#### **GROUNDWATER SAMPLING REPORT**

## "BETHPAGE HIGH SCHOOL" 10 CHERRY AVENUE BETHPAGE, NEW YORK 11714

# PREPARED FOR: BETHPAGE UNION FREE SCHOOL DISTRICT 10 CHERRY AVENUE BETHPAGE, NEW YORK 11714

JCB PROJECT #: 20-46952 SEPTEMBER 2020

J.C. BRODERICK & ASSOCIATES, INC. Environmental Consulting & Testing

> 1775 Expressway Drive North Hauppauge, New York 11788 631-584-5492 Fax: 631-584-3395



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#### **Section No. 1.0: Introduction**

J.C. Broderick and Associates, Inc. (JCB) was retained by the Bethpage Union Free School District to perform annual groundwater sampling and analysis from three (3) existing groundwater monitoring wells located at the Bethpage High School.

#### Section No. 2.0: Site Description and Location

The subject site is located at 10 Cherry Avenue, Bethpage, New York 11714. The subject site is located on the south side of Cherry Avenue, between Stewart Avenue to the west and Broadway to the east. According to the United States Geological Survey (USGS) *Huntington, New York 1992 7.5 Minute Series* Topographical Map, the subject site is situated at an approximate elevation of 121 feet above mean sea level. The location of the subject site is shown on the Site Location Map Appendix-A Figure-1.

#### Section No. 3.0: Subsurface Investigation Procedures

The following sections summarizes the subsurface investigation performed. Please refer to the attachments of this document for additional details.

#### Section No. 3.1: Monitoring Well Gauging

On August 28, 2020, JCB checked the groundwater monitoring wells for the presence of light non-aqueous phase liquid (LNAPL) utilizing a Solinst® Model 122 Product/Water Interface Probe and depth to the groundwater table was recorded to the nearest 0.01 ft.

The following table summarizes the groundwater data:

	Table No. 1: Depth to Groundwater Gauged with Interface Meter											
Well Number   Casing Elevation (ft)   Depth to Product (ft)   Depth to Groundwater (ft)   Groundwater Elevation (f												
MW-5	118.88	No Product	52.82	66.06								
MW-6	119.04	No Product	52.34	66.70								
MW-7	118.72	No Product	52.40	66.32								
Notes: ft = Feet												

#### Section No. 3.2: Groundwater Sampling

On August 28, 2020, JCB collected three (3) groundwater samples from the replacement groundwater monitoring wells (MW-5, MW-6, and MW-7). Prior to sampling, the casing volume of each monitoring well was calculated and a minimum of three (3) casing volumes of water were purged utilizing a check valve. During the purging process, specific groundwater parameters were monitored by a YSI Multi-meter.

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The following table summarizes the purged water testing.

	Groundw	Table ater Monitoring	No. 2: During Sample Collectio	n	
MW-5	DTW (ft)	TD (ft)	Water Column (ft)		
	52.82	62.40	9.58		
Time	Temp (°C)	TDS (g/l)	DO (%)	pН	ORP (mV)
8:48	17.03	0.370	2.10	6.55	192.0
8:52	17.33	0.393	2.05	6.54	189.1
8:55	17.35	0.415	2.04	6.53	188.3
9:00			Samples Collected		•
MW-6	DTW (ft)	TD (ft)	Water Column (ft)		
	52.34	62.70	10.36		
Time	Temp (°C)	TDS (g/l)	DO (%)	pН	ORP (mV)
8:05	23.73	0.129	1.50	6.57	179.5
8:08	23.78	0.130	1.47	6.55	177.9
8:11	23.84	0.129	1.46	6.53	176.2
8:15			Samples Collected		•
MW-7	DTW (ft)	TD (ft)	Water Column (ft)		
	52.40	62.40	10.0		
Time	Temp (°C)	TDS (g/l)	DO (%)	pН	ORP (mV)
7:17	18.75	0.491	2.26	6.15	236.2
7:20	18.75	0.491	2.23	6.16	234.9
7:23	18.81	0.490	2.18	6.19	233.0
7:30			Samples Collected		

Notes:
DTW = Depth to Groundwater Table
TD = Total Depth of Well
Temp = Temperature in degrees Celsius
TDS = Total Dissolved Solids on grams per liter

DO = Dissolved Oxygen in percent

pH = Potential of Hydrogen, unitless

ORP = Oxygen-Reduction Potential in millivolts

The following table summarizes the groundwater samples submitted for laboratory analysis:

	Table No. 3: Summary of Groundwater Samples Submitted for Laboratory Analysis Sample ID# Date Sampled Description of Sample Analysis Method										
Sample ID#	Analysis Method										
MW-5	8-28-2020	Monitoring Well No. 5	EPA 8260 + Freon EPA 903.0 EPA 904.0								
MW-6	8-28-2020	Monitoring Well No. 6	EPA 8260 + Freon EPA 903.0 EPA 904.0								
MW-7	8-28-2020	Monitoring Well No. 7	EPA 8260 + Freon EPA 903.0 EPA 904.0								
Notes: EPA = Environment	ntal Protection Agency	y									

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#### Section No. 4.0: Groundwater Laboratory Analytical Summary

Groundwater samples selected for laboratory analysis were placed into laboratory supplied containers, assigned individual identification numbers and then placed into an appropriately conditioned cooler. Chain of Custody documents were prepared, and the samples were then delivered to an independent New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory for analysis.

Groundwater samples submitted for laboratory analysis were analyzed for volatile organic compounds (VOCs) plus Freon utilizing Environmental Protection Agency (EPA) Method 8260. York Analytical Laboratories, Inc. (York) provided laboratory analytical services. Copies of York's NYSDOH certifications are available upon request

Groundwater samples submitted for laboratory analysis were also analyzed for Radium 226 utilizing EPA Method 903.0, and for Radium 228 utilizing EPA Method 904.0. EMSL Analytical, Inc. (EMSL) provided laboratory analytical services. Copies of EMSL's NYSDOH certifications are available upon request

The laboratory analytical results for the groundwater samples were reviewed and compared to Table No. 1 of the <u>Ambient Water Quality Standards and Guidance Values of the New York State Department of Environmental Conservation, Division of Water, Technical and Operational Guidance Series (TOGS)</u> (1.1.1).

The following table summarizes the detected VOC analytical results in groundwater:

Summary o	Table No. 4: Summary of Groundwater Samples Submitted for VOC Analysis												
Sample ID York ID Sampling Date Client Matrix	NYSDEC TOGS Standards and Guidance	MW-5 2010153-0	1	MW-6 2010153-0 8/28/202 Water	_	MW-7 2010153-0 8/28/202 Water							
Compound	CAS Numbe	Values - GA	Result	Q	Result	Q	Result	Q					
Volatile Organics, 8260 - Comprehensive		ug/L	ug/L		ug/L		ug/L						
Dilution Factor			1		1		1						
1,1-Dichloroethane	75-34-3	5	0.200	U	0.340	J	0.200	U					
Acetone	67-64-1	50	1	JB	1	U	1	U					
Toluene	108-88-3	5	0.370	J	0.260	J	0.410	J					
NOTES:													
Any Regulatory Exceedences are color co	ded by Regul	ation											
Q is the Qualifier Column with definitions													
J=analyte detected at or above the MDL (n	tion limit) but b	pelow the RL (	Repo	rting Limit) - (	data	is estimated							
U=analyte not detected at or above the le	vel indicated	t											
B=analyte found in the analysis batch bla	ank												

The review of the laboratory VOC analysis revealed the following significant findings:

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The laboratory analysis results from the groundwater samples submitted from MW-5, MW-6, and MW-7 did indicate detectable concentrations of 1,1-dichloroethane, acetone, and toluene; however, the levels reported were below the above referenced guidance values for groundwater.

The following table summarizes the Radium analytical results in groundwater:

	Table No. 5: Summary of Groundwater Samples Submitted for Radium Analysis										
Client Sample ID Allowable Standards MW-5 MW-6 MW-7											
EPA 903.0 & EPA 904	pCi/L	8/28/2020	8/28/2020	8/28/2020							
Radium 226 (pCi/g)	3.0	0.98	0.31	1.16							
Radium 228 (pCi/g)	5.0	1.80	0.51	1.97							
Notes: pCi/L = picocuries per lite	er										

The review of the laboratory Radium analysis revealed the following significant findings:

The laboratory analysis results from the groundwater samples submitted from MW-5, MW-6, and MW-7 did indicate detectable concentrations of Radium 226 and Radium 228; however, the levels reported were below the above referenced guidance values for groundwater.

#### Section No. 5.0: Quality Assurance and Quality Control (QA/QC) Procedures

In order to prevent cross-contamination between sampling locations, all re-usable sampling equipment which came into contact with sample materials was decontaminated prior to each use. Equipment used for sample collection was wiped clean, washed in a solution of Alconox and thoroughly rinsed with potable water. New and dedicated polyethylene tubing was used for collection of each groundwater sample. All sampling personnel wore disposable latex, nylon, or nitrile gloves during sampling events. At a minimum, gloves were changed before each laboratory sample was collected. All collected samples were placed into an appropriately conditioned cooler for storage and were transported to the laboratory. Samples were maintained between 0°C and 8°C.

#### **Section No. 6.0: Conclusions and Recommendations**

Based on the findings of the current data collected during the subsurface investigation performed and reported to JCB, the following observations are made:

The laboratory analysis results from the groundwater samples submitted did not indicate elevated concentrations of any VOCs or Freon above the NYSDEC TOGS 1.1.1 guidance values for groundwater.

The laboratory analysis results from the groundwater samples submitted did indicate elevated concentrations of Radium 226 and Radium 228 above the NYSDEC TOGS 1.1.1 guidance values for groundwater.

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Based upon the detected concentrations of VOCs and Radium in the collected groundwater samples it is recommended that periodic groundwater and volatile vapor intrusion (VVI) sampling be continued to monitor site conditions. VVI sampling is currently scheduled for March 2021.

Sincerely,

J.C. Broderick & Associates, Inc.

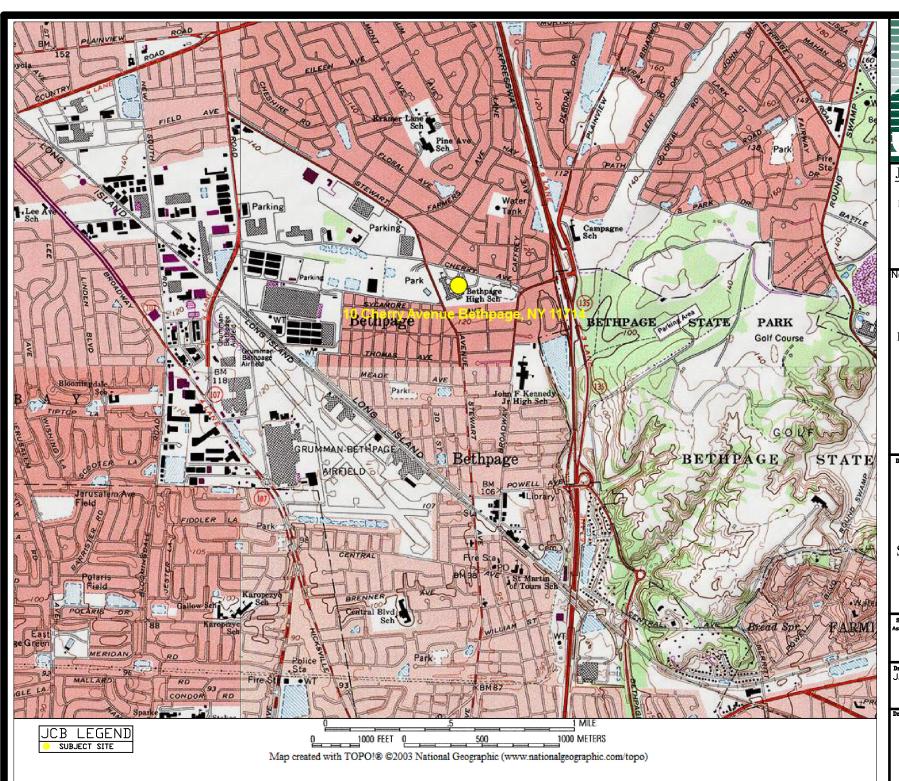
Jeffrey V. Nannini Environmental Scientist

Steven Muller, P.G.

Director - Subsurface Division

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## Appendix A Figures





#### J.C. BRODERICK

#### & Associates

Environmental Consulting and Testing 1775 Express Drive North Hauppauge, NY 11788 Phone: (631).584.5492 Fax: (631).584.3395

Notes:

Bethpage High School 10 Cherry Avenue Bethpage, NY 11714

Drawing Title

Figure No. 1

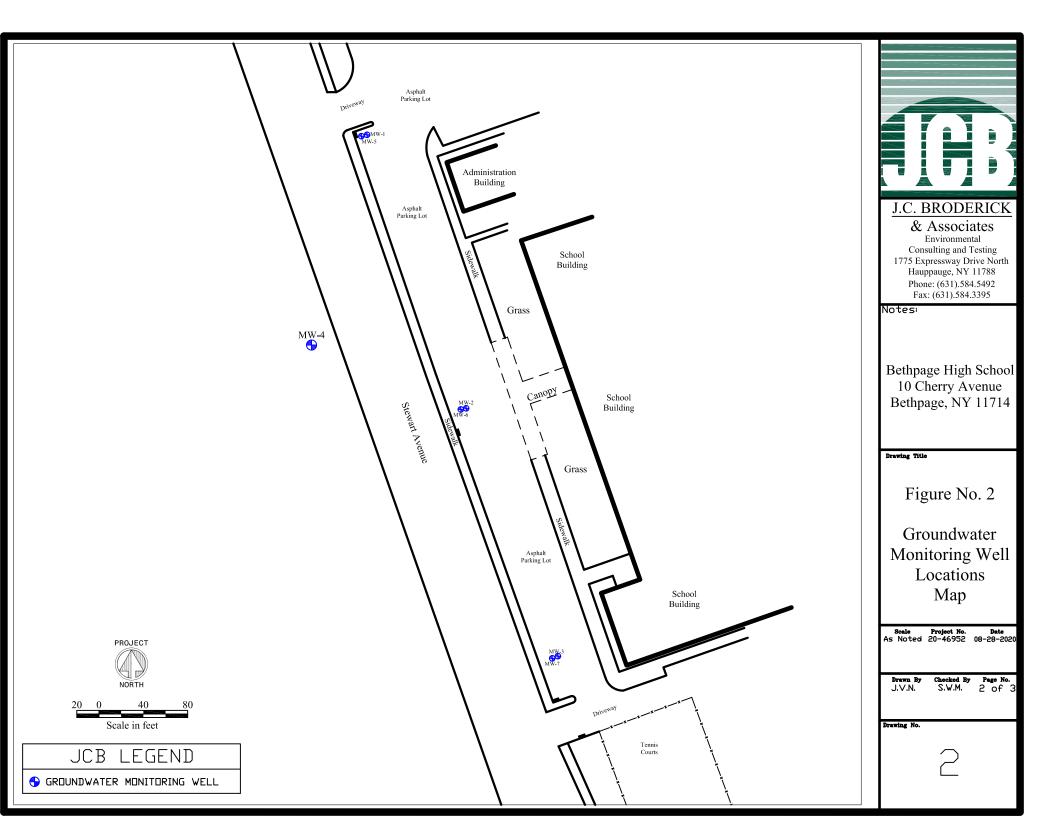
Site Location Map

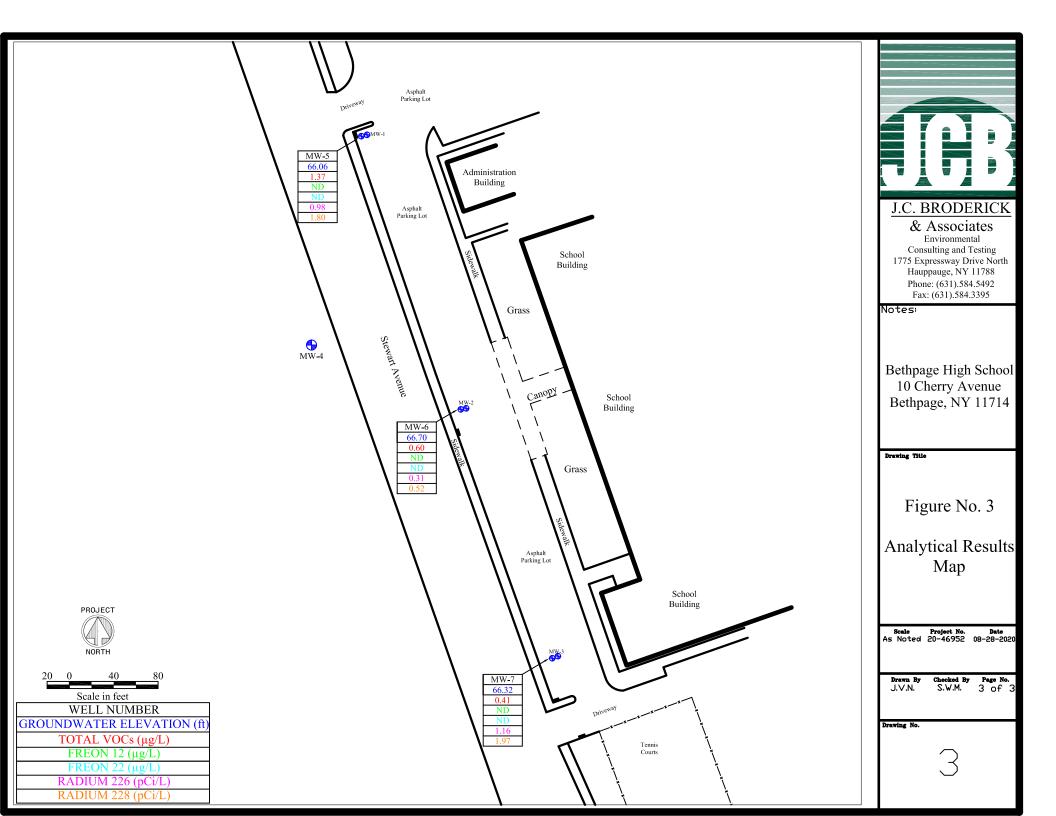
Scale Project No. Date is Noted 20-46952 08-28-2020

Drawn By Checked By Page No. J.V.N. S.W.M. 1 of 3

Drawing No.

1





## Appendix B Photo Log

## Groundwater Monitoring Well Locations MW-1 MW-5





## Field Photograph Log

**Groundwater Sampling Report** 

Bethpage High School 10 Cherry Avenue Bethpage, New York 11714

Photo No. 01

## Groundwater Monitoring Well Locations MW-2 MW-6





## Field Photograph Log

**Groundwater Sampling Report** 

Bethpage High School 10 Cherry Avenue Bethpage, New York 11714

Photo No. 02

## Groundwater Monitoring Well Locations MW-3 MW-7





## Field Photograph Log

**Groundwater Sampling Report** 

Bethpage High School 10 Cherry Avenue Bethpage, New York 11714

Photo No. 03

#### **Groundwater Sampling Equipment**





## Field Photograph Log

**Groundwater Sampling Report** 

Bethpage High School 10 Cherry Avenue Bethpage, New York 11714

Photo No. 04

## **Appendix C Laboratory Analysis Report**



## **Technical Report**

prepared for:

J.C. Broderick
1775 North Express Drive
Hauppauge NY, 11788
Attention: Jeff Nannini

Report Date: 09/09/2020

Client Project ID: 20-46952 BETHPAGE HS

York Project (SDG) No.: 2010153

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

Report Date: 09/09/2020

Client Project ID: 20-46952 BETHPAGE HS

York Project (SDG) No.: 20I0153

#### J.C. Broderick

1775 North Express Drive Hauppauge NY, 11788 Attention: Jeff Nannini

#### **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 September 02, 2020 with a temperature of 1.3 C. The project was identified as your project: **20-46952 BETHPAGE HS**.

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

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

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

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

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

York Sample ID	Client Sample ID	<u>Matrix</u>	<b>Date Collected</b>	Date Received
2010153-01	MW-5	Water	08/28/2020	09/02/2020
2010153-02	MW-6	Water	08/28/2020	09/02/2020
2010153-03	MW-7	Water	08/28/2020	09/02/2020

#### **General Notes for York Project (SDG) No.: 2010153**

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

8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By:

**Date:** 09/09/2020

Benjamin Gulizia Laboratory Director



Client Sample ID: MW-5 2010153-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received20I015320-46952 BETHPAGE HSWaterAugust 28, 2020 12:00 am09/02/2020

#### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:** 

#### **Sample Notes:**

запріє гтерагес	1 by Method: EPA 5030B				Reported to					Date/Time	Date/Time	
CAS No.	. Parameter	Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference !	Method	Prepared	Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH NI	09/03/2020 06:54 ELAC-NY10854,NEL	09/05/2020 02:56	TMP
71.55.6	1117:11	ND		/T	0.20	0.50	1		CIDOII,IV			T1 (D
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	09/03/2020 06:54 ELAC-NY10854,NEL	09/05/2020 02:56 AC-NY12058,NJ	TMP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,N	ELAC-NY10854,NEL	AC-NY12058,NJ	
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,N	09/03/2020 06:54 ELAC-NY10854,NELA	09/05/2020 02:56 AC-NY12058,NJ	TMP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
,,, 00 5	1,1,2-Themoroculaic	ND		-8-					CTDOH,N	ELAC-NY10854,NEL		*****
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,N	ELAC-NY10854,NEL	AC-NY12058,NJ	
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,N	ELAC-NY10854,NEL		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	NEV 10 N	09/03/2020 06:54	09/05/2020 02:56	TMP
				-					NELAC-N	Y10854,NELAC-NY12		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NEL AC N	09/03/2020 06:54 Y10854,NELAC-NY12	09/05/2020 02:56	TMP
120 82 1	124T:11 1	MD		υα/I	0.20	0.50	1		NELAC-N	09/03/2020 06:54	09/05/2020 02:56	TMP
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.30	1	EPA 8260C Certifications:	NELAC-N	V10854,NELAC-NY12		IMP
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,2,4-11memylochzene	ND		ug L	0.20	0.50	•		CTDOH,N	ELAC-NY10854,NEL		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
	,							Certifications:	CTDOH,N	ELAC-NY10854,NEL	AC-NY12058,NJ	
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,N	ELAC-NY10854,NEL	AC-NY12058,NJ	
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,N	ELAC-NY10854,NEL	AC-NY12058,NJ	
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
									CTDOH,N	ELAC-NY10854,NEL		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH N	09/03/2020 06:54 ELAC-NY10854,NELA	09/05/2020 02:56	TMP
100 67 0	1.2.5 Trimedally areas	ND		ng/I	0.20	0.50	1		CTDOII,IV	09/03/2020 06:54	09/05/2020 02:56	TMD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.30	1	EPA 8260C Certifications:	CTDOH N	09/03/2020 06.34 ELAC-NY10854,NEL		TMP
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
, , , ,	1,5-Diemorobenzene	ND		ug L	0.20	0.50	•		CTDOH,N	ELAC-NY10854,NEL		11111
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
	,			-					CTDOH,N	ELAC-NY10854,NEL	AC-NY12058,NJ	
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	NELAC-N	Y10854,NELAC-NY12	2058,NJDEP,PAE	



Client Sample ID: MW-5 2010153-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received20I015320-46952 BETHPAGE HSWaterAugust 28, 2020 12:00 am09/02/2020

#### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

<u>Log-in Notes:</u> Sample 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
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL		
67-64-1	Acetone	1.0	J, B	ug/L	1.0	2.0	1	EPA 8260C	CER OU VI	09/03/2020 06:54	09/05/2020 02:56	TMP
105.00.0					0.20	0.50		Certifications:	CTDOH,NE	ELAC-NY10854,NEL		T. 10
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH NE	09/03/2020 06:54 ELAC-NY10854,NEL	09/05/2020 02:56	TMP
105.12.1				/*	0.20	0.50			CTDOII,NI			T. 10
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH NE	09/03/2020 06:54 ELAC-NY10854,NEL	09/05/2020 02:56	TMP
71 42 2	D	ND		ua/I	0.20	0.50	1		CTDOII,IVI	09/03/2020 06:54	09/05/2020 02:56	TMP
71-43-2	Benzene	ND		ug/L	0.20	0.30	1	EPA 8260C Certifications:	CTDOH NE	09/03/2020 06.34 ELAC-NY10854,NEL		IMP
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	012011,112	09/03/2020 06:54	09/05/2020 02:56	TMP
14-31-3	Bromocniorometnane	ND		ug/L	0.20	0.50	1	Certifications:	NELAC-NY	710854,NELAC-NY1		11011
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
13-21-4	Bromodicmoromethane	ND		ug/L	0.20	0.50		Certifications:	CTDOH,NE	ELAC-NY10854,NEL		11411
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
70 20 2	Biomolomi	ND		ug L	0.20	0.50	•	Certifications:	CTDOH,NE	ELAC-NY10854,NEL		1.,,1
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
	Diomonicular.	112		C				Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL		
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	NELAC-NY	/10854,NELAC-NY12		
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	

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Client Sample ID: MW-5 2010153-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received20I015320-46952 BETHPAGE HSWaterAugust 28, 2020 12:00 am09/02/2020

#### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

CAS No.	. Parameter	Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference M	Aethod	Prepared	Analyzed	Analyst
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	NELAC-NY	/10854,NELAC-NY12	2058,NJDEP,PAE	
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	NELAC-NY	/10854,NELAC-NY12	2058,NJDEP,PAE	
00-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NI	ELAC-NY10854,NELA	AC-NY12058,NJ	
37-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	NELAC-NY	/10854,NELAC-NY12	2058,NJDEP,PAE	
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NELA	AC-NY12058,NJ	
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
	•							Certifications:	NELAC-NY	710854,NELAC-NY12	2058,NJDEP,PAE	
634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NELA	AC-NY12058,NJ	
08-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
	3 3			-				Certifications:	NELAC-NY	/10854,NELAC-NY12	2058,NJDEP,PAE	
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
	mem, rene emerae	1,12		Ü					CTDOH,NE	ELAC-NY10854,NELA	AC-NY12058,NJ	
04-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
	ii Bacyioenzene	T(D		0					CTDOH,NE	ELAC-NY10854,NELA		
03-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
	n-1 ropytoenzene	ND		8	***		-		CTDOH,NE	ELAC-NY10854,NELA		
05-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
3 47 0	0-Aylene	ND		ug L	0.20	0.50	•		CTDOH.NE	ELAC-NY10854,NELA		1.411
79601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	,	09/03/2020 06:54	09/05/2020 02:56	TMP
//001-23-1	p- & III- Aylenes	ND		ug/L	0.50	1.0			CTDOH.NE	ELAC-NY10854,NELA		11411
9-87-6		ND		ug/L	0.20	0.50	1	EPA 8260C	,	09/03/2020 06:54	09/05/2020 02:56	TMP
19-07-0	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1		CTDOH NE	ELAC-NY10854,NELA		INIF
35-98-8	Dutallana	ND		ng/I	0.20	0.50	1		012011,112	09/03/2020 06:54	09/05/2020 02:56	TMP
33-90-0	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH NE	09/03/2020 00:54 ELAC-NY10854,NELA		INIF
00.42.5	G.	ND		/T	0.20	0.50	1		CTDOII,IVI	09/03/2020 06:54		TMP
00-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH NE	09/03/2020 06.34 ELAC-NY10854,NELA	09/05/2020 02:56 AC-NV12058 NI	IMP
	D	1.75			0.50	1.0			CTDOII,IVI			T
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications:	NEL AC NI	09/03/2020 06:54 /10854,NELAC-NY12	09/05/2020 02:56	TMP
				_					NELAC-N			
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	CTROUNI	09/03/2020 06:54	09/05/2020 02:56	TMP
									CTDOH,NI	ELAC-NY10854,NELA		
27-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
									CTDOH,NE	ELAC-NY10854,NELA		
108-88-3	Toluene	0.37	J	ug/L	0.20	0.50	1	EPA 8260C	CTDOUS	09/03/2020 06:54	09/05/2020 02:56	TMP
				-	0.00	0.50	_		CIDON,NI	ELAC-NY10854,NELA		
56-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	OTDOUS."	09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NI	ELAC-NY10854,NELA	AC-NY 12058,NJ	

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Client Sample ID: MW-5 2010153-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received20I015320-46952 BETHPAGE HSWaterAugust 28, 2020 12:00 am09/02/2020

#### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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CAS No.	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NI	ELAC-NY10854,NELA	AC-NY12058,NJ	
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NI	ELAC-NY10854,NELA	AC-NY12058,NJ	
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NELA	AC-NY12058,NJ	
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C		09/03/2020 06:54	09/05/2020 02:56	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NELA	AC-NY12058,NJ	
	Surrogate Recoveries	Result		Acc	eptance Ran	ge						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	102 %			69-130							
2037-26-5	Surrogate: SURR: Toluene-d8	100 %			81-117							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	99.7 %			79-122							

#### **Sample Information**

Client Sample ID: MW-6 2010153-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received201015320-46952 BETHPAGE HSWaterAugust 28, 2020 12:00 am09/02/2020

#### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:

CAS No.	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Metho	Date/Time d Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOI	09/03/2020 06:54 H,NELAC-NY10854,NEL	09/05/2020 03:22 AC-NY12058,NJ	TMP
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOI	09/03/2020 06:54 H,NELAC-NY10854,NEL	09/05/2020 03:22 AC-NY12058,NJ	TMP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOI	09/03/2020 06:54 H,NELAC-NY10854,NEL	09/05/2020 03:22 AC-NY12058,NJ	TMP
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDO	09/03/2020 06:54 H,NELAC-NY10854,NEL	09/05/2020 03:22 AC-NY12058,NJ	TMP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDO	09/03/2020 06:54 H,NELAC-NY10854,NEL	09/05/2020 03:22 AC-NY12058,NJ	TMP
75-34-3	1,1-Dichloroethane	0.34	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDO	09/03/2020 06:54 H,NELAC-NY10854,NEL	09/05/2020 03:22 AC-NY12058,NJ	TMP

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Client Sample ID: MW-6 York Sample ID: 2010153-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received20I015320-46952 BETHPAGE HSWaterAugust 28, 2020 12:00 am09/02/2020

#### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

<b>Log-in Notes:</b>	Sample Notes:
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CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference N	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	NEV 4 0 NR	09/03/2020 06:54	09/05/2020 03:22	TMP
04.10.4	4.0.0 T. 1.1			-	0.20	0.50			NELAC-NY	/10854,NELAC-NY12		T1 (D
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	09/03/2020 06:54 /10854,NELAC-NY12	09/05/2020 03:22 2058,NJDEP,PAE	TMP
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
	, ,							Certifications:	NELAC-NY	/10854,NELAC-NY12	2058,NJDEP,PAE	
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
									CTDOH,NE	ELAC-NY10854,NEL		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
									CTDOH,NE	ELAC-NY10854,NEL		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	CEDOU NE	09/03/2020 06:54	09/05/2020 03:22	TMP
100 (7.0				-	0.20	0.50			CIDOH,NE	ELAC-NY10854,NEL		T1 (D
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH NE	09/03/2020 06:54 ELAC-NY10854,NEL	09/05/2020 03:22	TMP
541 72 1	120:11	ND		a/I	0.20	0.50	1		CIDOII,IVE			TMD
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH NE	09/03/2020 06:54 ELAC-NY10854,NEL	09/05/2020 03:22 AC-NY12058 NI	TMP
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
100-40-7	1,4-Dicilioropenzene	ND		ug/L	0.20	0.50			CTDOH,NE	ELAC-NY10854,NEL		TIVII
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
	1,1 Dioxane	NB							NELAC-NY	/10854,NELAC-NY12		
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
									CTDOH,NE	ELAC-NY10854,NEL		
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	CTDOUNT	09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	CIDOH,NE	ELAC-NY10854,NEL	AC-N Y 12058,NJ	

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Client Sample ID: MW-6 York Sample ID: 2010153-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received20I015320-46952 BETHPAGE HSWaterAugust 28, 2020 12:00 am09/02/2020

#### 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	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
				_				Certifications:	NELAC-NY	/10854,NELAC-NY12		
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH NE	09/03/2020 06:54 ELAC-NY10854,NEL	09/05/2020 03:22 AC-NY12058 NJ	TMP
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	CTP OVEN TO	09/03/2020 06:54	09/05/2020 03:22	TMP
56 22 5		ND.		/T	0.20	0.50		Certifications:	C1DOH,NE	ELAC-NY10854,NEL		TMD
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/03/2020 06:54 ELAC-NY10854,NEL	09/05/2020 03:22 AC-NY12058,NJ	TMP
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
74.07.0	and the second	170		/7	0.20	0.50		Certifications:	CTDOH,NE	ELAC-NY10854,NEL		T 10
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH NE	09/03/2020 06:54 ELAC-NY10854,NEL	09/05/2020 03:22 AC-NY12058 NJ	TMP
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
	cis 1,2 Biemorocalyiene	NB		0				Certifications:	CTDOH,NE	ELAC-NY10854,NEL		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
				_				Certifications:	NELAC-NY	/10854,NELAC-NY12		
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH NE	09/03/2020 06:54 ELAC-NY10854,NEL	09/05/2020 03:22 AC-NY12058 NI	TMP
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	012011,112	09/03/2020 06:54	09/05/2020 03:22	TMP
,,,,,,	Biotomomentane	NB		0				Certifications:	NELAC-NY	/10854,NELAC-NY12		
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	NELAC-NY	/10854,NELAC-NY12	2058,NJDEP,PAE	
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
				_				Certifications:	CTDOH,NE	ELAC-NY10854,NEL		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	09/03/2020 06:54 /10854,NELAC-NY12	09/05/2020 03:22 2058 NJDEP PAT	TMP
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
	100p.10p.10enzene	110		<u>0</u> -			-	Certifications:	CTDOH,NE	ELAC-NY10854,NEL		
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	NELAC-NY	/10854,NELAC-NY12	2058,NJDEP,PAE	
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	

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Client Sample ID: MW-6 York Sample ID: 2010153-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received20I015320-46952 BETHPAGE HSWaterAugust 28, 2020 12:00 am09/02/2020

#### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

Log-	ın N	otes:	Sampl	e ľ	<b>101</b>	tes	:

CAS No.	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	ethod	Date/Time Prepared	Date/Time Analyzed	Analyst
08-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	TEL A C NE	09/03/2020 06:54	09/05/2020 03:22	TMP
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	Certifications: N EPA 8260C	ELAC-N	Y10854,NELAC-NY12 09/03/2020 06:54	09/05/2020 03:22	TMP
5-09-2	Methylene chioride	ND		ug/L	1.0	2.0	1		TDOH,NI	ELAC-NY10854,NEL		TIVIT
04-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications: C	TDOH,NI	ELAC-NY10854,NEL	AC-NY12058,NJ	
03-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	TDOU NI	09/03/2020 06:54	09/05/2020 03:22	TMP
-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	Certifications: C' EPA 8260C	IDOH,NI	ELAC-NY10854,NEL 09/03/2020 06:54	09/05/2020 03:22	TMP
-47-0	0-Aylene	ND		ugil	0.20	0.50	•		TDOH,NI	ELAC-NY10854,NEL		11011
79601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications: C	TDOH,NI	ELAC-NY10854,NEL	AC-NY12058,PA	
9-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
25.00.0	D + II	ND		/I	0.20	0.50	1		TDOH,NI	ELAC-NY10854,NEL		TMD
5-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	TDOH,NI	09/03/2020 06:54 ELAC-NY10854,NEL	09/05/2020 03:22 AC-NY12058,NJ	TMP
00-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications: C	TDOH,NI	ELAC-NY10854,NEL	AC-NY12058,NJ	
-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
									ELAC-N	Y10854,NELAC-NY12		
-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	TDOH,NI	09/03/2020 06:54 ELAC-NY10854,NELA	09/05/2020 03:22 AC-NY12058,NJ	TMP
7-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications: C	TDOH,NI	ELAC-NY10854,NEL	AC-NY12058,NJ	
8-88-3	Toluene	0.26	J	ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
	100:11	) ID		/I	0.20	0.50	1		TDOH,NI	ELAC-NY10854,NEL		TMD
6-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	TDOH,NI	09/03/2020 06:54 ELAC-NY10854,NEL	09/05/2020 03:22 AC-NY12058,NJ	TMP
061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
	, 113							Certifications: C	TDOH,NI	ELAC-NY10854,NEL	AC-NY12058,NJ	
0-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
					0.00	0.50			TDOH,NI	ELAC-NY10854,NEL	, i	
-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: C	TDOH.NI	09/03/2020 06:54 ELAC-NY10854,NEL	09/05/2020 03:22 AC-NY12058.NJ	TMP
-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
								Certifications: C	TDOH,NI	ELAC-NY10854,NEL	AC-NY12058,NJ	
5-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:22	TMP
									TDOH,NI	ELAC-NY10854,NEL		
330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: C	трон м	09/03/2020 06:54 ELAC-NY10854,NELA	09/05/2020 03:22 AC-NY12058 NI	TMP
	Surrogate Recoveries	Result		Acc	eptance Ran	ge.		Carmondons. C			11112000,110	
7060-07-0	Surrogate: SURR:	106 %		1100	69-130	<b>-</b> ~						
	1,2-Dichloroethane-d4	100 /0			0, 150							

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Client Sample ID: MW-6 York Sample ID: 2010153-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received20I015320-46952 BETHPAGE HSWaterAugust 28, 2020 12:00 am09/02/2020

Volatile Organics, 8260 - Comprehensive

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

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
2037-26-5	Surrogate: SURR: Toluene-d8	97.9 %			81-117					
460-00-4	Surrogate: SURR:	97.1 %			79-122					
	p-Bromofluorobenzene									

#### **Sample Information**

Client Sample ID: MW-7 2010153-03

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received201015320-46952 BETHPAGE HSWaterAugust 28, 2020 12:00 am09/02/2020

#### Volatile Organics, 8260 - Comprehensive

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

Sample Prepared by Method: EPA 5030B

CAS No.	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
530-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	09/03/2020 06:54 ELAC-NY10854,NELA	09/05/2020 03:47 AC-NY12058,NJ	TMP
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	09/03/2020 06:54 ELAC-NY10854,NELA	09/05/2020 03:47 AC-NY12058,NJ	TMP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	09/03/2020 06:54 ELAC-NY10854,NELA	09/05/2020 03:47 AC-NY12058,NJ	TMP
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	09/03/2020 06:54 ELAC-NY10854,NELA	09/05/2020 03:47 AC-NY12058,NJ	TMP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	09/03/2020 06:54 ELAC-NY10854,NEL	09/05/2020 03:47 AC-NY12058,NJ	TMP
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	09/03/2020 06:54 ELAC-NY10854,NELA	09/05/2020 03:47 AC-NY12058,NJ	TMP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	09/03/2020 06:54 ELAC-NY10854,NELA	09/05/2020 03:47 AC-NY12058,NJ	TMP
37-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	09/03/2020 06:54 Y10854,NELAC-NY12	09/05/2020 03:47 058,NJDEP,PAE	TMP
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	09/03/2020 06:54 Y10854,NELAC-NY12	09/05/2020 03:47 058,NJDEP,PAE	TMP
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	09/03/2020 06:54 Y10854,NELAC-NY12	09/05/2020 03:47 058,NJDEP,PAE	TMP
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	09/03/2020 06:54 ELAC-NY10854,NELA	09/05/2020 03:47 AC-NY12058,NJ	TMP
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	09/03/2020 06:54 ELAC-NY10854,NELA	09/05/2020 03:47 AC-NY12058,NJ	TMP
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NI	09/03/2020 06:54 ELAC-NY10854,NELA	09/05/2020 03:47 AC-NY12058,NJ	TMP

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Client Sample ID: MW-7 2010153-03

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received20I015320-46952 BETHPAGE HSWaterAugust 28, 2020 12:00 am09/02/2020

#### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

<u>Log-in Notes:</u> Sample Notes
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CAS No.	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NI	ELAC-NY10854,NEL	AC-NY12058,NJ	
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NI	ELAC-NY10854,NEL	AC-NY12058,NJ	
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NI	ELAC-NY10854,NEL	AC-NY12058,NJ	
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NI	ELAC-NY10854,NEL	AC-NY12058,NJ	
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NI	ELAC-NY10854,NEL	AC-NY12058,NJ	
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NI	ELAC-NY10854,NEL	AC-NY12058,NJ	
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	NELAC-N	Y10854,NELAC-NY12		
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
									CTDOH,NI	ELAC-NY10854,NEL		
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
									CTDOH,NI	ELAC-NY10854,NEL		
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
									CTDOH,NI	ELAC-NY10854,NEL		
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C	CTP OVI VIII	09/03/2020 06:54	09/05/2020 03:47	TMP
									CTDOH,NI	ELAC-NY10854,NEL		
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C	OTTO OVENI	09/03/2020 06:54	09/05/2020 03:47	TMP
									CTDOH,NI	ELAC-NY10854,NEL		
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C	CTDOLLNI	09/03/2020 06:54	09/05/2020 03:47	TMP
				_					CTDOH,NI	ELAC-NY10854,NEL		
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOLLNI	09/03/2020 06:54 ELAC-NY10854,NEL	09/05/2020 03:47	TMP
74.07.5	D 11 4	ND		/T	0.20	0.50			CTDOII,NI			TMD
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NEL AC NO	09/03/2020 06:54 Y10854,NELAC-NY12	09/05/2020 03:47	TMP
75 27 4	D 1:11 d	ND		na/I	0.20	0.50	1		TILL/IC-II	09/03/2020 06:54	09/05/2020 03:47	TMD
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH NI	09/03/2020 00.34 ELAC-NY10854,NEL		TMP
75-25-2	Df	ND		ng/I	0.20	0.50	1	EPA 8260C	012011,	09/03/2020 06:54	09/05/2020 03:47	TMP
13-23-2	Bromoform	ND		ug/L	0.20	0.50	1		CTDOH NI	ELAC-NY10854,NEL		INIF
74-83-9	Bromomethane	ND		ng/I	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
74-03-9	biomomethane	ND		ug/L	0.20	0.50	1		CTDOH.NI	ELAC-NY10854,NEL		TIVIT
75-15-0	Carbon digulfida	ND		ug/L	0.20	0.50	1	EPA 8260C	,	09/03/2020 06:54	09/05/2020 03:47	TMP
,5 15 0	Carbon disulfide	ND			0.20	0.50			CTDOH,NI	ELAC-NY10854,NEL		11411
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	- ,	09/03/2020 06:54	09/05/2020 03:47	TMP
JU 23 J	Caroon tenaemonat	MD			0.20	0.50			CTDOH,NI	ELAC-NY10854,NEL		11411
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	- ,	09/03/2020 06:54	09/05/2020 03:47	TMP
	Chiototochizene	MD		g. L	0.20	0.50			CTDOH.NI	ELAC-NY10854,NEL		. 1711
									, - 1 -			



Client Sample ID: MW-7 2010153-03

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received20I015320-46952 BETHPAGE HSWaterAugust 28, 2020 12:00 am09/02/2020

#### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

<u>Log-in Notes:</u> Sample Notes
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CAS No	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NI	ELAC-NY10854,NEL	AC-NY12058,NJ	
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NI	ELAC-NY10854,NEL	AC-NY12058,NJ	
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	NELAC-NY	Y10854,NELAC-NY1	2058,NJDEP,PAE	
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	NELAC-NY	Y10854,NELAC-NY1	2058,NJDEP,PAE	
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	NELAC-NY	Y10854,NELAC-NY1	2058,NJDEP,PAE	
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	NELAC-NY	Y10854,NELAC-NY1	2058,NJDEP,PAE	
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NI	ELAC-NY10854,NEL	AC-NY12058,NJ	
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	NELAC-NY	Y10854,NELAC-NY1	2058,NJDEP,PAL	
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NI	ELAC-NY10854,NEL	AC-NY12058,NJ	
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	NELAC-NY	Y10854,NELAC-NY1	2058,NJDEP,PAE	
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,NJ	
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,PA	
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOH,NE	ELAC-NY10854,NEL	AC-NY12058,PA	
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	CTDOLLNI	ELAC-NY10854,NEL	A C. NIX/12050 NII	

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Client Sample ID: MW-7 2010153-03

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received20I015320-46952 BETHPAGE HSWaterAugust 28, 2020 12:00 am09/02/2020

#### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

**Log-in Notes:** 

**Sample Notes:** 

CAS No	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time Tethod Prepared	Date/Time Analyzed	Analyst
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications: C	TDOH,NELAC-NY10854,NEL	AC-NY12058,NJ	
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	TTDOH,NELAC-NY10854,NEL	AC-NY12058,NJ	
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C	09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications: N	NELAC-NY10854,NELAC-NY12	2058,NJDEP,PAE	
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications: C	TDOH,NELAC-NY10854,NEL	AC-NY12058,NJ	
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications: C	TDOH,NELAC-NY10854,NEL	AC-NY12058,NJ	
108-88-3	Toluene	0.41	J	ug/L	0.20	0.50	1	EPA 8260C	09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications: C	TDOH,NELAC-NY10854,NEL	AC-NY12058,NJ	
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications: C	TDOH,NELAC-NY10854,NEL	AC-NY12058,NJ	
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	TTDOH,NELAC-NY10854,NEL	AC-NY12058,NJ	
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C	09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications: C	TDOH,NELAC-NY10854,NEL	AC-NY12058,NJ	
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications: C	TDOH,NELAC-NY10854,NEL	AC-NY12058,NJ	
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications: C	TDOH,NELAC-NY10854,NEL	AC-NY12058,NJ	
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications:	TDOH,NELAC-NY10854,NEL	AC-NY12058,NJ	
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	09/03/2020 06:54	09/05/2020 03:47	TMP
								Certifications: C	TDOH,NELAC-NY10854,NEL	AC-NY12058,NJ	
	Surrogate Recoveries	Result		Acc	eptance Ran	ge					
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	102 %			69-130						
2037-26-5	Surrogate: SURR: Toluene-d8	99.8 %			81-117						
460-00-4	Surrogate: SURR:	96.5 %			79-122						
	p-Bromofluorobenzene	70.0 70			. / 122						

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#### **Volatile Analysis Sample Containers**

Lab ID	Client Sample ID	Volatile Sample Container
20I0153-01	MW-5	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
20I0153-02	MW-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
20I0153-03	MW-7	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



#### Sample and Data Qualifiers Relating to This Work Order

J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
В	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.
	Definitions and Other Explanations
*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high

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.

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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 STRATFORD, CT 06615
 132-02 89th AVENUE
 RICHMOND HILL, NY 11418

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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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 STRATFORD, CT 06615
 ■ 132-02 89th AVENUE
 RIC

 www.YORKLAB.com
 (203) 325-1371
 FAX (203) 357-0166
 Clie



York Analytical Laboratories, Inc.

120 Research Drive Stratford, CT 06615

132-02 89th Ave Queens, NY 11418

clientservices@yorklab.com

### Field Chain-of-Custody Record

20 FO 153

YORK Project No.

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. www.yorklab.com Your signature binds you to YORK's Standard Terms & Conditions. YOUR Project Number **Turn-Around Time** Report To: Invoice To: YOUR Information RUSH - Next Day 11/13 20 - 46952 YOUR Project Name 1715 Expressing Dr N RUSH - Two Day RUSH - Three Day Hauppauge NY 11788 RUSH - Four Day BETHPAGE MS Contact Standard (5-7 Day) YOUR PO#: JACAMINIPSC Soder K. com Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved. Report / EDD Type (circle selections) YORK Reg. Comp. **Matrix Codes** Samples From Compared to the following Summary Report CT RCP Standard Excel EDD S - soil / solid New York Regulation(s): (please fill in) CT RCP DQA/DUE EQuIS (Standard) QA Report GW - groundwater New Jersey NYSDEC EQuIS DW - drinking water NY ASP A Package Connecticut NJDEP Reduced Deliverables NJDEP SRP HazSite Pennsylvania NY ASP B Package WW - wastewater NJDKQP O - Oil Other Other Container Description Date/Time Sampled **Analysis Requested** Sample Matrix Sample Identification FULL EPA 8260 with VOA - (3) MW-5 MW-6 MW-7 Preservation: (check all that apply) Special Instruction Comments: Beflipaye HS MeOH HNO3 H2SO4 NaOH ZnAc Field Filtered 16 Cherry Ave Ascorbic Acid Other: Lab to Filter Date/Time Samples Relinquished by / Company Date/Time Samples Received by / Company nles Relinquished by / Company Page Samples Received by / Company Date/Time Date/Time Received by / Company 8 <u>o</u> Date/Time Temp. Received at Lab Samples Received by / Company Date/Time Date/Time ω Relinquished by / Company



200 Route 130 North Cinnaminson, NJ 08077

Telephone: (800)220-3675 FAX: (856)786-0327 <a href="mailto:com/cinnaminsonradonlab@emsl.com/">cinnaminsonradonlab@emsl.com/</a> | <a href="mailto:http://www.EMSL.com/">http://www.EMSL.com/</a>

**Reported Date: 9/30/2020** 

**Current Rev** R0 **Final Comment** 0

**Attention:** Steven Muller

J.C. Broderick & Associates

1775 Expressway Drive North, Suite 1

Hauppauge, NY 11788

Phone: 631-584-5492

Email: smuller@jcbroderick.com

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 09/09/2020 at 09:50. The results are tabulated on the attached data pages for the following client designated project:

#### Bethpage HS / MW-5

The reference number for these samples is EMSL Order #782006559. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (800)220-3675.

**Dominic Gehret, Radiochemistry Laboratory Manager** 

**EMSL ORDER ID**: 782006559

**EMSL CUSTOMER ID:** JCBR50

or other approved signatory

The test results contained within this report meet the requirements of NELAP and/or the specific certification program that is applicable, unless otherwise noted.

NELAC Certification #: 03036

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted.



200 Route 130 North Cinnaminson, NJ 08077

Phone:

Email:

Telephone: (800)220-3675 FAX: (856)786-0327

cinnaminsonradonlab@emsl.com | http://www.EMSL.com

Attention: Steven Muller

J.C. Broderick & Associates

1775 Expressway Drive North,

Suite 1

631-584-5492

Hauppauge, NY 11788

smuller@jcbroderick.com

**Customer PO:** 20-46952

EMSL Project ID:

Project Name: Bethpage HS / MW-5

Collected: 08/28/2020 07:30
Received: 09/09/2020 09:50
Analyzed: See Results

**Reported**: 9/30/2020

# Laboratory Report- Sample Summary

EMSL Sample ID.	Client Sample ID.	Start Sampling Date	Start Sampling Time
782006559-0001	MW-5	8/28/2020	7:30 AM

If "Preliminary Report" is displayed in the signature box; this indicates that there are samples that have not yet been analyzed, that are in a preliminary state, or that analysis is in progress but not completed at the time of report issue.

Report DateReport RevisionRevision Comments9/30/2020R0Initial Report

Dominic Gehret, Radiochemistry Laboratory Manager or other approved signatory

EMSL ORDER ID: 782006559 EMSL CUSTOMER ID: JCBR50

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody.

Samples are within quality control criteria and met method specifications unless otherwise noted.



200 Route 130 North Cinnaminson, NJ 08077

Telephone: (800)220-3675 FAX: (856)786-0327

cinnaminsonradonlab@emsl.com | http://www.EMSL.com

Attention: Steven Muller

J.C. Broderick & Associates 1775 Expressway Drive North,

Suite 1

Hauppauge, NY 11788

**Customer PO:** 20-46952

**EMSL Project ID:** 

Project Name: Bethpage HS / MW-5 EMSL ORDER ID: 782006559

EMSL CUSTOMER ID: JCBR50

Collected: 08/28/2020 07:30 Phone: 631-584-5492 Received: 09/09/2020 09:50 Email: smuller@jcbroderick.com Analyzed: See Results Reported: 9/30/2020

# Analytical Report

Sample Identification:	MW-5		Lab Sample #: 782006559-0001										
Test Parameter	Units	Result	Uncertainty	SDWA DL	Start Count Date/ Time	End Count Date/ Time	Analyst	Status Count	Method	Comment			
Ra-228 - EPA 904.0	pCi/L	1.80	0.940	0.900	09/23/2020 14:08	09/23/2020 16:08	JW	Not Applicable	EPA 904.0				
Ra-226-EPA 903.0	pCi/L	0.98	0.149	0.166	09/30/2020 09:15	09/30/2020 10:55	JW	Not Applicable	EPA 903.0				

## Sample Specific Comments

- (1)= Analyte was analyzed for, but not detected above the SDWA DL
- (2)= Analyte was analyzed for, but not detected above the MDA

#### **Additional Comments**

- \* The uncertainty reported is an expanded uncertainty of 1.96-sigma.
- \* For NJ Rapid Gross Alpha, the uncertainty reported is an expanded uncertainty of 1.65-sigma.
- \* The SDWA detection limit is defined in 40 CFR 141.25(c) as equal to the analyte concentration which can be counted with a precision of plus or minus 100% at the 95% confidencelevel (1.96 $\sigma$  where  $\sigma$  is the standard deviation of the net counting rate of the sample).
- \* For drinking water, the regulatory limit for gross alpha is 15 pCi/L with an SDWA DL of 3 pCi/L..
- \* For drinking water, the regulatory limit for combined radium-226 and radium-228 is 5 pCi/L with each having an SDWA DL of 1 pCi/L.
- \* If gross alpha result from the 36 48 hour count exceeds 5pCi/L, the plancheted sample is recounted between 20 28 hours after the midpoint of the initial count.

If "Preliminary Report" is displayed in the signature box; this indicates that there are samples that have not yet been analyzed, that are in a preliminary state, or that analysis is in progress but not completed at the time of report issue.

**Report Revision Revision Comments Report Date** 9/30/2020 R0 Initial Report

Dominic Gehret, Radiochemistry Laboratory Manager

or other approved signatory



200 Route 130 North Cinnaminson, NJ 08077

Telephone: (800)220-3675 FAX: (856)786-0327

cinnaminsonradonlab@emsl.com | http://www.EMSL.com

Attention: Steven Muller

Phone:

Email:

J.C. Broderick & Associates

1775 Expressway Drive North,

631-584-5492

Hauppauge, NY 11788

smuller@jcbroderick.com

**Customer PO:** 20-46952

**EMSL Project ID:** 

**Project Name:** Bethpage HS / MW-5

Collected: 08/28/2020 07:30 Received: 09/09/2020 09:50

Analyzed: See Results Reported: 9/30/2020

# **Quality Control Report**

Sample Identification	n: MW-5		Lab S	ample #:	78200	06559-0001	Date/T	ime Colle	ected: 8/28	3/2020	07:30 AM				
Test Parameter	Tracer/ Carrier 1	<u>Spike</u>	<u>Result</u>	<u>% Rec.</u>	<u>Q</u>	Tracer/ Carrier 2	<u>Spike</u>	<u>Result</u>	% Rec.	<u>Q</u>	Tracer/ Carrier 3	<u>Spike</u>	<u>Result</u>	% Rec.	Q
Ra-228 - EPA 904.0	Barium Carrier	55.3	57.2	103		Yttrium Carrier	29.5	23.6	80		N/A				
Ra-226 - EPA 903.0	Barium Carrier	55.3	57.2	103		N/A					N/A				

#### % Recovery Criteria

30% - 125%

## **Qualifier Definitions**

C= Carrier recovery was outside of acceptable limits.

T= Tracer recovery was outside of acceptable limits.

If "Preliminary Report" is displayed in the signature box; this indicates that there are samples that have not yet been analyzed, that are in a preliminary state, or that analysis is in progress but not completed at the time of report issue.

**Report Revision Revision Comments Report Date** 9/30/2020 R0 Initial Report

Dominic Gehret, Radiochemistry Laboratory Manager

or other approved signatory

EMSL ORDER ID: 782006559 EMSL CUSTOMER ID: JCBR50



200 Route 130 North Cinnaminson, NJ 08077

Telephone: (800)220-3675 FAX: (856)786-0327 <a href="mailto:com/cinnaminsonradonlab@emsl.com/">cinnaminsonradonlab@emsl.com/</a> | <a href="mailto:http://www.EMSL.com/">http://www.EMSL.com/</a>

**Reported Date: 9/30/2020** 

**Current Rev** R0 **Final Comment** 0

**Attention:** Steven Muller

J.C. Broderick & Associates

1775 Expressway Drive North, Suite 1

Hauppauge, NY 11788

Phone: 631-584-5492

Email: smuller@jcbroderick.com

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 09/09/2020 at 09:50. The results are tabulated on the attached data pages for the following client designated project:

# Bethpage HS / MW-6

The reference number for these samples is EMSL Order #782006560. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (800)220-3675.

**Dominic Gehret, Radiochemistry Laboratory Manager** 

or other approved signatory

EMSL ORDER ID: 782006560

**EMSL CUSTOMER ID:** JCBR50

The test results contained within this report meet the requirements of NELAP and/or the specific certification program that is applicable, unless otherwise noted.

NELAC Certification #: 03036



200 Route 130 North Cinnaminson, NJ 08077

Telephone: (800)220-3675 FAX: (856)786-0327

cinnaminsonradonlab@emsl.com | http://www.EMSL.com

Attention: Steven Muller

Phone:

Email:

J.C. Broderick & Associates

1775 Expressway Drive North, Suite 1

631-584-5492

Hauppauge, NY 11788

smuller@jcbroderick.com

**Customer PO:** 20-46952

EMSL Project ID:

Project Name: Bethpage HS / MW-6

Collected: 08/28/2020 08:15
Received: 09/09/2020 09:50
Analyzed: See Results

**Reported**: 9/30/2020

# Laboratory Report- Sample Summary

EMSL Sample ID.	Client Sample ID.	Start Sampling Date	Start Sampling Time
782006560-0001	MW-6	8/28/2020	8:15 AM

If "Preliminary Report" is displayed in the signature box; this indicates that there are samples that have not yet been analyzed, that are in a preliminary state, or that analysis is in progress but not completed at the time of report issue.

Report DateReport RevisionRevision Comments9/30/2020R0Initial Report

Dominic Gehret, Radiochemistry Laboratory Manager or other approved signatory

EMSL ORDER ID: 782006560 EMSL CUSTOMER ID: JCBR50

or other approved signatory



200 Route 130 North Cinnaminson, NJ 08077

Telephone: (800)220-3675 FAX: (856)786-0327

cinnaminsonradonlab@emsl.com | http://www.EMSL.com

Attention: Steven Muller

Phone:

Email:

J.C. Broderick & Associates 1775 Expressway Drive North,

Suite 1

Hauppauge, NY 11788

**Customer PO:** 20-46952

**EMSL Project ID:** 

Project Name: Bethpage HS / MW-6

EMSL ORDER ID: 782006560

EMSL CUSTOMER ID: JCBR50

# Analytical Report

Sample Identification:	MW-6		Lab Sample #:	Lab Sample #: 782006560-0001 Date/Time Collected: 8/28/2020 08:15 AM										
Test Parameter	Units	Result	Uncertainty	SDWA DL	Start Count Date/ Time	End Count Date/ Time	Analyst	Status Count	Method	Comment				
Ra-228 - EPA 904.0	pCi/L	0.510	0.520	0.520	09/23/2020 14:09	09/23/2020 16:09	JW	Not Applicable	EPA 904.0	(1)				
Ra-226-EPA 903.0	pCi/L	0.308	0.0874	0.147	09/30/2020 09:15	09/30/2020 10:55	JW	Not Applicable	EPA 903.0					

## Sample Specific Comments

- (1)= Analyte was analyzed for, but not detected above the SDWA DL
- (2)= Analyte was analyzed for, but not detected above the MDA

#### **Additional Comments**

- \* The uncertainty reported is an expanded uncertainty of 1.96-sigma.
- \* For NJ Rapid Gross Alpha, the uncertainty reported is an expanded uncertainty of 1.65-sigma.
- \* The SDWA detection limit is defined in 40 CFR 141.25(c) as equal to the analyte concentration which can be counted with a precision of plus or minus 100% at the 95% confidencelevel (1.96σ where σ is the standard deviation of the net counting rate of the sample).
- \* For drinking water, the regulatory limit for gross alpha is 15 pCi/L with an SDWA DL of 3 pCi/L...
- \* For drinking water, the regulatory limit for combined radium-226 and radium-228 is 5 pCi/L with each having an SDWA DL of 1 pCi/L.
- \* If gross alpha result from the 36 48 hour count exceeds 5pCi/L, the plancheted sample is recounted between 20 28 hours after the midpoint of the initial count.

If "Preliminary Report" is displayed in the signature box; this indicates that there are samples that have not yet been analyzed, that are in a preliminary state, or that analysis is in progress but not completed at the time of report issue.

Report DateReport RevisionRevision Comments9/30/2020R0Initial Report

Dominic Gehret, Radiochemistry Laboratory Manager or other approved signatory



200 Route 130 North Cinnaminson, NJ 08077

Telephone: (800)220-3675 FAX: (856)786-0327

cinnaminsonradonlab@emsl.com | http://www.EMSL.com

Attention: Steven Muller

Phone:

Email:

J.C. Broderick & Associates

1775 Expressway Drive North,

Hauppauge, NY 11788

smuller@jcbroderick.com

631-584-5492

**Customer PO:** 20-46952

**EMSL Project ID:** 

**Project Name:** Bethpage HS / MW-6

Collected: 08/28/2020 08:15 Received: 09/09/2020 09:50 Analyzed:

See Results Reported: 9/30/2020

# **Quality Control Report**

Sample Identification	n: MW-6		Lab S	ample #:	78200	06560-0001	Date/T	ime Colle	ected: 8/2	3/2020	08:15 AM				
Test Parameter	<u>Tracer/</u> Carrier 1	<u>Spike</u>	<u>Result</u>	<u>% Rec.</u>	<u>Q</u>	<u>Tracer/</u> Carrier 2	<u>Spike</u>	<u>Result</u>	<u>% Rec.</u>	<u>Q</u>	Tracer/ Carrier 3	<u>Spike</u>	<u>Result</u>	<u>% Rec.</u>	<u>Q</u>
Ra-228 - EPA 904.0	Barium Carrier	55.3	52.7	95		Yttrium Carrier	29.5	25.5	86		N/A				
Ra-226 - EPA 903.0	Barium Carrier	55.3	52.7	95		N/A					N/A				

## % Recovery Criteria

30% - 125%

#### **Qualifier Definitions**

C= Carrier recovery was outside of acceptable limits.

T= Tracer recovery was outside of acceptable limits.

If "Preliminary Report" is displayed in the signature box; this indicates that there are samples that have not yet been analyzed, that are in a preliminary state, or that analysis is in progress but not completed at the time of report issue.

**Report Revision Revision Comments Report Date** 9/30/2020 R0 Initial Report

Dominic Gehret, Radiochemistry Laboratory Manager

or other approved signatory

EMSL ORDER ID: 782006560 EMSL CUSTOMER ID: JCBR50

200 Route 130 North Cinnaminson, NJ 08077

Telephone: (800)220-3675 FAX: (856)786-0327 <a href="mailto:com/cinnaminsonradonlab@emsl.com/">cinnaminsonradonlab@emsl.com/</a> | <a href="mailto:http://www.EMSL.com/">http://www.EMSL.com/</a>

**Reported Date: 9/30/2020** 

**Current Rev** R0 **Final Comment** 0

**Attention:** Steven Muller

J.C. Broderick & Associates

1775 Expressway Drive North, Suite 1

Hauppauge, NY 11788

Phone: 631-584-5492

Email: smuller@jcbroderick.com

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 09/09/2020 at 09:50. The results are tabulated on the attached data pages for the following client designated project:

# Bethpage HS / MW-7

The reference number for these samples is EMSL Order #782006561. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (800)220-3675.

**Dominic Gehret, Radiochemistry Laboratory Manager** 

or other approved signatory

EMSL ORDER ID: 782006561

**EMSL CUSTOMER ID:** JCBR50

The test results contained within this report meet the requirements of NELAP and/or the specific certification program that is applicable, unless otherwise noted.

NELAC Certification #: 03036



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Suite 1

Hauppauge, NY 11788

smuller@jcbroderick.com

631-584-5492

**Customer PO:** 20-46952

EMSL Project ID:

Project Name: Bethpage HS / MW-7

Collected: 08/28/2020 09:00
Received: 09/09/2020 09:50
Analyzed: See Results

**Reported**: 9/30/2020

# Laboratory Report- Sample Summary

EMSL Sample ID.	Client Sample ID.	Start Sampling Date	Start Sampling Time
782006561-0001	MW-7	8/28/2020	9:00 AM

If "Preliminary Report" is displayed in the signature box; this indicates that there are samples that have not yet been analyzed, that are in a preliminary state, or that analysis is in progress but not completed at the time of report issue.

Report DateReport RevisionRevision Comments9/30/2020R0Initial Report

Dominic Gehret, Radiochemistry Laboratory Manager or other approved signatory

EMSL ORDER ID: 782006561 EMSL CUSTOMER ID: JCBR50



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631-584-5492

**Customer PO:** 20-46952

**EMSL Project ID:** 

Project Name: Bethpage HS / MW-7 EMSL ORDER ID: 782006561

EMSL CUSTOMER ID: JCBR50

Collected: 08/28/2020 09:00 Received: 09/09/2020 09:50 Analyzed: See Results

Reported: 9/30/2020

# Analytical Report

Sample Identification:	MW-7		Lab Sample #: 782006561-0001										
Test Parameter	Units	Result	Uncertainty	SDWA DL	Start Count Date/ Time	End Count Date/ Time	Analyst	Status Count	Method	Comment			
Ra-228 - EPA 904.0	pCi/L	1.97	0.640	0.550	09/23/2020 14:09	09/23/2020 16:09	JW	Not Applicable	EPA 904.0				
Ra-226-EPA 903.0	pCi/L	1.16	0.167	0.164	09/30/2020 09:15	09/30/2020 10:55	JW	Not Applicable	EPA 903.0				

## Sample Specific Comments

- (1)= Analyte was analyzed for, but not detected above the SDWA DL
- (2)= Analyte was analyzed for, but not detected above the MDA

#### **Additional Comments**

- \* The uncertainty reported is an expanded uncertainty of 1.96-sigma.
- \* For NJ Rapid Gross Alpha, the uncertainty reported is an expanded uncertainty of 1.65-sigma.
- \* The SDWA detection limit is defined in 40 CFR 141.25(c) as equal to the analyte concentration which can be counted with a precision of plus or minus 100% at the 95% confidencelevel (1.96 $\sigma$  where  $\sigma$  is the standard deviation of the net counting rate of the sample).
- \* For drinking water, the regulatory limit for gross alpha is 15 pCi/L with an SDWA DL of 3 pCi/L..
- \* For drinking water, the regulatory limit for combined radium-226 and radium-228 is 5 pCi/L with each having an SDWA DL of 1 pCi/L.
- \* If gross alpha result from the 36 48 hour count exceeds 5pCi/L, the plancheted sample is recounted between 20 28 hours after the midpoint of the initial count.

If "Preliminary Report" is displayed in the signature box; this indicates that there are samples that have not yet been analyzed, that are in a preliminary state, or that analysis is in progress but not completed at the time of report issue.

**Report Revision Revision Comments Report Date** 9/30/2020 R0 Initial Report

> Dominic Gehret, Radiochemistry Laboratory Manager or other approved signatory



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631-584-5492

**Customer PO:** 20-46952

**EMSL Project ID:** 

Project Name: Bethpage HS / MW-7

Collected: 08/28/2020 09:00 Received: 09/09/2020 09:50

Analyzed: See Results Reported: 9/30/2020

# **Quality Control Report**

Sample Identification	n: MW-7		Lab S	ample #:	78200	06561-0001	Date/T	ime Colle	ected: 8/28	3/2020	09:00 AM				
Test Parameter	Tracer/ Carrier 1	<u>Spike</u>	<u>Result</u>	<u>% Rec.</u>	<u>Q</u>	Tracer/ Carrier 2	<u>Spike</u>	<u>Result</u>	% Rec.	<u>Q</u>	Tracer/ Carrier 3	<u>Spike</u>	<u>Result</u>	<u>% Rec.</u>	<u>Q</u>
Ra-228 - EPA 904.0	Barium Carrier	55.3	54.2	98		Yttrium Carrier	29.5	25.9	88		N/A				
Ra-226 - EPA 903.0	Barium Carrier	55.3	54.2	98		N/A					N/A				

## % Recovery Criteria

30% - 125%

## **Qualifier Definitions**

C= Carrier recovery was outside of acceptable limits.

T= Tracer recovery was outside of acceptable limits.

If "Preliminary Report" is displayed in the signature box; this indicates that there are samples that have not yet been analyzed, that are in a preliminary state, or that analysis is in progress but not completed at the time of report issue.

Report DateReport RevisionRevision Comments9/30/2020R0Initial Report

Dominic Gehret, Radiochemistry Laboratory Manager or other approved signatory

EMSL ORDER ID: 782006561

EMSL CUSTOMER ID: JCBR50



# Radiochemical Analysis Chain of Custody EMSL Order Number (Lab Use Only):

78200-

Contact Name:	Steven N	Muller		С			Bro	oderic	k ar	nd A	SSO	ciates	s, Inc.	Sample	Sampled By (Sign): Malemo				
Company Name:	IC Broder	ick & A	ssociate	s, Inc.	ttenti o:	ion		200	Š.					Sampled By (Name): Nicholas Salerno					
Address: 1775 Exp	oress Drive N	North		A	ddres	s:								Total #		1			,
City: Hauppauge	State: NY		Zip Code: 1	1788 c	ity:				Sta	ite:	Z	ip Code:		Date of Shipping: 09-08-2020 Sample State/ Zip Code: New York / 11714					
Telephone #: 631-	584-5492	Fa	x: 631-584	-3395 T	eleph	one #:				70	Fax	<b>(</b> :							
Email: smuller@jct	oroderick.com			P	roject	Name:	Bethp	age HS		- 34				Purchas	se Orde	r: 20-	4695	2	
Turn Around Time:	☐ 4 wee	ks (Stan	dard)	Client Spe	ecific:			48 Hours		96 H	ours	□ 1 w	eek	□ 2 we	☐ 2 weeks ☐ 3 Weeks				
Fie									Ar	nalytes									
						Gross A	Alpha			17 (1)	Ε	- S	es	1					1
Client Sample ID	(For Lab Use only)	Matrix	Size (mL, g)	Date/Tin	me	NJ 48 Hrs	EPA 900	Gross Beta	Ra-228	Ra-226	Total Uranium	Gamma Emitters	Actinides (U, Th, Pu, Am)	Sr-89, Sr-90	I-131	Radon	Tritium	66-2L	Note
MW-5	6539	GW		8-28-2020 / 7:3	30 AM				X	X								S	2
MW-6	6560	GW	2,000 ml	8-28-2020 / 8:1	15 AM				X	Х	7						7	공	NA_RE
MW-7	6561	GW	2,000 ml	8-28-2020 / 9:0	00 AM			135.74	X	Х								9	<b>E</b>
		7						10,000					/				10		SPE
	150								75,184					-				9	20
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Report Requiremen	 nt*: □ Le	vel One	■ Level	Two [		evel Thre	20												
Relinquished b		Date/ Ti			ceive			Dat	te/ Tin	ne			Note						
Nicholas Salerno 09-08-2020 Eu &										9:5	) an		Bethpa	ge High	Scho	ool		48	
									170	, ,			<del></del>	rry Avenue, Bethpage, NY 11714					
*Level One =Result			2																

782006561