethane	1,1,1,2-Tetrachloroethane	9.9	ug/L	10.0	ND	98.6	45-161				
1,2.2-Tetachloroethane	1,1,1-Trichloroethane										
1,12-Frichloroethane	1,1,2,2-Tetrachloroethane		"								
1-Dichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.9	"	10.0	ND	89.3	21-217				
1-Dichloroethylene	1,1,2-Trichloroethane	9.7	"	10.0	ND	97.0	59-146				
10	1,1-Dichloroethane	11	"	10.0	ND	108	54-146				
10	1,1-Dichloroethylene	11	"	10.0	ND	113	44-165				
2,4-Trichlorobenzene 9,4 " 10,0 ND 93,8 41-161 2,4-Trimethylbenzene 9,4 " 10,0 ND 93,6 72-129 2-Dibromo-3-chloropropane 10 " 10,0 ND 95,5 75-125 2-Dichlorothane 9,6 " 10,0 ND 95,0 63-122 2-Dichlorothane 9,6 " 10,0 ND 96,4 68-131 2-Dichloropropane 9,5 " 10,0 ND 94,9 77-121 3,5-Trimethylbenzene 9,4 " 10,0 ND 94,9 77-121 3,5-Trimethylbenzene 9,4 " 10,0 ND 94,9 77-121 3,5-Trimethylbenzene 9,3 " 10,0 ND 94,9 77-121 3,5-Trimethylbenzene 9,3 " 10,0 ND 93,4 74-119 4-Dichlorobenzene 8,9 " 10,0 ND 93,4 74-119 4-Dichlorobenzene 7,5 " 10,0 ND 75,3 10-193 -Hexanone 7,7 " 10,0 ND 75,3 10-193 -Hexanone 7,7 " 10,0 ND 75,0 38-150 vectone 12 " 10,0 ND 105	1,2,3-Trichlorobenzene	10	"	10.0	ND	99.6	40-161				
2,4-Trimethylbenzene 9,4 " 10,0 ND 93.6 72-129 2,2-Dibromo-3-chloropropane 10 " 10,0 ND 95.5 75-125 2,2-Dichloromethane 9,6 " 10,0 ND 95.5 75-125 2,2-Dichlorotethane 9,6 " 10,0 ND 95.0 63-122 2,2-Dichlorotethane 9,6 " 10,0 ND 95.0 63-122 2,2-Dichloropropane 9,5 " 10,0 ND 94.4 68-131 2,2-Dichloropropane 9,5 " 10,0 ND 94.9 77-121 3,35-Trimethylbenzene 9,4 " 10,0 ND 94.0 69-126 3,3-Dichlorobenzene 9,3 " 10,0 ND 94.0 69-126 3,3-Dichlorobenzene 9,3 " 10,0 ND 94.4 74-119 4,Dichlorobenzene 8,9 " 10,0 ND 89.4 70-124 4,Dichlorobenzene 450 " 200 ND 224 10-310 -Butanone 7,5 " 10,0 ND 75.3 10-193 -Hexanone 7,7 " 10,0 ND 75.3 10-193 -Hexanone 7,7 " 10,0 ND 77.4 53-133 -Methyl-2-pentanone 5,7 " 10,0 ND 77.4 53-133 -Methyl-2-pentanone 5,7 " 10,0 ND 75.0 38-150	1,2,3-Trichloropropane	10	"	10.0	ND	104	74-127				
10	1,2,4-Trichlorobenzene	9.4	"	10.0	ND	93.8	41-161				
2-Dibromoethane 9,6 " 10.0 ND 95.5 75-125 2-125	1,2,4-Trimethylbenzene	9.4	"	10.0	ND	93.6	72-129				
2-Dichlorobenzene 9.5 " 10.0 ND 95.0 63-122 2 2 2 10.0 ND 95.0 63-122 2 3 37-165 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1,2-Dibromo-3-chloropropane	10	"	10.0	ND	102	31-151				
2-Dichloroethane 9,6 " 10,0 ND 96,4 68-131 2-Dichloropropane 9,5 " 10,0 ND 94,9 77-121 3,5-Trimethylbenzene 9,4 " 10,0 ND 94,0 69-126 3-Dichlorobenzene 9,3 " 10,0 ND 94,0 69-126 3-Dichlorobenzene 9,3 " 10,0 ND 93,4 74-119 3,4-Dichlorobenzene 8,9 " 10,0 ND 89,4 70-124 3-Dichlorobenzene 450 " 200 ND 224 10-310 3-Dichlorobenzene 3,5 " 10,0 ND 75,3 10-193 3-Dichlorobenzene 3,7 " 10,0 ND 77,4 53-133 3-Dichlorobenzene 3,7 " 10,0 ND 10,0 ND 10,5 ND 10,0	1,2-Dibromoethane	9.6	"	10.0	ND	95.5	75-125				
2-Dichloropropane 9.5 " 10.0 ND 94.9 77-121 3,35-Trimethylbenzene 9.4 " 10.0 ND 94.0 69-126 3,3-Dichlorobenzene 9.3 " 10.0 ND 93.4 74-119 3,4-Dichlorobenzene 8.9 " 10.0 ND 89.4 70-124 3,4-Dichlorobenzene 8.9 " 10.0 ND 89.4 70-124 3,4-Dichlorobenzene 8.9 " 10.0 ND 89.4 70-124 3,4-Dichlorobenzene 8.9 " 10.0 ND 75.3 10-193 3,4-Dichlorobenzene 7.5 " 10.0 ND 75.3 10-193 3,4-Dichlorobenzene 7.7 " 10.0 ND 77.4 53-133 3,4-Dichlorobenzene 7.	1,2-Dichlorobenzene	9.5	"	10.0	ND	95.0	63-122				
3,5-Trimethylbenzene 9,4 " 10,0 ND 94,0 69-126 3-Dichlorobenzene 9,3 " 10,0 ND 93,4 74-119 4-Dichlorobenzene 8,9 " 10,0 ND 89,4 70-124 4-Dichlorobenzene 450 " 200 ND 224 10-310 -Butanone 7,5 " 10,0 ND 75,3 10-193 -Hexanone 7,7 " 10,0 ND 77,4 53-133 -Methyl-2-pentanone 5,7 " 10,0 ND 57,0 38-150 Acetone 12 " 10,0 ND 105 10-195 Acetone 12 " 10,0 ND 105 10-195 Acetone 10 " 10,0 ND 104 38-155 Acetone 10 " 10,0 ND 104 38-155 Acetone 10 " 10,0 ND 102 75-121 Acetone 10 " 10,0 ND 95,2 70-129 Acetone 9,5 " 10,0 ND 93,4 66-136 Acetone 4,3 " 10,0 ND 43,3 30-158 Acetone 4,3 " 10,0 ND 43,3 30-158 Acetone 4,3 " 10,0 ND 114 10-138 Acetone 10 ND 10,0 ND 114 10-138 Acetone 4,3 " 10	1,2-Dichloroethane	9.6	"	10.0	ND	96.4	68-131				
3-Dichlorobenzene 9.3 " 10.0 ND 93.4 74-119 10.0 ND 89.4 70-124 10.0 ND 75.3 10.0 10.0 10.0 ND 75.3 10.0 10.0 10.0 ND 75.3 10.0 10.0 10.0 ND 77.4 53-133 10.0 10.0 ND 77.4 53-133 10.0 10.0 ND 10.0	1,2-Dichloropropane	9.5	"	10.0	ND	94.9	77-121				
A-Dichlorobenzene 8.9			"								
4-Dioxane 450 " 200 ND 224 10-310 -Butanone 7.5 " 10.0 ND 75.3 10-193 -Hexanone 7.7 " 10.0 ND 77.4 53-133 -Methyl-2-pentanone 5.7 " 10.0 ND 57.0 38-150 Acetone 12 " 10.0 ND 105 10-195 Acetone 10 " 10.0 ND 105 10-195 Acetolitrile 9.2 " 10.0 ND 92.3 37-165 Benzene 10 " 10.0 ND 104 38-155 Benzene 10 " 10.0 ND 102 75-121 Benzendichloromethane 9.5 " 10.0 ND 95.2 70-129 Benzendichloromethane 9.3 " 10.0 ND 93.4 66-136 Benzene 4.3 " 10.0 ND 93.4 66-136 Benzene 4.3 " 10.0 ND 43.3 30-158 Carbon disulfide 11 " 10.0 ND 114 10-138											
-Butanone 7.5 " 10.0 ND 75.3 10-193 -Hexanone 7.7 " 10.0 ND 77.4 53-133Methyl-2-pentanone 5.7 " 10.0 ND 57.0 38-150Methyl-2-pentanone 5.7 " 10.0 ND 57.0 38-150Methyl-2-pentanone 12 " 10.0 ND 105 10-195											
-Hexanone 7.7 " 10.0 ND 77.4 53-133 -Methyl-2-pentanone 5.7 " 10.0 ND 57.0 38-150 -Methyl-2-pentanone 12 " 10.0 ND 105 10-195 -Merylonitrile 9.2 " 10.0 ND 92.3 37-165 -Benzene 10 " 10.0 ND 104 38-155 -Bromochloromethane 10 " 10.0 ND 102 75-121 -Bromodichloromethane 9.5 " 10.0 ND 95.2 70-129 -Bromoform 9.3 " 10.0 ND 93.4 66-136 -Bromomethane 4.3 " 10.0 ND 93.4 66-136 -Bromomethane 4.3 " 10.0 ND 93.4 66-136 -Bromomethane 4.3 " 10.0 ND 114 10-138											
Methyl-2-pentanone 5.7 10.0 ND 57.0 38-150 Methyl-2-pentanone 12 10.0 2.8 94.6 13-149 Methyl-2-pentanone 10 10.0 ND 105 10-195 Methyl-2-pentanone 10 10.0 ND 105 10-195 Methyl-2-pentanone 10 10.0 ND 92.3 37-165 Methyl-2-pentanone 10 10.0 ND 104 38-155 Methyl-2-pentanone 10 10.0 ND 105 10-195 Methyl-2-pentanone 10 10.0 ND 105 Methyl-2-pentanone 10 10.0 ND 10.0 Methyl-2-pentanone 10											
12											
10											
Series											
Benzene 10 " 10.0 ND 104 38-155 Bromochloromethane 10 " 10.0 ND 102 75-121 Bromodichloromethane 9.5 " 10.0 ND 95.2 70-129 Bromoform 9.3 " 10.0 ND 93.4 66-136 Bromomethane 4.3 " 10.0 ND 43.3 30-158 Carbon disulfide 11 " 10.0 ND 114 10-138											
Bromochloromethane 10 " 10.0 ND 102 75-121 Bromodichloromethane 9.5 " 10.0 ND 95.2 70-129 Bromoform 9.3 " 10.0 ND 93.4 66-136 Bromomethane 4.3 " 10.0 ND 43.3 30-158 Carbon disulfide 11 " 10.0 ND 114 10-138	· ·										
Bromodichloromethane 9.5 " 10.0 ND 95.2 70-129 Bromoform 9.3 " 10.0 ND 93.4 66-136 Bromomethane 4.3 " 10.0 ND 43.3 30-158 Carbon disulfide 11 " 10.0 ND 114 10-138											
Bromonform 9.3 " 10.0 ND 93.4 66-136 Bromomethane 4.3 " 10.0 ND 43.3 30-158 Carbon disulfide 11 " 10.0 ND 114 10-138											
Parbon disulfide 4.3 " 10.0 ND 43.3 30-158 Carbon disulfide 11 " 10.0 ND 114 10-138											
Carbon disulfide 11 " 10.0 ND 114 10-138											
							10-130				

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RPD

%REC



Volatile Organic Compounds by GC/MS - Quality Control Data York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag	١

Ratch	BA60665	- EPA	5030R

Matrix Spike (BA60665-MS1)	*Source sample: 16A040:	5-04 (HMW-7R)			Prepared & Analyzed: 01/19/20				
Carbon tetrachloride	11	ug/L	10.0	ND	107	71-146			
Chlorobenzene	9.8	"	10.0	ND	97.7	81-117			
Chloroethane	11	"	10.0	ND	107	51-145			
Chloroform	10	"	10.0	ND	104	80-124			
Chloromethane	9.2	"	10.0	ND	91.5	16-163			
cis-1,2-Dichloroethylene	10	"	10.0	ND	104	76-125			
cis-1,3-Dichloropropylene	9.2	"	10.0	ND	91.7	58-131			
Cyclohexane	16	"	10.0	6.2	93.0	70-130			
Dibromochloromethane	9.5	"	10.0	ND	95.3	71-129			
Dibromomethane	9.6	"	10.0	ND	95.7	76-120			
Dichlorodifluoromethane	7.4	"	10.0	1.9	54.6	30-147			
Ethyl Benzene	9.9	"	10.0	ND	99.3	72-128			
Hexachlorobutadiene	7.4	"	10.0	ND	74.1	34-166			
Isopropylbenzene	13	"	10.0	3.4	95.4	66-139			
Methyl acetate	20	"	10.0	ND	201	10-200	High Bias		
Methyl tert-butyl ether (MTBE)	17	"	10.0	6.8	102	75-128			
Methylcyclohexane	8.9	"	10.0	1.2	76.9	70-130			
Methylene chloride	9.7	"	10.0	ND	97.1	57-128			
n-Butylbenzene	9.5	"	10.0	1.1	84.0	61-138			
n-Propylbenzene	12	"	10.0	2.8	94.4	66-134			
o-Xylene	10	"	10.0	0.25	99.3	69-126			
p- & m- Xylenes	20	"	20.0	ND	100	67-130			
p-Isopropyltoluene	8.8	"	10.0	ND	88.5	64-137			
sec-Butylbenzene	11	"	10.0	2.0	87.5	53-155			
Styrene	11	"	10.0	ND	105	69-125			
tert-Butyl alcohol (TBA)	24	"	10.0	12	120	10-130			
tert-Butylbenzene	14	"	10.0	4.8	91.9	65-139			
Tetrachloroethylene	9.5	"	10.0	ND	94.8	64-139			
Toluene	10	"	10.0	ND	100	76-123			
trans-1,2-Dichloroethylene	11	"	10.0	ND	106	79-131			
trans-1,3-Dichloropropylene	9.5	"	10.0	ND	95.4	55-130			
Trichloroethylene	9.9	"	10.0	ND	98.8	53-145			
Trichlorofluoromethane	10	"	10.0	ND	101	61-142			
Vinyl Chloride	11	"	10.0	ND	105	31-165			
Surrogate: 1,2-Dichloroethane-d4	10.1	"	10.0		101	69-130			
Surrogate: Toluene-d8	9.75	"	10.0		97.5	81-117			
Surrogate: p-Bromofluorobenzene	10.2	"	10.0		102	79-122			

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Volatile Organic Compounds by GC/MS - Quality Control Data York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD		l
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag	l

Ratch	BA60665	- EPA	5030R

Matrix Spike Dup (BA60665-MSD1)	*Source sample: 16A0405	5-04 (HMW-7R)				Prep	pared & Analy	zed: 01/19/2	016
,1,1,2-Tetrachloroethane	9.5	ug/L	10.0	ND	95.0	45-161	<u> </u>	3.72	30
,1,1-Trichloroethane	10	"	10.0	ND	103	70-146		4.19	30
1,2,2-Tetrachloroethane	9.1	"	10.0	ND	91.0	74-121		4.30	30
1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.1	"	10.0	ND	81.2	21-217		9.50	30
1,2-Trichloroethane	9.3	"	10.0	ND	93.1	59-146		4.10	30
1-Dichloroethane	11	"	10.0	ND	105	54-146		3.00	30
1-Dichloroethylene	11	"	10.0	ND	106	44-165		5.66	30
2,3-Trichlorobenzene	9.6	"	10.0	ND	96.0	40-161		3.68	30
2,3-Trichloropropane	10	"	10.0	ND	102	74-127		2.62	30
2,4-Trichlorobenzene	8.8	"	10.0	ND	88.3	41-161		6.04	30
2,4-Trimethylbenzene	8.8	"	10.0	ND	87.5	72-129		6.74	30
2-Dibromo-3-chloropropane	9.4	"	10.0	ND	93.8	31-151		8.18	30
2-Dibromoethane	9.3	"	10.0	ND	93.1	75-125		2.55	30
2-Dichlorobenzene	9.0	"	10.0	ND	90.0	63-122		5.41	30
2-Dichloroethane	9.6	"	10.0	ND	96.2	68-131		0.208	30
2-Dichloropropane	9.3	"	10.0	ND	93.3	77-121		1.70	30
3,5-Trimethylbenzene	8.8	"	10.0	ND	88.5	69-126		6.03	30
3-Dichlorobenzene	8.8	"	10.0	ND	87.9	74-119		6.07	30
4-Dichlorobenzene	8.4	"	10.0	ND	84.5	70-124		5.64	30
4-Dioxane	460	"	200	ND	230	10-310		2.88	30
Butanone	8.7	"	10.0	ND ND	86.8	10-310		14.2	30
Hexanone	8.1	"	10.0	ND	81.4	53-133		5.04	30
Methyl-2-pentanone		"						0.351	30
cetone	5.7	"	10.0	ND	56.8	38-150		4.25	30
crolein	12	"	10.0	2.8	89.5	13-149			30
	9.6	"	10.0	ND	96.2	10-195		8.56 22.7	30
crylonitrile	7.4	"	10.0	ND	73.5	37-165			
enzene	10		10.0	ND	102	38-155		2.42	30
romochloromethane	9.9	"	10.0	ND	99.2	75-121		3.27	30
romodichloromethane	9.4		10.0	ND	94.0	70-129		1.27	30
romoform	9.2	"	10.0	ND	91.5	66-136		2.06	30
romomethane	4.5	"	10.0	ND	44.6	30-158		2.96	30
arbon disulfide	11	"	10.0	ND	108	10-138		5.23	30
arbon tetrachloride	10	"	10.0	ND	102	71-146		5.37	30
nlorobenzene	9.4	"	10.0	ND	93.8	81-117		4.07	30
hloroethane	10	"	10.0	ND	100	51-145		6.27	30
nloroform	10	"	10.0	ND	101	80-124		3.23	30
nloromethane	8.5	"	10.0	ND	85.2	16-163		7.13	30
s-1,2-Dichloroethylene	10	"	10.0	ND	102	76-125		2.53	30
s-1,3-Dichloropropylene	8.9	"	10.0	ND	88.8	58-131		3.21	30
yclohexane	15	"	10.0	6.2	87.9	70-130		3.34	30
bromochloromethane	9.4	"	10.0	ND	94.5	71-129		0.843	30
bromomethane	9.4	"	10.0	ND	93.5	76-120		2.33	30
chlorodifluoromethane	6.3	"	10.0	1.9	44.3	30-147		15.0	30
hyl Benzene	9.4	"	10.0	ND	93.9	72-128		5.59	30
exachlorobutadiene	7.5	"	10.0	ND	75.0	34-166		1.21	30
opropylbenzene	13	"	10.0	3.4	91.8	66-139		2.83	30
ethyl acetate	20	"	10.0	ND	201	10-200	High Bias	0.0995	30
ethyl tert-butyl ether (MTBE)	17	"	10.0	6.8	101	75-128		0.592	30
ethylcyclohexane	8.7	"	10.0	1.2	74.9	70-130		2.28	30
ethylene chloride	9.4	"	10.0	ND	94.1	57-128		3.14	30
Butylbenzene	9.2	"	10.0	1.1	81.3	61-138		2.88	30

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Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Reporting

Spike

Source*

%REC

Analyte	Result	Limit	Units	Level	Result	%REC	%REC Limits	Flag	RPD	Limit	Flag
Batch BA60665 - EPA 5030B Matrix Spike Dup (BA60665-MSD1)	*Source sample: 1	640405 04 (111	MW 7D)				Pren	ared & Analy	zed: 01/19/	2016	
n-Propylbenzene	12	0А0403-04 (П	ug/L	10.0	2.8	87.8	66-134		5.54	30	
o-Xylene	9.7		ug/L	10.0	0.25	94.1	69-126		5.24	30	
p- & m- Xylenes	19		"	20.0	ND	94.3	67-130		6.12	30	
p-Isopropyltoluene	8.5		"	10.0	ND	84.8	64-137		4.27	30	
sec-Butylbenzene	11		"	10.0	2.0	85.4	53-155		1.98	30	
Styrene	10		"	10.0	ND	99.6	69-125		5.37	30	
tert-Butyl alcohol (TBA)	22		"	10.0	12	101	10-130		7.86	30	
tert-Butylbenzene	14		"	10.0	4.8	90.3	65-139		1.15	30	
Tetrachloroethylene	8.7		"	10.0	ND	87.3	64-139		8.24	30	
Toluene	9.5		"	10.0	ND	94.7	76-123		5.64	30	
trans-1,2-Dichloroethylene	10		"	10.0	ND	101	79-131		5.01	30	
trans-1,3-Dichloropropylene	8.7		"	10.0	ND	86.9	55-130		9.33	30	
Trichloroethylene	9.2		"	10.0	ND	92.5	53-130		6.59	30	
Trichlorofluoromethane	8.8		"	10.0	ND	87.7	61-142		14.5	30	
Vinyl Chloride	9.7		"	10.0	ND	96.8	31-165		8.41	30	
					ND				0.11		
Surrogate: 1,2-Dichloroethane-d4	10.0		"	10.0		100	69-130				
Surrogate: Toluene-d8	9.71		"	10.0		97.1	81-117				
Surrogate: p-Bromofluorobenzene	10.4		"	10.0		104	79-122				
Batch BA60698 - EPA 5030B											
Blank (BA60698-BLK1)							Prep	ared & Analy	zed: 01/19/	2016	
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	0.23	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	2.0	"								
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	160	"								
2-Butanone	ND	2.0	"								
2-Hexanone	ND	2.0	"								
4-Methyl-2-pentanone	ND	0.50	"								
Acetone	1.9	2.0	"								
Acrolein	ND	2.0	"								
Acrylonitrile	ND	0.50	"								
Benzene	ND	0.50	"								
Bromochloromethane	ND	0.50	"								
Bromodichloromethane	ND	0.50	"								
Bromoform	ND	0.50	"								

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RPD



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Batch BA60698 - EPA 5030B						
Blank (BA60698-BLK1)						Prepared & Analyzed: 01/19/2016
Bromomethane	ND	0.50	ug/L			
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	"			
is-1,2-Dichloroethylene	ND	0.50	"			
is-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	"			
Iexachlorobutadiene	0.21	0.50	"			
sopropylbenzene	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	"			
-Butylbenzene	ND	0.50	"			
-Propylbenzene	ND	0.50	"			
-Xylene	ND	0.50	"			
- & m- Xylenes	ND	1.0	"			
-Isopropyltoluene	ND	0.50	"			
ec-Butylbenzene	ND	0.50	"			
tyrene	ND	0.50	"			
ert-Butyl alcohol (TBA)	ND	2.0	"			
ert-Butylbenzene	ND	0.50	"			
etrachloroethylene	ND	0.50	"			
Coluene	ND	0.50	"			
rans-1,2-Dichloroethylene	ND	0.50	"			
rans-1,3-Dichloropropylene	ND	0.50	"			
richloroethylene	ND	0.50	"			
richlorofluoromethane	ND	0.50	"			
/inyl Chloride	ND	0.50	"			
Zylenes, Total	ND	1.5	"			
urrogate: 1,2-Dichloroethane-d4	10.4		"	10.0	104	69-130
'urrogate: Toluene-d8	9.91		"	10.0	99.1	81-117
urrogate: p-Bromofluorobenzene	10.3		"	10.0	103	79-122

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$\label{lem:compounds} \textbf{Volatile Organic Compounds by GC/MS-Quality Control Data}$

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag	ı

Batch	BA60698	- EPA 5030B
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CS (BA60698-BS1)					Prepared & Analyzed: 01/19/2016
1,1,2-Tetrachloroethane	10	ug/L	10.0	103	82-126
1,1-Trichloroethane	11	"	10.0	108	78-136
1,2,2-Tetrachloroethane	10	"	10.0	105	76-129
1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10	"	10.0	102	54-165
1,2-Trichloroethane	10	"	10.0	103	82-123
1-Dichloroethane	11	"	10.0	111	82-129
1-Dichloroethylene	11	"	10.0	113	68-138
2,3-Trichlorobenzene	10	"	10.0	105	76-136
2,3-Trichloropropane	11	"	10.0	106	77-128
2,4-Trichlorobenzene	11	"	10.0	105	76-137
2,4-Trimethylbenzene	10	"	10.0	104	82-132
2-Dibromo-3-chloropropane	9.2	"	10.0	92.0	45-147
2-Dibromoethane	10	"	10.0	102	83-124
2-Dichlorobenzene	10	"	10.0	102	79-123
2-Dichloroethane	11	"	10.0	105	73-132
2-Dichloropropane	10	"	10.0	100	78-126
3,5-Trimethylbenzene	10	"	10.0	100	80-131
3-Dichlorobenzene	10	"			
		"	10.0	104	86-122
4-Dichlorobenzene	10	"	10.0	101	85-124
4-Dioxane	480		200	238	10-349
Butanone	8.2	"	10.0	82.3	49-152
Hexanone	7.3	"	10.0	73.2	51-146
Methyl-2-pentanone	5.9	"	10.0	58.8	57-145
cetone	10	"	10.0	101	14-150
crolein	8.3	"	10.0	83.1	10-153
crylonitrile	9.6	"	10.0	96.5	51-150
enzene	11	"	10.0	108	85-126
romochloromethane	11	"	10.0	110	77-128
romodichloromethane	10	"	10.0	100	79-128
romoform	10	"	10.0	102	78-133
romomethane	5.5	"	10.0	54.7	43-168
arbon disulfide	12	"	10.0	116	68-146
arbon tetrachloride	11	"	10.0	108	77-141
hlorobenzene	10	"	10.0	102	88-120
hloroethane	10	"	10.0	103	65-136
hloroform	11	"	10.0	107	82-128
hloromethane	8.8	"	10.0	87.5	43-155
s-1,2-Dichloroethylene	11	"	10.0	107	83-129
s-1,3-Dichloropropylene	9.7	"	10.0	97.2	80-131
yclohexane	10	"	10.0	101	63-149
ibromochloromethane	10	"	10.0	102	80-130
ibromomethane	10	"	10.0	103	72-134
ichlorodifluoromethane	8.0	"	10.0	79.5	44-144
hyl Benzene	10	"	10.0	102	80-131
exachlorobutadiene	10	"	10.0	102	67-146
ppropylbenzene	10	"	10.0		76-140
tethyl acetate		"		104	
-	9.9	"	10.0	98.7	51-139
lethyl tert-butyl ether (MTBE)	11	"	10.0	108	76-135
ethylcyclohexane	9.6		10.0	96.2	72-143
Iethylene chloride	10	"	10.0	102	55-137



York Analytical Laboratories, Inc.

Spike

Source*

Reporting

	Re	eporting	Spike	Source*		%REC			KrD	
Analyte	Result	Limit Units	Level	Result	%REC	Limits	Flag F	RPD	Limit	Flag
Batch BA60698 - EPA 5030B										
LCS (BA60698-BS1)						Prepa	ared & Analyzed:	01/19/	2016	
n-Propylbenzene	10	ug/L	10.0		105	78-133				
o-Xylene	10	"	10.0		102	78-130				
p- & m- Xylenes	21	"	20.0		104	77-133				
p-Isopropyltoluene	10	"	10.0		105	81-136				
sec-Butylbenzene	10	"	10.0		103	79-137				
Styrene	11	"	10.0		111	67-132				
tert-Butyl alcohol (TBA)	10	"	10.0		99.7	25-162				
tert-Butylbenzene	10	"	10.0		103	77-138				
Tetrachloroethylene	10	"	10.0		100	82-131				
Toluene	10	"	10.0		101	80-127				
trans-1,2-Dichloroethylene	11	"	10.0		109	80-132				
trans-1,3-Dichloropropylene	9.5	"	10.0		95.2	78-131				
Trichloroethylene	9.9	"	10.0		98.6	82-128				
Trichlorofluoromethane	9.9	"	10.0		99.3	67-139				
Vinyl Chloride	9.7	"	10.0		96.9	58-145				
Surrogate: 1,2-Dichloroethane-d4	10.1	"	10.0		101	69-130				
Surrogate: Toluene-d8	9.69	"	10.0		96.9	81-117				
Surrogate: p-Bromofluorobenzene	10.1	"	10.0		101	79-122				
							1041	01/10/	2016	
LCS Dup (BA60698-BSD1)						Prepa	ared & Analyzed:	01/19/.	2016	
1,1,1,2-Tetrachloroethane	11	ug/L	10.0		114	82-126		0.3	30	
1,1,1-Trichloroethane	11	"	10.0		112	78-136	3	5.55	30	
1,1,2,2-Tetrachloroethane	12	"	10.0		117	76-129		1.1	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11	"	10.0		107	54-165	5	5.17	30	
1,1,2-Trichloroethane	11	"	10.0		112	82-123	8	3.45	30	
1,1-Dichloroethane	11	"	10.0		114	82-129	2	2.84	30	
1,1-Dichloroethylene	12	"	10.0		117	68-138	3	.48	30	
1,2,3-Trichlorobenzene	11	"	10.0		113	76-136	7	.27	30	
1,2,3-Trichloropropane	12	"	10.0		120	77-128	1	2.1	30	
1,2,4-Trichlorobenzene	11	"	10.0		113	76-137		.50	30	
1,2,4-Trimethylbenzene	11	"	10.0		114	82-132	Ģ	0.19	30	
1,2-Dibromo-3-chloropropane	11	"	10.0		111	45-147	1	9.0	30	
1,2-Dibromoethane	11	"	10.0		114	83-124	1	1.2	30	
1,2-Dichlorobenzene	11	"	10.0		112	79-123	Ģ	0.80	30	
1,2-Dichloroethane	11	"	10.0		108	73-132	2	2.54	30	
1,2-Dichloropropane	11	"	10.0		108	78-126	7	.31	30	
1,3,5-Trimethylbenzene	11	"	10.0		112	80-131	6	.80	30	
1,3-Dichlorobenzene	11	"	10.0		115	86-122		.78	30	
1,4-Dichlorobenzene	11	"	10.0		112	85-124	ç	0.49	30	
1,4-Dioxane	510	"	200		257	10-349	7	.66	30	
2-Butanone	11	"	10.0		110	49-152	2	28.5	30	
2-Hexanone	9.5	"	10.0		95.0	51-146	2	25.9	30	
4-Methyl-2-pentanone	6.4	"	10.0		64.5	57-145	Ģ	0.25	30	
Acetone	12	"	10.0		116	14-150		3.5	30	
Acrolein	9.0	"	10.0		90.1	10-153		8.08	30	
Acrylonitrile	10	"	10.0		99.5	51-150	3	3.06	30	
Benzene	11	"	10.0		112	85-126	3	3.83	30	
Bromochloromethane	11	"	10.0		114	77-128	3	5.49	30	
Bromodichloromethane	11	"	10.0		110	79-128		3.87	30	
Bromoform	11	"	10.0		112	78-133	Ģ	0.92	30	
Bromomethane	6.9	"	10.0		69.1	43-168	2	23.3	30	
Carbon disulfide	12	"	10.0		120	68-146	3	5.14	30	
120 RESEARCH DRIVE	STRATFORD, CT (6615		(203) 325-13	74		FAX (203) 357	7 0166		

120 RESEARCH DRIVE STRATFORD, CT 06615 (203) 325-1371 FAX (203) 35<u>7-0166</u>

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RPD

%REC



York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

1 mary to	resure	Ziiiii Ciiiii	Lever	result /orthe	Diffitto	8		
Batch BA60698 - EPA 5030B								
LCS Dup (BA60698-BSD1)					Prepa	red & Analyzed: 01/19/2	016	
Carbon tetrachloride	11	ug/L	10.0	113	77-141	4.35	30	
Chlorobenzene	11	"	10.0	112	88-120	10.2	30	
Chloroethane	11	"	10.0	105	65-136	2.11	30	
Chloroform	11	"	10.0	112	82-128	4.83	30	
Chloromethane	8.8	"	10.0	88.3	43-155	0.910	30	
cis-1,2-Dichloroethylene	11	"	10.0	112	83-129	4.39	30	
cis-1,3-Dichloropropylene	11	"	10.0	108	80-131	10.2	30	
Cyclohexane	10	"	10.0	105	63-149	4.09	30	
Dibromochloromethane	12	"	10.0	116	80-130	12.2	30	
Dibromomethane	11	"	10.0	109	72-134	6.04	30	
Dichlorodifluoromethane	8.0	"	10.0	79.7	44-144	0.251	30	
Ethyl Benzene	11	"	10.0	112	80-131	9.29	30	
Hexachlorobutadiene	11	"	10.0	109	67-146	5.75	30	
Isopropylbenzene	11	"	10.0	112	76-140	8.24	30	
Methyl acetate	9.8	"	10.0	98.5	51-139	0.203	30	
Methyl tert-butyl ether (MTBE)	11	"	10.0	112	76-135	4.01	30	
Methylcyclohexane	10	"	10.0	100	72-143	4.27	30	
Methylene chloride	10	"	10.0	104	55-137	1.94	30	
n-Butylbenzene	11	"	10.0	115	79-132	6.67	30	
n-Propylbenzene	11	"	10.0	113	78-133	7.53	30	
o-Xylene	11	"	10.0	113	78-130	10.2	30	
p- & m- Xylenes	23	"	20.0	114	77-133	10.0	30	
p-Isopropyltoluene	11	"	10.0	114	81-136	8.05	30	
sec-Butylbenzene	11	"	10.0	110	79-137	7.22	30	
Styrene	12	"	10.0	122	67-132	9.97	30	
tert-Butyl alcohol (TBA)	11	"	10.0	110	25-162	10.3	30	
tert-Butylbenzene	11	"	10.0	111	77-138	7.00	30	
Tetrachloroethylene	11	"	10.0	108	82-131	7.58	30	
Toluene	11	"	10.0	110	80-127	8.93	30	
trans-1,2-Dichloroethylene	11	"	10.0	113	80-132	3.07	30	
trans-1,3-Dichloropropylene	11	"	10.0	109	78-131	13.4	30	
Trichloroethylene	11	"	10.0	107	82-128	7.89	30	
Trichlorofluoromethane	10	"	10.0	105	67-139	5.39	30	
Vinyl Chloride	9.9	"	10.0	99.4	58-145	2.55	30	
Surrogate: 1,2-Dichloroethane-d4	10.1	"	10.0	101	69-130			
Surrogate: Toluene-d8	9.74	"	10.0	97.4	81-117			
Surrogate: p-Bromofluorobenzene	9.95	"	10.0	99.5	79-122			



York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BA60725 - EPA 5030B											
Blank (BA60725-BLK1)							Prep	ared & Analy	yzed: 01/20	2016	
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	2.0	"								
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	160	"								
2-Butanone	ND	2.0	"								
2-Hexanone	ND	2.0	"								
4-Methyl-2-pentanone	ND	0.50	"								
Acetone	1.1	2.0	"								
Acrolein	ND	2.0	"								
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	"								
n-Butylbenzene	ND	0.50	"								



$\label{lem:compounds} \textbf{Volatile Organic Compounds by GC/MS-Quality Control Data}$

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Batch BA60725 - EPA 5030B						
Blank (BA60725-BLK1)					Prep	pared & Analyzed: 01/20/2016
n-Propylbenzene	ND	0.50 ug	/L			
o-Xylene	ND	0.50				
p- & m- Xylenes	ND	1.0	1			
p-Isopropyltoluene	ND	0.50	1			
sec-Butylbenzene	ND	0.50				
Styrene	ND	0.50	1			
tert-Butyl alcohol (TBA)	ND	2.0	,			
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	i			
Xylenes, Total	ND	1.5	,			
Surrogate: 1,2-Dichloroethane-d4	10.3		" 10.0	103	69-130	
Surrogate: Toluene-d8	9.95		" 10.0	99.5	81-117	
Surrogate: p-Bromofluorobenzene	9.45		" 10.0	94.5	79-122	
LCS (BA60725-BS1)					Prep	pared & Analyzed: 01/20/2016
1,1,1,2-Tetrachloroethane	11	ug	/L 10.0	106	82-126	
1,1,1-Trichloroethane	11	,		109	78-136	
1,1,2,2-Tetrachloroethane	11	,	10.0	106	76-129	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10	,	10.0	104	54-165	
1,1,2-Trichloroethane	10	,		103	82-123	
1,1-Dichloroethane	11	,		113	82-129	
1,1-Dichloroethylene	11	,		114	68-138	
1,2,3-Trichlorobenzene	10	,		100	76-136	
1,2,3-Trichloropropane	11	,		107	77-128	
1,2,4-Trichlorobenzene	11	,		110	76-137	
1,2,4-Trimethylbenzene	11	,		110	82-132	
1,2-Dibromo-3-chloropropane	9.4	,		94.1	45-147	
1,2-Dibromoethane	10	,		103	83-124	
1,2-Dichlorobenzene	11	,		106	79-123	
1,2-Dichloroethane	10	,		104	73-132	
1,2-Dichloropropane	10	,		102	78-126	
1,3,5-Trimethylbenzene	11	,		112	80-131	
1,3-Dichlorobenzene	11	,		110	86-122	
1,4-Dichlorobenzene	11	,		108	85-124	
1,4-Dioxane	470	,		236	10-349	
2-Butanone	7.2	,			49-152	
2-Hexanone	7.5	,	10.0	71.9		
4-Methyl-2-pentanone		,	10.0	75.0	51-146	Low Bias
Acetone	5.6	,	10.0	56.2	57-145	LOW DIAS
Accetone	8.0	,	10.0	79.6	14-150	
	8.1	,	10.0	80.8	10-153	
Acrylonitrile	9.0	,	10.0	89.6	51-150	
Benzene	11	,	10.0	110	85-126	
Bromochloromethane	11	,	10.0	111	77-128	
Bromodichloromethane	10		10.0	103	79-128	
Bromoform	10	,	10.0	102	78-133	
Bromomethane	9.2	'	10.0	91.9	43-168	

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York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Datah	RA60725	EDA	5030B

LCS (BA60725-BS1)					Prepared & Analyzed: 01/20/2016
Carbon disulfide	12	ug/L	10.0	118	68-146
Carbon tetrachloride	11	"	10.0	110	77-141
Chlorobenzene	11	"	10.0	105	88-120
Chloroethane	10	"	10.0	104	65-136
Chloroform	11	"	10.0	109	82-128
Chloromethane	8.7	"	10.0	86.7	43-155
cis-1,2-Dichloroethylene	12	"	10.0	115	83-129
cis-1,3-Dichloropropylene	11	"	10.0	107	80-131
Cyclohexane	10	"	10.0	104	63-149
Dibromochloromethane	10	"	10.0	104	80-130
Dibromomethane	10	"	10.0	104	72-134
Dichlorodifluoromethane	7.3	"	10.0	73.3	44-144
Ethyl Benzene	11	"	10.0	107	80-131
Hexachlorobutadiene	11	"	10.0	112	67-146
Isopropylbenzene	11	"	10.0	111	76-140
Methyl acetate	11	"	10.0	110	51-139
Methyl tert-butyl ether (MTBE)	11	"	10.0	108	76-135
Methylcyclohexane	10	"	10.0	102	72-143
Methylene chloride	10	"	10.0	104	55-137
n-Butylbenzene	12	"	10.0	117	79-132
n-Propylbenzene	11	"	10.0	112	78-133
o-Xylene	11	"	10.0	106	78-130
p- & m- Xylenes	22	"	20.0	108	77-133
p-Isopropyltoluene	11	"	10.0	113	81-136
sec-Butylbenzene	11	"	10.0	110	79-137
Styrene	12	"	10.0	115	67-132
tert-Butyl alcohol (TBA)	10	"	10.0	100	25-162
tert-Butylbenzene	11	"	10.0	109	77-138
Tetrachloroethylene	11	"	10.0	107	82-131
Toluene	11	"	10.0	106	80-127
trans-1,2-Dichloroethylene	11	"	10.0	111	80-132
trans-1,3-Dichloropropylene	10	"	10.0	104	78-131
Trichloroethylene	10	"	10.0	102	82-128
Trichlorofluoromethane	10	"	10.0	101	67-139
Vinyl Chloride	9.8	"	10.0	97.9	58-145
Surrogate: 1,2-Dichloroethane-d4	9.77	"	10.0	97.7	69-130
Surrogate: Toluene-d8	9.73	"	10.0	97.3	81-117
Surrogate: p-Bromofluorobenzene	10.1	"	10.0	101	79-122



$\label{lem:compounds} \textbf{Volatile Organic Compounds by GC/MS-Quality Control Data}$

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BA60725 - EPA 5030B											
LCS Dup (BA60725-BSD1)							Prep	ared & Analy	yzed: 01/20/	2016	
1,1,1,2-Tetrachloroethane	11		ug/L	10.0		109	82-126		2.89	30	
1,1,1-Trichloroethane	11		"	10.0		112	78-136		2.08	30	
1,1,2,2-Tetrachloroethane	11		"	10.0		110	76-129		3.88	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11		"	10.0		107	54-165		1.99	30	
1,1,2-Trichloroethane	11		"	10.0		109	82-123		6.04	30	
1,1-Dichloroethane	12		"	10.0		117	82-129		3.30	30	
1,1-Dichloroethylene	12		"	10.0		116	68-138		1.57	30	
1,2,3-Trichlorobenzene	11		"	10.0		112	76-136		10.9	30	
1,2,3-Trichloropropane	11		"	10.0		114	77-128		5.89	30	
1,2,4-Trichlorobenzene	11		"	10.0		112	76-137		1.98	30	
1,2,4-Trimethylbenzene	11		"	10.0		108	82-132		2.29	30	
1,2-Dibromo-3-chloropropane	10		"	10.0		102	45-147		7.76	30	
1,2-Dibromoethane	11		"	10.0		108	83-124		4.36	30	
1,2-Dichlorobenzene	11		"	10.0		108	79-123		1.59	30	
1,2-Dichloroethane	11		"	10.0		110	73-132		5.68	30	
1,2-Dichloropropane	10		"	10.0		104	78-126		1.55	30	
1,3,5-Trimethylbenzene	11		"	10.0		108	80-131		3.37	30	
1,3-Dichlorobenzene	11		"	10.0		109	86-122		1.19	30	
1,4-Dichlorobenzene	11		"	10.0		106	85-124		1.77	30	
1,4-Dioxane	520		"	200		262	10-349		10.4	30	
2-Butanone	7.7		"	10.0		77.1	49-152		6.98	30	
2-Hexanone	8.9		"	10.0		88.9	51-146		17.0	30	
4-Methyl-2-pentanone	6.1		"	10.0		60.8	57-145		7.86	30	
Acetone	8.1		"	10.0		80.9	14-150		1.62	30	
Acrolein	8.0		"	10.0		79.6	10-153		1.50	30	
Acrylonitrile	9.7		"	10.0		97.3	51-150		8.24	30	
Benzene	11		"	10.0		113	85-126		2.86	30	
Bromochloromethane	12		"	10.0		118	77-128		5.87	30	
Bromodichloromethane	11		"	10.0		105	79-128		2.21	30	
Bromoform	11		"	10.0		108	78-133		6.19	30	
Bromomethane	7.4		"	10.0		73.9	43-168		21.7	30	
Carbon disulfide	12		"	10.0		120	68-146		1.34	30	
Carbon tetrachloride	11		"	10.0		112	77-141		1.53	30	
Chlorobenzene	11		"	10.0		108	88-120		2.16	30	
Chloroethane	10		"	10.0		104	65-136		0.193	30	
Chloroform	11		"	10.0		114	82-128		4.21	30	
Chloromethane	8.6		"	10.0		86.5	43-155		0.231	30	
cis-1,2-Dichloroethylene	12		"	10.0		118	83-129		2.31	30	
cis-1,3-Dichloropropylene	11		"	10.0		109	80-131		1.94	30	
Cyclohexane	10		"	10.0		105	63-149		1.25	30	
Dibromochloromethane	11		"	10.0		110	80-130		5.41	30	
Dibromomethane	11		"	10.0		109	72-134		4.71	30	
Dichlorodifluoromethane	7.4		"	10.0		73.5	44-144		0.272	30	
Ethyl Benzene	11		"	10.0		108	80-131		0.934	30	
Hexachlorobutadiene	11		"	10.0		108	67-146		3.45	30	
Isopropylbenzene	11		"	10.0		107	76-140		3.48	30	
Methyl acetate	12		"	10.0		120	51-139		8.44	30	
Methyl tert-butyl ether (MTBE)	11		"	10.0		114	76-135		5.24	30	
Methylcyclohexane	10		"	10.0		99.9	72-143		1.98	30	
Methylene chloride	11		"	10.0		108	55-137		4.53	30	
n-Butylbenzene	11		"	10.0		113	79-132		4.09	30	



$\label{lem:compounds} \textbf{Volatile Organic Compounds by GC/MS-Quality Control Data}$

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Ratch	$\mathbf{R}\mathbf{\Lambda}$	60725 -	. FPA	5030R

LCS Dup (BA60725-BSD1)					Prepared &	k Analyzed: 01/20/2	016
n-Propylbenzene	11	ug/L	10.0	109	78-133	2.54	30
o-Xylene	11	"	10.0	108	78-130	1.49	30
p- & m- Xylenes	22	"	20.0	109	77-133	0.918	30
p-Isopropyltoluene	11	"	10.0	110	81-136	3.05	30
sec-Butylbenzene	11	"	10.0	107	79-137	2.85	30
Styrene	12	"	10.0	117	67-132	2.07	30
tert-Butyl alcohol (TBA)	9.7	"	10.0	96.8	25-162	3.55	30
tert-Butylbenzene	11	"	10.0	106	77-138	2.60	30
Tetrachloroethylene	11	"	10.0	107	82-131	0.00	30
Toluene	11	"	10.0	106	80-127	0.283	30
trans-1,2-Dichloroethylene	11	"	10.0	113	80-132	1.51	30
trans-1,3-Dichloropropylene	11	"	10.0	108	78-131	4.34	30
Trichloroethylene	11	"	10.0	106	82-128	3.96	30
Trichlorofluoromethane	9.7	"	10.0	96.6	67-139	4.16	30
Vinyl Chloride	9.8	"	10.0	97.9	58-145	0.00	30
Surrogate: 1,2-Dichloroethane-d4	10.3	"	10.0	103	69-130		
Surrogate: Toluene-d8	9.76	"	10.0	97.6	81-117		
Surrogate: p-Bromofluorobenzene	9.93	"	10.0	99.3	79-122		



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
16A0405-01	HMW-3R	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16A0405-02	HMW-5	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16A0405-03	HMW-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16A0405-04	HMW-7R	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16A0405-05	HMW-8	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16A0405-06	HMW-9R	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16A0405-07	HMW-10R	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16A0405-08	HMW-13	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16A0405-09	HMW-14	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16A0405-10	DUP-20160113	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16A0405-11	TB-20160113	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



Notes and Definitions

S	SCAL-E	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration (average Rf>20%).
Ç	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.
C	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).
E	3	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value as artifact.
*		Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
N	ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
R	RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
L	.OQ	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.
L	OD	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.
N	ИDL	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.
R	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.
N	NR .	Not reported
R	RPD	Relative Percent Difference
V	Vet	The data has been reported on an as-received (wet weight) basis
L	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.
Н	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.

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.

due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

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

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.

Non-Dir.



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

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

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YORK ANALYTICAL LABDRATORIES
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Field Chain-of-Custody Record

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Page 1 of 2 York Project No. 1640405

Report Type	Summary Report Summary w/ QA Summary CT RCP Package	CTRCP DQA/DUE Pkg	NY ASP A Package NY ASP B Package	NJDEP Red. Deliv.	Simple Excel	NYSDEC EQUIS V	EQuIS (std)	NJDEP SRP HazSite EDD	GIS/KEY (std)	York Regulatory Comparison Excel Spreadsheet	Compare to the following Regs. (please fill in):	Container Description(s)	Stanim-OH (4)	n n	n 11	(00) "	" (4)	" "		n n	11 00	п п	Temperature	3:2c on Receipt)ate/Time 4./ °C	Date/Time	
Turn-Around Time	RUSH - Same Day S RUSH - Next Day C		RUSH - Three Day	15	Full Lists Misc.	Pri.Poll. Corrosivity	TCL Oganies Reactivity	Full TCLP Flash Point	Full App. IX Sieve Anal. Part 360-Rouine Heterotrophs	Part 360-Breeline TOX Part 360-Errusas BTU/lb.	Tox.	oove and Enter Below											H ₂ SO ₊ NaOH		Bacelyed By // 4/	Samples Received in LAB by / Da	
YOUR Project ID	644464	Purchase Order No.	_	1	Metale	RCRA8	st 8081Pest PP13 list	Acids Only CT RCP CT15 list NY 310-13	PAH list App. IX TAGM list TPH 1664 TAGM list Site Spec. NJDEP list Air TO14A	CT RCP list SPLP or TCLP Total Air TO15 TCL list TCLP Pest Dissolved Air STARS	NJDEP list TCLP Herb SPLPG-TCLP Air VPH App. IX Chlordane IndisMeals Air TICs TCLP BNA 608 Pest LIST Below Inchance Inchance Inchance Inchance Inchange Inch	Choose Analyses Needed from the Menu Above and Enter Below	106 (Baro)									,	C Ascorbic Acid Other	m	By Date/Time Samples	Date/Time	
Invoice To:	v. E31		2	Dinnan wen	idress: Democ	8260 full TICs	624 Site Spec.	STAKS list Nassau Co. BTEX Suffolk Co.	MTBE Ketones PAI TCL list Oxygenates TAC	TAGM list TCLP list CT RCP list 524.2	Arom. only 502.2 Halog.only NJDEP list App.IX list SPLPorTCLP	Choose Analyses	10%				-					•	4°C Y Frozen	_	Samples Relinquished By	Samples Relinquished By	
0:	Company:		Phone No.			st be complete	n-around tim	k are resolved	Matrix Codes S - soil	Other - specify(oil, etc.) WW - wastewater	GW - groundwater DW - drinking water Air-A - ambient air Air-SV - soil vanor	Sample Matrix	GW	-								→	Preservation Check those Applicable	Special Instructions	Field Filtered □ Lab to Filter □		
Report To:	Company:		Phone No.	Astention: Astrosstrategy	É-Mail Address:	ll Information mu	d in and the tur	v questions by Yor	, 11	R (Signature)	-Helbeil	Date/Time Sampled	113/16 9:38	42:11	10:54	84:0	12:21	13:50	13:37	11:09	14:34	->		additusel	WWW-7R	HMW-10R.	
YOUR Information	Company: GS1 Address: 24 Davis Avenue	Power Keyose NY 1200	Phone No. (845) 452-1658	Contact Person: K-Indian - M Kitenion:	E-Mail Address: TUSquira (2)	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.	00	Samples Collected/Authorized By (Signature)	Rosaura Andwyon - He Neil	Sample Identification	HMW-32		HMW-6	44W -7R	HMW-8	HMW-9R	47WW-1012	HMW-13	H- MH		ag omments	Rease use	inplus for	Pil	



Field Chain-of-Custody Record YORK ANALYTICAL LABORATORIES STRATFORD, CT 06615 120 RESEARCH DR.

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Page 2 of 2

York Project No. 16 ACY 05

Date/Time

Samples Relinquished By

Data Usability Summary Report

Haverstraw Harbors Site # GH9964.50 Haverstraw, New York

Groundwater Samples Collected July 2015

August 2015



Data Usability Summary Report

Groundwater Samples Collected April 4, 2015

Haverstraw Harbors Site ESI File GH9964.50 Haverstraw, New York

Prepared By:

ZDataReports
Data Management and Validation Service
118 Rose Lane Terrace
Syracuse, New York 13219

EXECUTIVE SUMMARY

This report addresses data quality for nine groundwater samples, one field duplicate and one trip blank collected at the Haverstraw Harbors Site ESI File GH9964.50 located in Haverstraw, New York. The samples were analyzed for volatile organics (VOCs) following New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) methodologies. Sample collection was performed by Ecosystems Strategies, Inc. of Poughkeepsie, New York. Analytical services were provided by York Analytical Laboratories, Inc. located in Stratford, Connecticut.

The volatile organics analysis data were determined to be usable for qualitative and quantitative purposes with no exceptions. Sample results for several compounds were qualified based on deviations from initial and continuing calibration criteria, and laboratory control samples.

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Appendices

Appendix A - Data Validation Checklists

SECTION 1 - INTRODUCTION

1.1 Introduction

This report addresses data quality for nine groundwater samples, one field duplicate sample and one tip blank collected at Haverstraw Harbors Site ESI File GH9964.50 located in Haverstraw, New York. The samples were analyzed for volatile organics (VOCs) following New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) methodologies. Sample collection was performed by Ecosystems Strategies, Inc. of Poughkeepsie, New York. Analytical services were provided by York Analytical Laboratories, Inc. located in Stratford, Connecticut. The quantity and types of samples submitted for data validation are tabulated below.

	Date		Sample Identi	fication
SDG#	Collected	Matrix	Client ID	Laboratory ID
15G0568	07/14/2015	Groundwater	HMW-3R	15G0568-01
			HMW-5	15G0568-02
			HMW-6	15G0568-03
			HMW-7R	15G0568-04
			HMW-8	15G0568-05
			HMW-9R	15G0568-06
			HMW-10R	15G0568-07
			HMW-13	15G0568-08
			HMW-14	15G0568-09
			DUP-20150714	15G0568-10
			TP-201500714	15G0568-11

Table 1: Introduction - Sample Summary Table

1.2 Analytical Methods

The samples were analyzed for volatile organics (VOCs) following New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) methodologies (2005 update). Laboratory analyses were provided by York Analytical Laboratories, Inc. located in Stratford, Connecticut.

1.3 Validation Protocols

Data validation is a process that involves the evaluation of analytical data against prescribed quality control criteria to determine the usefulness of the data. The analytical data addressed in this report were evaluated utilizing the quality control criteria presented in the following documents:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, USEPA-540-R-08-01, June 2008.
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, USEPA-540-R-10-011, January 2010.
- *CLP Organics Data Review and Preliminary Review*, SOP No. HW-6 Revision #14, USEPA Region II, September 2006.

- Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-846 Method 8260B, SOP No. HW-24 Revision #2, USEPA Hazardous Waste Support Branch, August 2008.
- Exhibit E of New York State Department of Environmental Conservation Analytical Services Protocol (NYSDEC ASP), NYSDEC June 2005.

1.3.1 Organic Parameters

The validation of organic parameters for this project followed the requirements presented in the analytical methodology and the data validation guidelines presented above. The following QA/QC parameters were evaluated:

Volatile Organics Analyses

- 1. Holding Times
- 2. GC/MS Instrument Tuning Criteria
- 3. Calibration
 - a. Initial Calibration
 - b. Continuing Calibration
- 4. Blank Analysis
- 5. Surrogate Recovery
- 6. Matrix Spike / Matrix Spike Duplicate Analysis
- 7. Reference Standard Analysis
- 8. Internal Standards Recovery
- 9. Compound Identification and Quantification
- 10. Field Duplicate Analysis
- 11. System Performance
- 12. Documentation Completeness
- 13. Overall Data Assessment

1.4 Data Qualifiers

The following qualifiers as specified in the guidance documents presented in Section 1.3 of this report have been used for this data validation.

- U Indicates that the compound was analyzed for, but was not detected. The sample quantification limit is presented and adjusted for dilution. This qualifier is also used to signify that the detection limit of an analyte was raised due to blank contamination.
- J Indicates that the result should be considered approximate. This qualifier is used when the data validation procedure identifies a deficiency in the data generation process.
- UJ Indicates that the detection limit for the analyte in this sample should be considered approximate. This qualifier is used when the data validation process identifies a deficiency in the data generation process.

R Indicates that the previously reported detection limit or sample result has been rejected due to a major deficiency in the data generation procedure. The data are considered to be unusable for both qualitative and quantitative purposes.

The following sections of this document present a summary of the data validation process. Section 2 discusses data compliance with established QA/QC criteria and qualifications performed on the sample data. A discussion of the Precision, Accuracy, Representativeness, Comparability, and Completeness (PARCC) of the data and data usability are discussed in Section 3. The USEPA Region II Data Validation Checklists are presented in Appendix A.

SECTION 2 - DATA VALIDATION SUMMARY

This section presents a discussion of QA/QC parameter compliance with established criteria and the qualification of data performed when QA/QC parameter deviations were identified. When several deviations from established QA/QC criteria were observed, the final qualifier assigned to the data was based on the cumulative effect of the deviations.

2.1 Volatiles Analysis

Data validation was performed for 11 groundwater samples including a trip blank and a blind duplicate sample. The QA/QC parameters presented in Section 1.3.2 of this report were found to be within specified limits with the exception of the following:

Initial Calibration

The initial calibration relative standard deviation (%RSD) limit, which requires the %RSD to be less than 30 percent, was exceeded for several compounds. Sample qualification included the approximation (J, UJ) of results when %RSD criteria were exceeded. Samples requiring qualification due to these deviations are tabulated below.

Date Compound %RSD Result **Affected Samples** Analyzed **Qualifier** MSVOA7 Acrolein 31.0 % Ш HMW-3R 07/22/2015 34.0 % J,UJ Acetone HMW-5 HMW-6 HMW-7R HMW-8 HMW-9R HMW-10R HMW-13 HMW-14 DUP-20150714

TP-201500714

Table 3: Volatiles Organics Analyses – Initial Calibration Deviations

Continuing Calibration

The continuing calibration percent difference (%D) limit, which requires the %D to be less than 25 percent, was exceeded for several compounds. Sample qualification included the approximation (J, UJ) of results when %D criteria were exceeded, but were less than 90 percent. Non-detected results were rejected (R) for compounds with %D values greater than 90 percent. Samples requiring qualification due to these deviations are tabulated below.

Table 4: Volatile Organics Analysis - Continuing Calibration Deviations

Date Analyzed	Compound	%D	Result Qualifie r	Affected Samples
MSVOA7	Dichlorodifluoromethane	41.0 %	J, UJ	HMW-3R
07/22/2015	Chloromethane	31.8 %	UJ	HMW-5
(12:36)	Acrolein	-75.3 %	UJ	HMW-6
	4-Methyl-2-pentanone	38.0 %	UJ	HMW-7R
	Styrene	-28.2 %	UJ	HMW-8
				HMW-9R
				HMW-10R
				HMW-13
				HMW-14
				DUP-20150714
				TP-201500714

Laboratory Control Sample Analysis

Laboratory control sample (LCS) recovery criteria requiring recoveries to be within laboratory generated control limits were exceeded for several compounds. Qualification of sample data included the approximation of results when spike recoveries were greater than the upper limit, but less than 200 percent or less than the lower limit, but greater than 10 percent. Non-detected sample results were rejected (R) for compounds with recoveries that were less than 10 percent. Samples qualified due to LCS recovery deviations are tabulated below.

Table 2: Volatile Organics Analysis - Laboratory Control Sample Deviations

Matrix	Compound	Percent Recovery	Control Limits	Qualifier	Affected Samples
Water	4-Methyl-2-pentanone	56.0 % / 60.5 %	57 % to 145 %	UJ	HMW-3R
BG51114					HMW-5
					HMW-6
					HMW-7R
					HMW-8
					HMW-9R
					HMW-10R
					HMW-13
					HMW-14
					DUP-20150714
					TP-201500714

Overall Data Assessment

Overall, the laboratory performed volatile organics analyses in accordance with the requirements specified in the method listed in Section 1.2. These data were determined to be usable for qualitative and quantitative purposes with the no exceptions. Sample results for several compounds were qualified based on deviations from initial calibration and continuing calibration criteria and deviations in laboratory control samples.

SECTION 3 - DATA USABILITY and PARCC EVALUATION

3.1 Data Usability

This section presents a summary of the usability of the analytical data and an evaluation of the PARCC parameters. Data usability was calculated as the percentage of data that was not qualified as rejected based on a significant deviation from established QA/QC criteria. Data usability, which was calculated separately for each type of analysis, is tabulated below.

Table 10: Data Usability and PARCC Evaluation - Data Usability

Parameter	Usability	Deviations
Volatile Parameters	100 %	None resulting in the rejection of data

3.2 PARCC Evaluation

The following sections provide an evaluation of the analytical data with respect to the precision, accuracy, representativeness, comparability, and completeness (PARCC) parameters.

3.2.1 Precision

Precision is measured through field duplicate samples, split samples, and laboratory duplicate samples. For this sampling program, 0.0 percent of the analytical data required qualification from field duplicate criteria deviations.

3.2.2 Accuracy

Matrix spike sample, surrogate recovery, internal standard recovery, laboratory control samples, and calibration criteria indicate the accuracy of the data. For this sampling program, 2.98 percent of the data were qualified for calibration criteria deviations, 1.49 percent of the data were qualified for laboratory control sample deviations, 0.0 percent of the data were qualified due to deviation in matrix spike criteria, and 0.0 percent of the data were qualified due to deviation in surrogate recovery criteria. Overall, 8.96 percent of the data were qualified due for deviations in accuracy metrics.

3.2.3 Representativeness

Holding times, sample preservation, and blank analysis are indicators of the representativeness of the analytical data. For this investigation, 0.00 percent of the analytical data required qualification for blank analysis deviations.

3.2.4 Comparability

Comparability is not compromised provided that the analytical methods did not change over time. A major component of comparability is the use of standard reference materials for calibration and QC. These standards are compared to other unknowns to verify their concentrations. Since standard analytical methods and reporting procedures were consistently used by the laboratory, the comparability criteria for the analytical data were met.

3.2.5 Completeness

The overall percent usability or completeness of the data was 100 percent.

APPENDIX A

DATA VALIDATION CHECKLISTS

Table of Contents

		Page
I.	Part A: VOA Analyses	2

No:	Parameter	YES	NO	N/A
1.0	Traffic Reports and Laboratory Narrative			
1.1	Are the traffic Report Forms present for all samples?	X		
1.2	Do the Traffic Reports or Lab Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?		X	
2.0	Holding Times			
2.1	Have any VOA technical holding times, determined from date of collection to date of analysis, been exceeded?		X	
3.0	System Monitoring Compound (SMC) Recovery (Form II)			
3.1	Are the VOA SMC Recovery Summaries (FORM II) present for each of the following matrices:			
	a. Low Water	X		
	b. Low Soil			X
	c. Air			X
3.2	Are all the VOA samples listed on the appropriate System Monitoring Compound Recovery Summary for each of the following matrices:			
	a. Low Water	X		
	b. Low Soil			X
	c. Air			X
3.3	Were outliers marked correctly with an asterisk?	X		
3.4	Was one or more VOA system monitoring compound recovery outside of contract specifications for any sample or method blank?		X	
	If yes, were samples re-analyzed?			X
	Were method blanks re-analyzed?			X
3.5	Are there any transcription/calculation errors between raw data and Form II?		X	
4.0	Matrix Spikes (Form III)			
4.1	Is the Matrix Spike/Matrix Spike Duplicate Recovery Form (Form III) present?	X		
4.2	Were matrix spikes analyzed at the required frequency for each of the following matrices?			
	a. Low Water	X		
	b. Low Soil			X
	c. Air			X
4.3	How many VOA spike recoveries are outside QC limits?			
	Water out of 67 Soils out of 54			
4.4	How many RPD's for matrix spike and matrix spike duplicate recoveries are outside QC limits?			
	Water 0 out of 67 Soils out of 54			

S.0 Blanks (Form IV)	No:	Parameter	YES	NO	N/A
5.2 Frequency of Analysis: for the analysis of VOA TCL compounds, has a reagent/method blank been analyzed for each SIDG or every 20 samples of similar matrix (low water, low sod), mediume soil, whichever is more frequent? 5.3 Has a VOA method/instrument blank been analyzed at least once every twelve hours for each concentration level and GC/MS system used? 5.4 Is the chromatographic performance (baseline stability) for each instrument acceptable for VOAs? 6.0 Contamination 6.1 Do any method/instrument/reagent blanks have positive results (TCL and/or TIC) for VOAs? 6.2 Do any field/trip/rinse blanks have positive VOA results (TCL and/or TIC)? 7.5 X 6.6 Are there field/rinse/equipment blanks associated with every sample? 7.6 Are the GC/MS Instrument Performance Check (Form V) 7.1 Are the GC/MS Instrument Performance Check Forms (Form V) present for Bromofluorobenzene (BFB?) 7.2 Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the BFB provided for each twelve hour shift? 7.3 Has an instrument performance compound been analyzed for every twelve hours of sample analysis per instrument? 7.4 Have the ion abundances been normalized to m/z 95? 7.5 Have the ion abundance criteria been met for each instrument used? 7.6 Are there any transcription/calculation errors between mass lists and Form V's? 7.8 Are the spectra of the mass calibration compound acceptable? 8.0 Target Compound List (TCL) Analytes 8.1 Are the Organic Analysis Data Sheets (Form I VOA) present with required header information on each page, for each of the following: a. Sample and/or fractions as appropriate? b. Matrix spikes and matrix spike duplicates? c. Blanks? 8.2 Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (Quant Reports) included in the sample package for each of the following: a. Samples and/or fractions as appropriate? b. Matrix spikes and matrix spike duplicates (Mass spectra not required)? c. Blanks?	5.0	Blanks (Form IV)			
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7.7 Have the appropriate number of significant figures (two) been reported? 7.8 Are the spectra of the mass calibration compound acceptable? 8.0 Target Compound List (TCL) Analytes 8.1 Are the Organic Analysis Data Sheets (Form I VOA) present with required header information on each page, for each of the following: a. Sample and/or fractions as appropriate? b. Matrix spikes and matrix spike duplicates? c. Blanks? X 8.2 Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (Quant Reports) included in the sample package for each of the following? a. Samples and/or fractions as appropriate? b. Matrix spikes and matrix spike duplicates (Mass spectra not required)? C. Blanks? X X X X X X X X X X X X X	7.5	Have the ion abundance criteria been met for each instrument used?	X		
Are the spectra of the mass calibration compound acceptable? 8.0 Target Compound List (TCL) Analytes 8.1 Are the Organic Analysis Data Sheets (Form I VOA) present with required header information on each page, for each of the following: a. Sample and/or fractions as appropriate? b. Matrix spikes and matrix spike duplicates? c. Blanks? Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (Quant Reports) included in the sample package for each of the following? a. Samples and/or fractions as appropriate? b. Matrix spikes and matrix spike duplicates (Mass spectra not required)? c. Blanks? X	7.6	Are there any transcription/calculation errors between mass lists and Form V's?		X	
8.0 Target Compound List (TCL) Analytes 8.1 Are the Organic Analysis Data Sheets (Form I VOA) present with required header information on each page, for each of the following: a. Sample and/or fractions as appropriate? b. Matrix spikes and matrix spike duplicates? c. Blanks? X 8.2 Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (Quant Reports) included in the sample package for each of the following? a. Samples and/or fractions as appropriate? b. Matrix spikes and matrix spike duplicates (Mass spectra not required)? C. Blanks? X	7.7	Have the appropriate number of significant figures (two) been reported?	X		
Are the Organic Analysis Data Sheets (Form I VOA) present with required header information on each page, for each of the following: a. Sample and/or fractions as appropriate? b. Matrix spikes and matrix spike duplicates? c. Blanks? X Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (Quant Reports) included in the sample package for each of the following? a. Samples and/or fractions as appropriate? b. Matrix spikes and matrix spike duplicates (Mass spectra not required)? C. Blanks? X X X X X X X X X X X X X	7.8	Are the spectra of the mass calibration compound acceptable?	X		
information on each page, for each of the following: a. Sample and/or fractions as appropriate? b. Matrix spikes and matrix spike duplicates? c. Blanks? X Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (Quant Reports) included in the sample package for each of the following? a. Samples and/or fractions as appropriate? b. Matrix spikes and matrix spike duplicates (Mass spectra not required)? C. Blanks? X X Z Z Z Z Z	8.0	Target Compound List (TCL) Analytes			
b. Matrix spikes and matrix spike duplicates? c. Blanks? X 8.2 Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (Quant Reports) included in the sample package for each of the following? a. Samples and/or fractions as appropriate? b. Matrix spikes and matrix spike duplicates (Mass spectra not required)? C. Blanks? X X X X X X X X X X X X X	8.1				
c. Blanks? Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (Quant Reports) included in the sample package for each of the following? a. Samples and/or fractions as appropriate? b. Matrix spikes and matrix spike duplicates (Mass spectra not required)? C. Blanks? X		a. Sample and/or fractions as appropriate?	X		
c. Blanks? Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (Quant Reports) included in the sample package for each of the following? a. Samples and/or fractions as appropriate? b. Matrix spikes and matrix spike duplicates (Mass spectra not required)? C. Blanks? X		b. Matrix spikes and matrix spike duplicates?	X		
compounds, and the data system printouts (Quant Reports) included in the sample package for each of the following? a. Samples and/or fractions as appropriate? b. Matrix spikes and matrix spike duplicates (Mass spectra not required)? C. Blanks? X		c. Blanks?			
b. Matrix spikes and matrix spike duplicates (Mass spectra not required)? x c. Blanks? X	8.2	compounds, and the data system printouts (Quant Reports) included in the sample			
b. Matrix spikes and matrix spike duplicates (Mass spectra not required)? X C. Blanks? X		a. Samples and/or fractions as appropriate?	X		
c. Blanks? X		b. Matrix spikes and matrix spike duplicates (Mass spectra not required)?	X		
8.3 Are the response factors shown in the Quant Report?		c. Blanks?	X		
	8.3	Are the response factors shown in the Quant Report?	X		

No:	Parameter	YES	NO	N/A
8.4	Is the chromatographic performance acceptable with respect to:			
	Baseline stability?	X		
	Resolution?	X		
	Peak shape?	X		
	Full-scale graph (attenuation)?	X		
	Other:			X
8.5	Are the lab-generated standard mass spectra of the identified VOA compounds present for each sample?	X		
8.6	Is the RRT of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?	X		
8.7	Are all ions in the standard mass spectrum at a relative intensity greater than 10% also present in the sample mass spectrum?	X		
8.8	Do sample and standard relative ion intensities agree within 20%?	X		
9.0	Tentatively Identified Compounds (TIC)			
9.1	Are all Tentatively Identified Compound Forms (Form I Part B) present; and do listed TICs include scan number or retention time, estimated concentration and "JN" qualifier?			X
9.2	Are the mass spectra for the tentatively identified compounds and associated "best match" spectra included in the sample package for each of the following:			
	a. Samples and/or fractions as appropriate?			X
	b. Blanks?			X
9.3	Are any TCL compounds (from any fraction) listed as TIC compounds?			X
9.4	Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?			X
9.5	Do TIC and "best match" standard relative ion intensities agree within 20%?			X
10.0	Compound Quantitation and Reported Detection Limits			
10.1	Are there any transcription/calculation errors in Form I results?		X	
10.2	Are the CRQLs adjusted to reflect sample dilutions and, for soils, sample moisture?	X		
11.0	Standards Data (GC/MS)			
11.1	Are the Reconstructed Ion Chromatograms, and data system printouts present for initial and continuing calibration?	X		
12.0	GC/MS Initial Calibration (Form VI)			
12.1	Are the Initial Calibration Forms (Form VI) present and complete for the volatile fraction at concentrations of 10, 20, 50, 100, 200 ug/L? Are there separate calibrations for low/med soils and low soil samples?	X		
12.2	Were all low level soil standards, blanks, and samples analyzed by heated purge?			X
12.3	Are the response factors stable for VOA's over the concentration range of the calibration (%Relative Standard Deviation (%RSD) <30%)		X	
12.4	Are the RRFs above 0.01?	X		
12.5	Are there any transcription/calculation errors in the reporting of average response factors (RRF) or %RSD?		X	

No:	Parameter	YES	NO	N/A
13.0	GC/MS Continuing Calibration (Form VII)			
13.1	Are the Continuing Calibration Forms (Form VII) present and complete for the volatile fraction?	X		
13.2	Has a continuing calibration standard been analyzed for every twelve hours of sample analysis per instrument?	X		
13.3	Do any volatile compounds have a percent difference (%D) between the initial and continuing RRF which exceeds the +/- 25% criteria?	X		
13.4	Do any volatile compounds have a RRF <0.01?		X	
13.5	Are there any transcription/calculation errors in the reporting of average response factor (RRF) or %difference (%D) between initial and continuing RRFs?		X	
14.0	Internal Standard (Form VIII)			
14.1	Are the internal standard areas (Form VIII) of every sample and blank within the upper and lower limits (-50% to \pm 100%) for each continuing calibration?	X		
14.2	Are the retention times of the internal standards within 30 seconds of the associated calibration standard?	X		
15.0	Field Duplicates			
15.1	Were any field duplicates submitted for VOA analysis?	X		



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 No. C344060	Site	Details	Box 1	
Site Name Haverstraw Ha	rbors Site			
Site Address: Dr. George W City/Town: Haverstraw County; Rockland Site Acreage: 5.0	I. Girling Drive	Zip Code: 10927-		
Reporting Period: December	er 04, 2014 to March 0	4, 2016		
			YES	NO
1. Is the information above	correct?		X	
If NO, include handwritte	n above or on a separ	rate sheet.		
 Has some or all of the si tax map amendment dur 		subdivided, merged, or u lod?	ndergone a	×
 Has there been any char (see 6NYCRR 375-1,110 		during this Reporting Period	od	×
 Have any federal, state, for or at the property dur 		e.g., building, discharge) bod?	peen issued	×
		include documentation bmitted with this certifi		
5. Is the site currently unde	ergoing development?			×
			Box 2	
			YES	NO
Is the current site use co Restricted-Residential, C			×	0
7. Are all ICs/ECs in place	and functioning as de-	signed?	X	
IF THE ANSWER TO DO NOT COM	DEITHER QUESTION PLETE THE REST OF	6 OR 7 IS NO, sign and d THIS FORM. Otherwise	ate below and continue.	
A Corrective Measures World	k Plan must be submit	tted along with this form	to address these issues.	
			التقييل	
Signature of Owner, Remedia	Party or Designated R	epresentative	Date	

		Box	2A
		YES	NO
3.	Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?		X
	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)	X	
	If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.		
TI	E NO. C344060	Box 3	

SITE NO. C344060		Box 3
Description	of Institutional Controls	
<u>Parcel</u> 27.14-1-5.1	Owner Admiral's Cove Haverstraw, LLC	Institutional Control 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 Cover 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

240 000 000 000 000		Box 4
Description of E	Engineering Controls	
Parcel	Engineering Control	
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	Maria A Miller of the co	
	Vapor Mitigation	
	Cover System	
27.62-2-8		
21.02-2-0	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 if are in accordance with the requirements of the site remedial program, and gener engineering practices; and the information presented is accurate and compete. 			tion			
	chighteening practices, and the information presented is accurate and compete.	YES	NO				
		X					
2.	If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that following statements are true:			nal			
	(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				
		X					
	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 the	nese is	sues.				
	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.

ame print busin	ess address
designated representative	(Owner or Remedial Party)
in the Site Details Section of this form.	
	designated representative in the Site Details Section of this form.

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. Ecosystems Strategies, Inc.

Paul H. Ciminello

at 24 Davis Avenue, Poughkeepsie, NY

print name

print business address

am certifying as a Qualified Environmental Professional for the

Owner

(Owner or Remedial Party)

Paul & Catto

04/05/2016

Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification Stamp (Required for PE) Date