#### **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 #: 21-49924 SEPTEMBER 2021

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

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



#### **Table of Contents**

Section No. 1.0: Introduction	1
Section No. 2.0: Site Description and Location	1
Section No. 3.0: Subsurface Investigation Procedures	1
Section No. 3.1: Monitoring Well Gauging	1
Section No. 3.2: Groundwater Sampling	1
Section No. 4.0: Groundwater Laboratory Analytical Summary	3
Section No. 5.0: Quality Assurance and Quality Control (QA/QC) Procedures	
Section No. 6.0: Conclusions and Recommendations	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	

#### **List of Tables**

Table No. 1 - Depth to Groundwater Gauged with Interface Meter

Table No. 2 - Groundwater Monitoring During Sample Collection

Table No. 3 - Summary of Groundwater Samples Submitted for Laboratory Analysis

Table No. 4 - Summary of Groundwater Samples Detected Analytical Results

Table No. 5 - Summary of Groundwater Radon Samples Analytical Results

#### **List of Figures**

Figure 1 - Site Location Map

Figure 2 - Well Locations Map

Figure 3 - Analytical Results Map

#### **Appendices**

Appendix A - Figures

Appendix B – Field Photograph Logs

Appendix C - Laboratory Analysis Reports

#### **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 September 16, 2021, 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	<b>Casing Elevation (ft)</b>	Depth to Product (ft)	Depth to Groundwater (ft)	<b>Groundwater Elevation (ft)</b>							
MW-5	118.88	No Product	50.13	68.75							
MW-6	119.04	No Product	50.72	68.32							
MW-7	118.72	No Product	50.75	67.97							
Notes: ft = Feet											

#### **Section No. 3.2: Groundwater Sampling**

On September 16, 2021, 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.

JCB Project # 21-49924 Page 1 of 5

The following table summarizes the purged water testing.

	Groundw	Table vater Monitoring	No. 2: During Sample Collectio	n	
MW-5	DTW (ft)	TD (ft)	Water Column (ft)		
	50.13	62.55	12.42		
Time	Temp (°C)	TDS (g/l)	DO (%)	pН	ORP (mV
8:15	16.17	0.367	2.59	744	153.4
8:20	15.99	0.457	2.57	7.40	161.6
8:25	15.72	0.522	2.48	7.36	163.1
		Samples	Collected		
MW-6	DTW (ft)	TD (ft)	Water Column (ft)		
	50.72	62.40	11.68		
Time	Temp (°C)	TDS (g/l)	DO (%)	pН	ORP (mV
8:45	22.74	0.127	2.40	7.72	146.2
8:50	22.92	0.122	2.41	7.46	150.9
8:55	22.95	0.123	2.40	7.44	152.6
		Samples	Collected		•
MW-7	DTW (ft)	TD (ft)	Water Column (ft)		
	50.75	62.83	12.08		
Time	Temp (°C)	TDS (g/l)	DO (%)	pН	ORP (mV
9:15	20.15	0.501	3.03	7.10	161.2
9:20	20.20	0.505	2.97	7.11	161.3
	20.31	0.505	2.97	7.08	164.3

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								
MW-5	9-16-2021	Monitoring Well No. 5	EPA 8260 + Freon EPA 903.0 EPA 904.0								
MW-6	9-16-2021	Monitoring Well No. 6	EPA 8260 + Freon EPA 903.0 EPA 904.0								
MW-7	9-16-2021	Monitoring Well No. 7	EPA 8260 + Freon EPA 903.0 EPA 904.0								
Notes: EPA = Environmen											

JCB Project # 21-49924 Page 2 of 5

#### 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:

	Table N	0. 4:									
Summary of Groundwater Sample Detected Analytical Results											
Sample ID	MW-5			MW-6		MW-7					
York ID	NYSDEC TOGS	2110786-		2110786		21I0786-					
Sampling Date	Standards and	9/16/20:	21	9/16/20	21	9/16/20	21				
Client Matrix	Guidance Values - GA	Water	•	Water	·	Water	•				
Compound		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	5	0.200	U	0.300	J	0.320	J				
Chloroform	7	0.200	U	0.370	J	0.200	U				
Toluene	5	0.340	J	0.270	J	0.420	J				
Volatile Organics, Freon-113	ug/L	ug/L		ug/L		ug/L					
Dilution Factor		1		1		1					
NOTES:											
Any Regulatory Exceedences are color cod	ed by Regulation										
Q is the Qualifier Column with definitions	as follows:										
J=analyte detected at or above the MDL (m	ethod detection limit) but	below the RL	(Repor	ting Limit) - da	ata is es	timated					
U=analyte not detected at or above the leve	el indicated										

The review of the laboratory VOC 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 1,1-dichloroethane, chloroform, and toluene; however, the levels reported were below the above referenced guidance values for groundwater.

JCB Project # 21-49924 Page **3** of **5** 

The following table summarizes the Radium analytical results in groundwater:

Table No. 5: Summary of Groundwater Radon Samples Analytical Results										
Client Sample ID Allowable Standards MW-5 MW-6 MW-7										
EPA 903.0 & EPA 904	pCi/L	9/16/2021	9/16/2021	9/16/2021						
Radium 226 (pCi/L)	3.0	0.381	0.0219	0.892						
Radium 228 (pCi/L)	5.0	0.820	0.26	1.54						
$\frac{\text{Notes}}{\text{pCi/L}} = \text{picocuries per lite}$	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.

JCB Project # 21-49924 Page 4 of 5

#### 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 any 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 not indicate any elevated concentrations of Radium 226 and Radium 228 above the NYSDEC TOGS 1.1.1 guidance values for groundwater.

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 2022.

Sincerely,

J.C. Broderick & Associates, Inc.

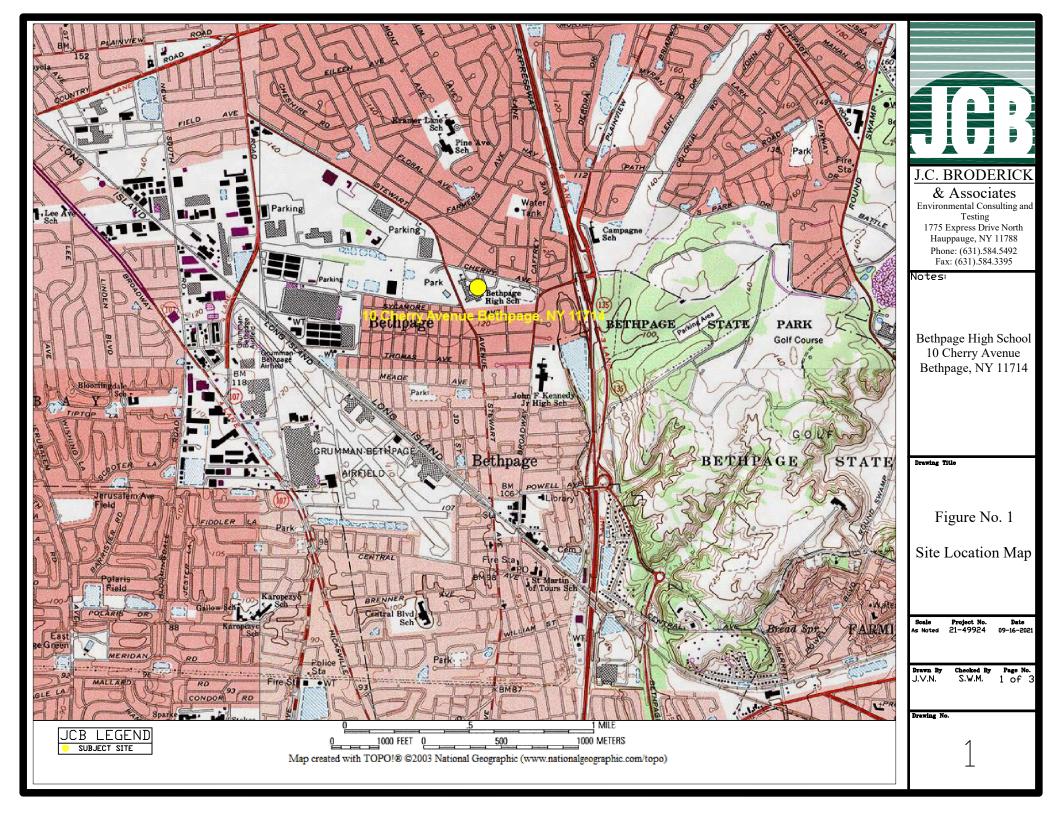
Jeffrey V. Nannini Environmental Scientist

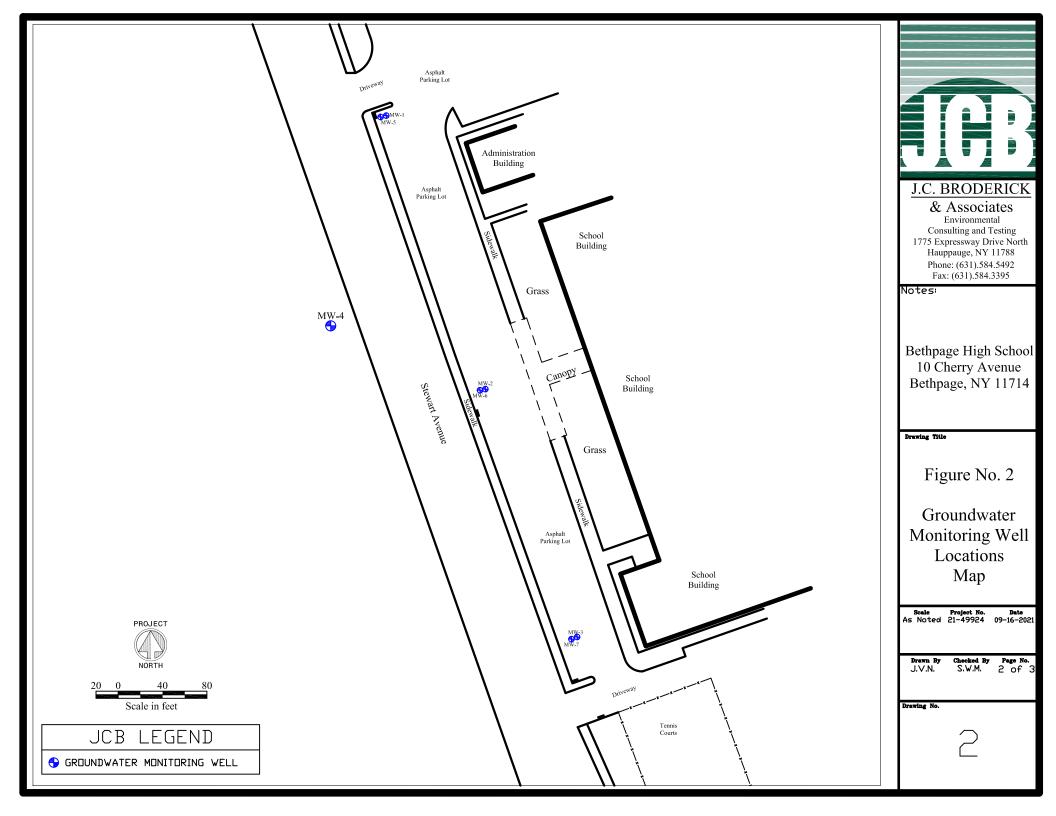
Steven Muller, P.G.

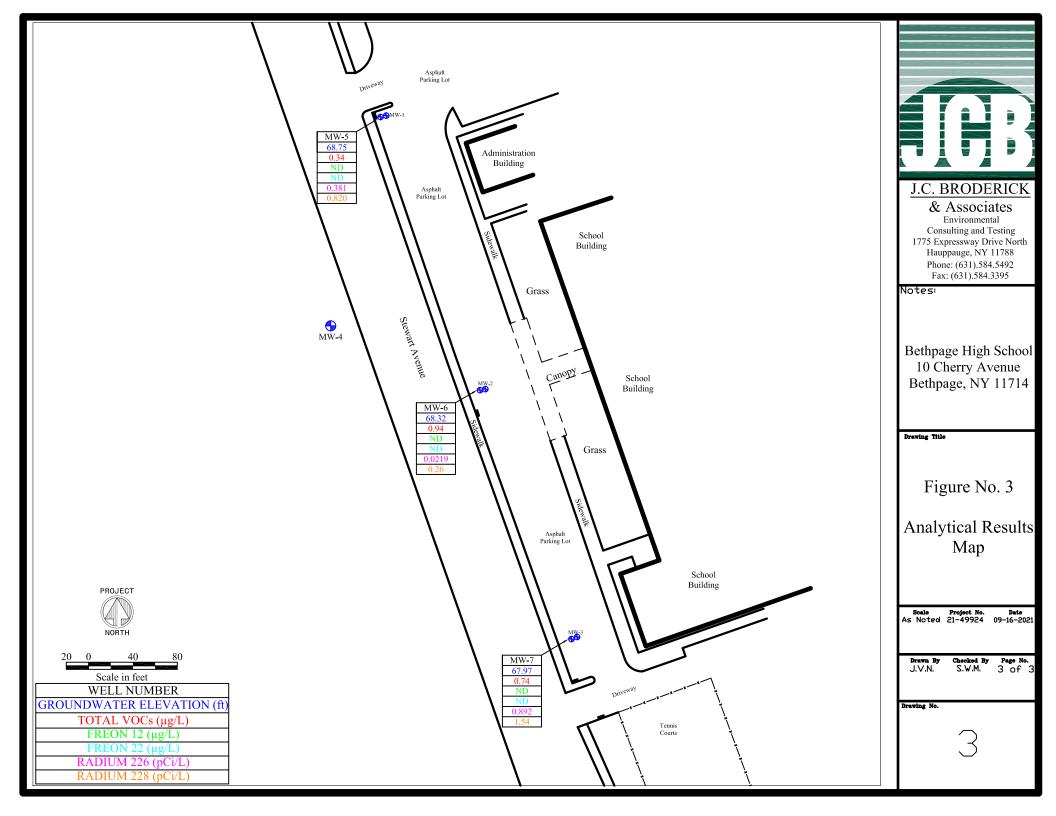
Director - Subsurface Division

JCB Project # 21-49924 Page 5 of 5

## Appendix A Figures







## Appendix B Field Photograph Logs

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





## Field Photograph Log

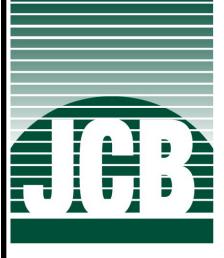
**Groundwater Sampling Report** 

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: Steven Muller

Report Date: 09/21/2021

Client Project ID: 21-49924 Bethpage High School

York Project (SDG) No.: 2110786

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: 09/21/2021

Client Project ID: 21-49924 Bethpage High School

York Project (SDG) No.: 21I0786

#### J.C. Broderick

1775 North Express Drive Hauppauge NY, 11788 Attention: Steven Muller

#### **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 17, 2021 and listed below. The project was identified as your project: **21-49924 Bethpage High School**.

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
2110786-01	MW-5	Water	09/16/2021	09/17/2021
2110786-02	MW-6	Water	09/16/2021	09/17/2021
2110786-03	MW-7	Water	09/16/2021	09/17/2021

#### General Notes for York Project (SDG) No.: 2110786

- 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.
- This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.

Och I most

- 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:

Cassie L. Mosher Laboratory Manager **Date:** 09/21/2021



Client Sample ID: MW-5 2110786-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received211078621-49924 Bethpage High SchoolWaterSeptember 16, 2021 3:00 pm09/17/2021

#### 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 1	Date/Tim Method Prepare		Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09 CTDOH,NELAC-NY10854		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09 CTDOH,NELAC-NY10854		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09 CTDOH,NELAC-NY10854		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09 CTDOH,NELAC-NY10854		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09 CTDOH,NELAC-NY10854		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09 CTDOH,NELAC-NY10854		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09 CTDOH,NELAC-NY10854		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09 NELAC-NY10854,NELAC-		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	09/20/2021 09 NELAC-NY10854,NELAC-	:00 09/20/2021 13:42	PD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	09/20/2021 09 NELAC-NY10854,NELAC-	:00 09/20/2021 13:42	PD
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09 CTDOH,NELAC-NY10854		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09 CTDOH,NELAC-NY10854		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09 CTDOH,NELAC-NY10854		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	09/20/2021 09 CTDOH,NELAC-NY10854	:00 09/20/2021 13:42	PD
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09 CTDOH,NELAC-NY10854		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09 CTDOH,NELAC-NY10854		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09 CTDOH,NELAC-NY10854		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09 CTDOH,NELAC-NY10854		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09 CTDOH,NELAC-NY10854		
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications:	09/20/2021 09 NELAC-NY10854,NELAC-		
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	09/20/2021 09 CTDOH,NELAC-NY10854	:00 09/20/2021 13:42	PD
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	09/20/2021 09 CTDOH,NELAC-NY10854	:00 09/20/2021 13:42	PD

120 RESEARCH DRIVE www.YORKLAB.com

STRATFORD, CT 06615 (203) 325-1371 132-02 89th AVENUE FAX (203) 357-0166 RICHMOND HILL, NY 11418

ClientServices@

Page 4 of 18



Client Sample ID: MW-5

Sample Prepared by Method: EPA 5030B

**York Sample ID:** 2110786-01

York Project (SDG) No.Client Project ID21I078621-49924 Bethpage High School

Matrix Water <u>Collection Date/Time</u> September 16, 2021 3:00 pm Date Received 09/17/2021

Volatile Organics, 8260 - Comprehensive

**Log-in Notes:** 

**Sample Notes:** 

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference		Oate/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		20/2021 09:00 -NY10854,NEI	09/20/2021 13:42 LAC-NY12058,NJDEI	PD P,PADEP
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:		20/2021 09:00 -NY10854,NEI	09/20/2021 13:42 LAC-NY12058,NJDEI	PD P,PADEP
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		20/2021 09:00 -NY10854,NEI	09/20/2021 13:42 LAC-NY12058,NJDEI	PD P,PADEP
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		20/2021 09:00 -NY10854,NEI	09/20/2021 13:42 LAC-NY12058,NJDEI	PD P,PADEP
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		20/2021 09:00 -NY10854,NEI	09/20/2021 13:42 LAC-NY12058,NJDEI	PD P,PADEP
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 12058,NJDEP,PADEP	PD
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 LAC-NY12058,NJDEI	PD P.PADEP
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 LAC-NY12058,NJDEI	PD
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 LAC-NY12058,NJDEI	PD
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 AC-NY12058,NJDEI	PD
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 AC-NY12058,NJDEI	PD
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 LAC-NY12058,NJDEI	PD
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 LAC-NY12058,NJDEI	PD
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 LAC-NY12058,NJDEI	PD
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 LAC-NY12058,NJDEI	PD
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 LAC-NY12058,NJDEI	PD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 AC-NY12058,NJDEI	PD
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 12058,NJDEP,PADEP	PD
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 LAC-NY12058,NJDEI	PD P.PADEP
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 12058,NJDEP,PADEP	PD
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 12058,NJDEP,PADEP	PD
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 LAC-NY12058,NJDEI	PD
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/2	20/2021 09:00	09/20/2021 13:42 12058,NJDEP,PADEP	PD
								ceruncations:	NELAC-N I 1085	T,INELAC-INY	12030,INJDEP,PADEP	

120 RESEARCH DRIVE www.YORKLAB.com

STRATFORD, CT 06615 (203) 325-1371 132-02 89th AVENUE

RICHMOND HILL, NY 11418

ClientServices@ Page 5 of 18

FAX (203) 357-0166



Client Sample ID: MW-5

<u>York Sample ID:</u> 2110786-01

York Project (SDG) No. 21I0786

<u>Client Project ID</u> 21-49924 Bethpage High School Matrix Water <u>Collection Date/Time</u> September 16, 2021 3:00 pm Date Received 09/17/2021

Volatile Organics, 8260 - Comprehensive

**Log-in Notes:** 

**Sample Notes:** 

voiathe Organ	1103, 0200	Comprehensi	. , ,
Sample Prepared by N	lethod: FPA 50	30B	
bampic i repared by iv	ictilod. Li A 50.	J0D	

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Date/Time e Method Prepare		Analyst
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09: CTDOH,NELAC-NY10854,1		
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09: NELAC-NY10854,NELAC-1		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09: CTDOH,NELAC-NY10854,1		
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09: NELAC-NY10854,NELAC-1		
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	09/20/2021 09: CTDOH,NELAC-NY10854,I	00 09/20/2021 13:42	PD
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09: CTDOH,NELAC-NY10854,I	00 09/20/2021 13:42	PD
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09: CTDOH,NELAC-NY10854,1	00 09/20/2021 13:42	PD
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	09/20/2021 09:	00 09/20/2021 13:42	PD
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	Certifications:	O9/20/2021 09:	00 09/20/2021 13:42	PD
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	Certifications: EPA 8260C	CTDOH,NELAC-NY10854,1 09/20/2021 09:	00 09/20/2021 13:42	PD
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	Certifications: EPA 8260C	CTDOH,NELAC-NY10854,1 09/20/2021 09:	00 09/20/2021 13:42	PD
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	Certifications: EPA 8260C	CTDOH,NELAC-NY10854,1 09/20/2021 09:		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	2.5	1	Certifications: EPA 8260C	CTDOH,NELAC-NY10854,1 09/20/2021 09:		
	, ,							Certifications:	NELAC-NY10854,NELAC-N	NY 12058, NJDEP, PADEP	
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09: CTDOH,NELAC-NY10854,1		
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09: CTDOH,NELAC-NY10854,1		
108-88-3	Toluene	0.34	J	ug/L	0.20	0.50	1	EPA 8260C	09/20/2021 09:	00 09/20/2021 13:42	PD
								Certifications:	CTDOH,NELAC-NY10854,	NELAC-NY12058,NJDI	EP,PADEP
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09: CTDOH,NELAC-NY10854,1		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09: CTDOH,NELAC-NY10854,1		
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09: CTDOH,NELAC-NY10854,1		
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09: CTDOH,NELAC-NY10854,1		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09: CTDOH,NELAC-NY10854,I	00 09/20/2021 13:42	PD
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	09/20/2021 09:	00 09/20/2021 13:42	PD
					0.66			Certifications:	CTDOH,NELAC-NY10854,I		
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications:	09/20/2021 09: CTDOH,NELAC-NY10854,I		

Acceptance Range

120 RESEARCH DRIVE STRATFORD, CT 06615

**Surrogate Recoveries** 

132-02 89th AVENUE

RICHMOND HILL, NY 11418

www.YORKLAB.com (203) 325-1371

Result

FAX (203) 357-0166

ClientServices@ Page 6 of 18



Client Sample ID: MW-5 2110786-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received21I078621-49924 Bethpage High SchoolWaterSeptember 16, 2021 3:00 pm09/17/2021

Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

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

CAS N	No. Parameter	Result	Flag	Units	Reported to LOD/MDL LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	107 %			69-130					
2037-26-5	Surrogate: SURR: Toluene-d8	90.5 %			81-117					
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	98.6 %			79-122					

**Volatile Organics, Freon-113** 

**Log-in Notes:** 

**Sample Notes:** 

Sample Prepare	ed by Method: EPA 5030B	Result	Flag	Units	Reported to	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
		Tiesan	1				Dilution			•	•	•
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	CTDOH,NI	09/20/2021 09:00 ELAC-NY10854,NJDI	09/20/2021 13:42 EP,NELAC-NY12058	PD ,PADEP
	Surrogate Recoveries	Result		Acc	eptance Rang	e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	107 %			65-135							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	98.6 %			81-114							
2037-26-5	Surrogate: SURR: Toluene-d8	90.5 %			86-118							

#### **Sample Information**

<u>Client Sample ID:</u> MW-6 <u>York Sample ID:</u> 2110786-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received21I078621-49924 Bethpage High SchoolWaterSeptember 16, 2021 3:00 pm09/17/2021

#### 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	09/20/2021 09:00 ELAC-NY10854,NELA	09/20/2021 14:10 AC-NY12058,NJDEP	PD PADEP
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,NJDEP	PD PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,NJDEP	PD PADEP
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	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,NJDEP	PD PADEP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,NJDEP	PD PADEP
75-34-3	1,1-Dichloroethane	0.30	J	ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,NJDEI	PD P,PADEP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NELA	09/20/2021 14:10 AC-NY12058,NJDEP	PD PADEP

120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE

RICHMOND HILL, NY 11418

www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@ Page 7 of 18



Client Sample ID: MW-6

Sample Prepared by Method: EPA 5030B

**York Sample ID:** 2110786-02

York Project (SDG) No.Client Project ID21I078621-49924 Bethpage High School

Matrix Co
Water Septem

<u>Collection Date/Time</u> September 16, 2021 3:00 pm Date Received 09/17/2021

Volatile Organics, 8260 - Comprehensive

**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
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	09/20/2021 09:00 10854,NELAC-NY1	09/20/2021 14:10 12058,NJDEP,PADEP	PD
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	09/20/2021 09:00 10854,NELAC-NY1	09/20/2021 14:10 12058,NJDEP,PADEP	PD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-NY	09/20/2021 09:00 10854,NELAC-NY1	09/20/2021 14:10 12058,NJDEP,PADEP	PD
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 LAC-NY10854,NEI	09/20/2021 14:10 LAC-NY12058,NJDEF	PD P,PADEP
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		09/20/2021 09:00	09/20/2021 14:10 LAC-NY12058,NJDEF	PD
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		09/20/2021 09:00	09/20/2021 14:10 AC-NY12058,NJDEF	PD
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		09/20/2021 09:00	09/20/2021 14:10 LAC-NY12058,NJDEF	PD
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		09/20/2021 09:00	09/20/2021 14:10 LAC-NY12058,NJDEF	PD
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		09/20/2021 09:00	09/20/2021 14:10	PD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		09/20/2021 09:00	O9/20/2021 14:10 LAC-NY12058,NJDEF	PD
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C		09/20/2021 09:00	09/20/2021 14:10	PD
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	Certifications:		09/20/2021 09:00	09/20/2021 14:10	PD
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	Certifications:		09/20/2021 09:00	09/20/2021 14:10	PD
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	Certifications:		09/20/2021 09:00	09/20/2021 14:10	PD
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	Certifications:		09/20/2021 09:00	O9/20/2021 14:10	PD
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	Certifications: EPA 8260C		09/20/2021 09:00	09/20/2021 14:10	PD
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	Certifications: EPA 8260C		09/20/2021 09:00	09/20/2021 14:10	PD
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	Certifications: EPA 8260C	CTDOH,NE	LAC-NY10854,NEI 09/20/2021 09:00	O9/20/2021 14:10	P,PADEP PD
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	Certifications: EPA 8260C	CTDOH,NE	LAC-NY10854,NEI 09/20/2021 09:00	09/20/2021 14:10	P,PADEP PD
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	Certifications: EPA 8260C	CTDOH,NE	LAC-NY10854,NEI 09/20/2021 09:00	O9/20/2021 14:10	P,PADEP PD
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	Certifications: EPA 8260C	CTDOH,NE	LAC-NY10854,NEI 09/20/2021 09:00	O9/20/2021 14:10	P,PADEP PD
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	Certifications: EPA 8260C	NELAC-NY	10854,NELAC-NY1 09/20/2021 09:00	12058,NJDEP,PADEP 09/20/2021 14:10	PD
								Certifications:	CTDOH,NE		09/20/2021 14:10 09/20/2021 14:10	P,PADEP
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE		09/20/2021 14:10 LAC-NY12058,NJDEF	PD P,PADEP

120 RESEARCH DRIVE www.YORKLAB.com

STRATFORD, CT 06615 (203) 325-1371 132-02 89th AVENUE

RICHMOND HILL, NY 11418

FAX (203) 357-0166 ClientServices@ Page 8 of 18



Client Sample ID: MW-6

Sample Prepared by Method: EPA 5030B

**York Sample ID:** 2110786-02

York Project (SDG) No.Client Project ID21I078621-49924 Bethpage High School

MatrixCollection Date/TimeWaterSeptember 16, 2021 3:00 pm

Date Received 09/17/2021

Volatile Organics, 8260 - Comprehensive

**Log-in Notes:** 

**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
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 CTDOH,NELAC-NY10854,NEI	09/20/2021 14:10 LAC-NY12058,NJDEI	PD P,PADEP
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 CTDOH,NELAC-NY10854,NEI	09/20/2021 14:10 LAC-NY12058,NJDEI	PD P,PADEP
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 CTDOH,NELAC-NY10854,NEI	09/20/2021 14:10 LAC-NY12058,NJDEI	PD P,PADEP
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 CTDOH,NELAC-NY10854,NEI	09/20/2021 14:10 LAC-NY12058,NJDEI	PD P,PADEP
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 CTDOH,NELAC-NY10854,NEI	09/20/2021 14:10 LAC-NY12058,NJDEI	PD P,PADEP
67-66-3	Chloroform	0.37	J	ug/L	0.20	0.50	1	EPA 8260C	09/20/2021 09:00	09/20/2021 14:10	PD
								Certifications:	CTDOH,NELAC-NY10854,NE	LAC-NY12058,NJDE	.P,PADEP
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 CTDOH,NELAC-NY10854,NEI	09/20/2021 14:10 LAC-NY12058,NJDEI	PD P,PADEP
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 CTDOH,NELAC-NY10854,NEI	09/20/2021 14:10 LAC-NY12058,NJDEI	PD P,PADEP
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 CTDOH,NELAC-NY10854,NEI	09/20/2021 14:10 LAC-NY12058,NJDEI	PD P,PADEP
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 NELAC-NY10854,NELAC-NY	09/20/2021 14:10 12058,NJDEP,PADEP	PD
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 CTDOH,NELAC-NY10854,NEI	09/20/2021 14:10 LAC-NY12058,NJDEI	PD P,PADEP
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 NELAC-NY10854,NELAC-NY	09/20/2021 14:10 12058,NJDEP,PADEP	PD
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 NELAC-NY10854,NELAC-NY	09/20/2021 14:10 12058,NJDEP,PADEP	PD
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 CTDOH,NELAC-NY10854,NEI	09/20/2021 14:10 LAC-NY12058,NJDEI	PD P,PADEP
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 NELAC-NY10854,NELAC-NY	09/20/2021 14:10 12058,NJDEP,PADEP	PD
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 CTDOH,NELAC-NY10854,NEI	09/20/2021 14:10 LAC-NY12058,NJDEF	PD P,PADEP
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 NELAC-NY10854,NELAC-NY	09/20/2021 14:10 12058,NJDEP,PADEP	PD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 CTDOH,NELAC-NY10854,NEI	09/20/2021 14:10 LAC-NY12058,NJDEI	PD P,PADEP
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 NELAC-NY10854,NELAC-NY	09/20/2021 14:10 12058,NJDEP,PADEP	PD
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	09/20/2021 09:00 CTDOH,NELAC-NY10854,NEI	09/20/2021 14:10 LAC-NY12058,NJDEI	PD P,PADEP
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 CTDOH,NELAC-NY10854,NEI	09/20/2021 14:10 LAC-NY12058,NJDEI	PD P,PADEP
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 CTDOH,NELAC-NY10854,NEI	09/20/2021 14:10 LAC-NY12058,NJDEI	PD P,PADEP
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/2021 09:00 CTDOH,NELAC-NY10854,NEI	09/20/2021 14:10	PD

120 RESEARCH DRIVE www.YORKLAB.com

STRATFORD, CT 06615 (203) 325-1371 132-02 89th AVENUE

RICHMOND HILL, NY 11418

ClientServices@ Page 9 of 18

FAX (203) 357-0166



Client Sample ID: MW-6

York Sample ID:

2110786-02

York Project (SDG) No. 21I0786

<u>Client Project ID</u> 21-49924 Bethpage High School Matrix Water <u>Collection Date/Time</u> September 16, 2021 3:00 pm Date Received 09/17/2021

Volatile Organics, 8260 - Comprehensive

**Log-in Notes:** 

**Sample Notes:** 

Sample Prepared by Method: EPA 5030B

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,PADEP	PD
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,NJDEP,	PD PADEP
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,NJDEP,	PD PADEP
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,NJDEP,	PD PADEP
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	2.5	1	EPA 8260C Certifications:	NELAC-NY	09/20/2021 09:00 710854,NELAC-NY1	09/20/2021 14:10 2058,NJDEP,PADEP	PD
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,NJDEP,	PD PADEP
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,NJDEP,	PD PADEP
108-88-3	Toluene	0.27	J	ug/L	0.20	0.50	1	EPA 8260C		09/20/2021 09:00	09/20/2021 14:10	PD
								Certifications:	CTDOH,NI	ELAC-NY10854,NEI	AC-NY12058,NJDEF	,PADEP
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,NJDEP,	PD PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,NJDEP,	PD PADEP
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,NJDEP	PD
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,NJDEP,	PD PADEP
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,NJDEP,	PD PADEP
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,NJDEP,	PD PADEP
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:10 AC-NY12058,NJDEP	PD
	Surrogate Recoveries	Result		Acce	eptance Rang	e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	108 %			69-130							
2037-26-5	Surrogate: SURR: Toluene-d8	89.7 %			81-117							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	99.6 %			79-122							

#### **Volatile Organics, Freon-113**

Sample Prepared by Method: EPA 5030B

<u>Log-in Notes:</u> <u>Sample Notes</u>	g-in Notes: Sample No	tes:
------------------------------------------	-----------------------	------

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	lethod	Date/Time Prepared	Date/Time Analyzed	Analyst
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: C	TDOH,NE	09/20/2021 09:00 ELAC-NY10854,NJDI	09/20/2021 14:10 EP,NELAC-NY12058	PD ,PADEP
	Surrogate Recoveries	Result		Acc	eptance Rang	ge						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	108 %			65-135							

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

www.YORKLAB.com (203) 325-1371

FAX (203) 357-0166

ClientServices@ Page 10 of 18



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

York Project (SDG) No. Client Project ID Matrix Collection Date/Time Date Received 2110786 21-49924 Bethpage High School Water September 16, 2021 3:00 pm 09/17/2021

2110786-02

**Volatile Organics, Freon-113** Sample Prepared by Method: EPA 5030B

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

CAS N	vo. Parameter	Result	Flag	Units	Reported to LOD/MDL LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	99.6 %			81-114					
2037-26-5	Surrogate: SURR: Toluene-d8	89.7 %			86-118					

#### **Sample Information**

Client Sample ID: MW-7 York Sample ID: 2110786-03

York Project (SDG) No. Collection Date/Time Date Received Client Project ID Matrix Water 2110786 21-49924 Bethpage High School September 16, 2021 3:00 pm 09/17/2021

#### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

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

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference		/Time epared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/20 CTDOH,NELAC-NY	021 09:00 10854,NEL	09/20/2021 14:38 AC-NY12058,NJDEP	PD P,PADEP
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/20 CTDOH,NELAC-NY	021 09:00 10854,NEL	09/20/2021 14:38 AC-NY12058,NJDEP	PD P,PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/20 CTDOH,NELAC-NY	021 09:00 10854,NEL	09/20/2021 14:38 AC-NY12058,NJDEP	PD P,PADEP
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/20 CTDOH,NELAC-NY	021 09:00 10854,NEL	09/20/2021 14:38 AC-NY12058,NJDEP	PD P,PADEP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/20 CTDOH,NELAC-NY	021 09:00 10854,NEL	09/20/2021 14:38 AC-NY12058,NJDEP	PD P,PADEP
75-34-3	1,1-Dichloroethane	0.32	J	ug/L	0.20	0.50	1	EPA 8260C	09/20/20	021 09:00	09/20/2021 14:38	PD
								Certifications:	CTDOH,NELAC-NY	10854,NE	LAC-NY12058,NJDE	P,PADEP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/20 CTDOH,NELAC-NY	021 09:00 10854,NEL	09/20/2021 14:38 AC-NY12058,NJDEP	PD P,PADEP
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/20 NELAC-NY10854,NE	021 09:00 ELAC-NY1	09/20/2021 14:38 2058,NJDEP,PADEP	PD
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/20 NELAC-NY10854,NE	021 09:00 ELAC-NY1	09/20/2021 14:38 2058,NJDEP,PADEP	PD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/20 NELAC-NY10854,NE	021 09:00 ELAC-NY1	09/20/2021 14:38 2058,NJDEP,PADEP	PD
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/20 CTDOH,NELAC-NY	021 09:00 10854,NEL	09/20/2021 14:38 AC-NY12058,NJDEP	PD P,PADEP
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/20 CTDOH,NELAC-NY	021 09:00 10854,NEL	09/20/2021 14:38 AC-NY12058,NJDEP	PD P,PADEP
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/20 CTDOH,NELAC-NY	021 09:00 10854,NEL	09/20/2021 14:38 AC-NY12058,NJDEP	PD P,PADEP
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/20 CTDOH,NELAC-NY	021 09:00 10854,NEL	09/20/2021 14:38 AC-NY12058,NJDEP	PD P,PADEP
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09/20/20 CTDOH,NELAC-NY	021 09:00 10854,NEL	09/20/2021 14:38 AC-NY12058,NJDEP	PD P,PADEP

120 RESEARCH DRIVE STRATFORD, CT 06615 132-02 89th AVENUE **RICHMOND HILL, NY 11418** 

www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@ Page 11 of 18



**Client Sample ID:** MW-7

Sample Prepared by Method: EPA 5030B

**York Sample ID:** 2110786-03

York Project (SDG) No. Client Project ID 21I0786 21-49924 Bethpage High School Matrix Collection Date/Time Water September 16, 2021 3:00 pm Date Received 09/17/2021

Volatile Organics, 8260 - Comprehensive

**Log-in Notes:** 

**Sample Notes:** 

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference		Date/Time Prepared	Date/Time Analyzed	Analyst
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		0/20/2021 09:00 C-NY10854,NEL	09/20/2021 14:38 AC-NY12058,NJDE	
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		0/20/2021 09:00 C-NY10854,NEL	09/20/2021 14:38 AC-NY12058,NJDE	
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		0/20/2021 09:00 C-NY10854,NEL	09/20/2021 14:38 AC-NY12058,NJDE	
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		0/20/2021 09:00 C-NY10854,NEL	09/20/2021 14:38 AC-NY12058,NJDE	
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications:		0/20/2021 09:00 54,NELAC-NY12	09/20/2021 14:38 2058,NJDEP,PADEP	
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		0/20/2021 09:00 C-NY10854,NEL	09/20/2021 14:38 AC-NY12058,NJDE	
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09	0/20/2021 09:00	09/20/2021 14:38 AC-NY12058,NJDE	PD
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09	0/20/2021 09:00	09/20/2021 14:38 AC-NY12058,NJDE	PD
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	09	0/20/2021 09:00	09/20/2021 14:38 AC-NY12058,NJDE	PD
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09	9/20/2021 09:00	09/20/2021 14:38 AC-NY12058,NJDE	PD
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09	0/20/2021 09:00	09/20/2021 14:38 AC-NY12058,NJDE	PD
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09	0/20/2021 09:00	09/20/2021 14:38 AC-NY12058,NJDE	PD
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09	0/20/2021 09:00	09/20/2021 14:38 2058,NJDEP,PADEP	PD
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09	0/20/2021 09:00	09/20/2021 14:38 AC-NY12058,NJDE	PD
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09	9/20/2021 09:00	09/20/2021 14:38 AC-NY12058,NJDE	PD
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09	0/20/2021 09:00	09/20/2021 14:38 AC-NY12058,NJDE	PD
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09	0/20/2021 09:00	09/20/2021 14:38 AC-NY12058,NJDE	PD
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09	0/20/2021 09:00	09/20/2021 14:38 AC-NY12058,NJDE	PD
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09	0/20/2021 09:00	09/20/2021 14:38 AC-NY12058,NJDE	PD
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09	0/20/2021 09:00	09/20/2021 14:38 AC-NY12058,NJDE	PD
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09	0/20/2021 09:00	09/20/2021 14:38 AC-NY12058,NJDE	PD
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	09	0/20/2021 09:00	09/20/2021 14:38 AC-NY12058,NJDE	PD
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	09	0/20/2021 09:00	09/20/2021 14:38	PD
								Certifications:	CIDOH,NELAC	INY 10854,NEL	AC-NY12058,NJDE	r,radep

120 RESEARCH DRIVE

STRATFORD, CT 06615 (203) 325-1371

132-02 89th AVENUE

RICHMOND HILL, NY 11418

ClientServices@



Client Sample ID: MW-7

<u>York Sample ID:</u> 21I0786-03

York Project (SDG) No. 21I0786 <u>Client Project ID</u> 21-49924 Bethpage High School Matrix Water <u>Collection Date/Time</u> September 16, 2021 3:00 pm Date Received 09/17/2021

Volatile Organics, 8260 - Comprehensive

**Log-in Notes:** 

**Sample Notes:** 

Sample Prepar	red 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
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:38 AC-NY12058,NJDE	
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	09/20/2021 09:00 Y10854,NELAC-NY1	09/20/2021 14:38 2058,NJDEP,PADEP	
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:38 AC-NY12058,NJDE	
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	09/20/2021 09:00 Y10854,NELAC-NY1	09/20/2021 14:38 2058,NJDEP,PADEP	
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	09/20/2021 09:00 Y10854,NELAC-NY1	09/20/2021 14:38 2058,NJDEP,PADEP	
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:38 AC-NY12058,NJDE	
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	09/20/2021 09:00 Y10854,NELAC-NY1	09/20/2021 14:38 2058,NJDEP,PADEP	
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:38 AC-NY12058,NJDE	
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	09/20/2021 09:00 Y10854,NELAC-NY1	09/20/2021 14:38 2058,NJDEP,PADEP	
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:38 AC-NY12058,NJDE	
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	NELAC-N	09/20/2021 09:00 Y10854,NELAC-NY1	09/20/2021 14:38 2058,NJDEP,PADEP	
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	CTDOH,N	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:38 AC-NY12058,NJDE	
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:38 AC-NY12058,NJDE	
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	09/20/2021 09:00 ELAC-NY10854,NEI	09/20/2021 14:38 AC-NY12058,NJDE	
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:38 AC-NY12058,PADE	
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications:	CTDOH,N	09/20/2021 09:00 ELAC-NY10854,NEI	09/20/2021 14:38 AC-NY12058,PADE	
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:38 AC-NY12058,NJDE	
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:38 AC-NY12058,NJDE	
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:38 AC-NY12058,NJDE	
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	2.5	1	EPA 8260C Certifications:		09/20/2021 09:00 Y10854,NELAC-NY1	09/20/2021 14:38	PD
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,N	09/20/2021 09:00 ELAC-NY10854,NEL	09/20/2021 14:38 AC-NY12058,NJDE	
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:		09/20/2021 09:00 ELAC-NY10854,NEI	09/20/2021 14:38	PD
108-88-3	Toluene	0.42	J	ug/L	0.20	0.50	1	EPA 8260C Certifications:		09/20/2021 09:00 IELAC-NY10854,NE	09/20/2021 14:38	PD

120 RESEARCH DRIVE www.YORKLAB.com

STRATFORD, CT 06615 (203) 325-1371 132-02 89th AVENUE

FAX (203) 357-0166

**RICHMOND HILL, NY 11418** 

ClientServices@ Page 13 of 18



Client Sample ID: MW-7

York Sample ID:

21I0786-03

York Project (SDG) No. 21I0786

<u>Client Project ID</u> 21-49924 Bethpage High School Matrix Water <u>Collection Date/Time</u> September 16, 2021 3:00 pm Date Received 09/17/2021

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
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NELA	09/20/2021 14:38 AC-NY12058,NJDEP,	PD PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NELA	09/20/2021 14:38 AC-NY12058,NJDEP,	PD PADEP
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NELA	09/20/2021 14:38 AC-NY12058,NJDEP	PD
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NELA	09/20/2021 14:38 AC-NY12058,NJDEP,	PD PADEP
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NELA	09/20/2021 14:38 AC-NY12058,NJDEP,	PD PADEP
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NELA	09/20/2021 14:38 AC-NY12058,NJDEP,	PD PADEP
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications:	CTDOH,NE	09/20/2021 09:00 ELAC-NY10854,NELA	09/20/2021 14:38 AC-NY12058,NJDEP	PD
	Surrogate Recoveries	Result		Acceptance Range		•						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	108 %	Ó		69-130							
2037-26-5	Surrogate: SURR: Toluene-d8	89.6 %			81-117							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	98.8 %			79-122							

#### **Volatile Organics, Freon-113**

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	CTDOH,NI	09/20/2021 09:00 ELAC-NY10854,NJDI	09/20/2021 14:38 EP,NELAC-NY12058	PD ,PADEP
	<b>Surrogate Recoveries</b>	Result	Acceptance Range									
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	108 %			65-135							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	98.8 %			81-114							
2037-26-5	Surrogate: SURR: Toluene-d8	89.6 %			86-118							

120 RESEARCH DRIVE www.YORKLAB.com

STRATFORD, CT 06615

(203) 325-1371

132-02 89th AVENUE

**RICHMOND HILL, NY 11418** 

FAX (203) 357-0166

ClientServices@ P.

Page 14 of 18



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

Lab ID	Client Sample ID	Volatile Sample Container
2110786-01	MW-5	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
21I0786-02	MW-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
21I0786-03	MW-7	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



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

QL-02 This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the reference method. The reference method has certain limitations with respect to analytes of this nature.

J Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.

CCV-E The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).

#### **Definitions and Other Explanations**

\* Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.

ND NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)

RL REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.

LOQ LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.

LOD LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect.

This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.

MDL METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.

Reported to This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.

NR Not reported

RPD Relative Percent Difference

Wet The data has been reported on an as-received (wet weight) basis

Low Bias Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

High Bias High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

Non-Dir. Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

 120 RESEARCH DRIVE
 STRATFORD, CT 06615
 ■ 132-02 89th AVENUE
 RICHMOND HILL, NY 11418

 www.YORKLAB.com
 (203) 325-1371
 FAX (203) 357-0166
 ClientServices@
 Page 16 of 18



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.

120 RESEARCH DRIVE STRATFORD, CT 06615 132-02 89th AVENUE RICHMOND HILL, NY 11418 www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@ Page 17 of 18



York Analytical Laboratories, Inc.

120 Research Drive 133 Stratford, CT 06615 Que

132-02 89th Ave Queens, NY 11418

### Field Chain-of-Custody Record

250786

YORK Project No.

YORK

clientservices@yorklab.com www.yorklab.com NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

<del>2110104</del>

YOUR Information		Repo	rt To:	l	ıvo	ice To:	YOUR Pro	Turn-Around Time	
Company:  Company:  Company:  Address:  Address:			Company:		21 (102211			RUSH - Next Day	
			Address:			21-49924		RUSH - Two Day	
1110 Hou.	Expressway Dr. North						YOUR Pr	oject Name	RUSH - Three Day
Phone.:	opaugt , ÁV 11788 ) 584 - 5492	Phone.:		Phone.:			Bethpage 11	ich School	RUSH - Four Day
Contact:	e Molice	Contact:	Contact:				i sampose ii	rji ochwi	Standard (5-7 Day)
F-mail:	<del></del>	E-mail:	E-mail:						
Please p will not b	rint clearly and legibly. All information muse logged in and the turn-around-time clocks by YORK are resolved.	st be complete. Samples k will not begin until any	Matrix Codes	Samples Fro	m	Report	/ EDD Type (circle s	YORK Reg. Comp.	
question	s by YORK are resolved.		S - soil / solid	New York	<u>ر</u> ا	(Summary Report)	CT RCP	Standard Excel EDD	Compared to the following
	A copardo		GW - groundwater	New Jersey		QA Report	CT RCP DQA/DUE	EQuIS (Standard)	Regulation(s): (please fill in)
	Samples Collected by: (print your name abo	ove and sign below)	DW - drinking water	1 1		NY ASP A Package		NYSDEC EQuIS	
	Je-Mar		WW - wastewater	Pennsylvania		NY ASP B Package	NJDEP Reduced Deliverables	NJDEP SRP HazSite	
,	See III		O - Oil Other	Other		111 AOI BY BORAGO	NJDKQP	Other:	
	Sample Identification		Sample Matrix	Date/Time Samp	led	<u> </u>	Analysis Requested		Container Description
	<i>ты-5</i>		(Sh)	911612021		FDA 8760	THE FILOD		(3) 40 ml Vals
	mw-6		1				20		1
MW-7		,				/	·		
							. '		
	· ·········								
		_							
							(	<del></del>	
•									
								\	
Comm	nents:					Prese	ervation: (check all tha	t apply)	Special Instruction
1301	npage High School					HCI MeOH H	INO3 H2SO4	NaOH ZnAc	Field Filtered
	Chicry Avenue Bethpag	C. NOW YOUR /	1714			Ascorbic Acid Other			Lab to Filter
Samples R	telinguished by / Company	Date/Time	Samples Received by / Compa	ny		Date/Time	Samples Relinquished by / Com	pany	Date/Time
P.	Ph 1503	9/16/2021	Kons	zolk		9/17/21	Kback you	lc	9/17/4 1630
Page	eceived by / Company	Date/Time	Samples Relinquished by / Con	прапу		Date/Time	Samples Received by / Company	y	Date/Time
8									
- 호 그 호 R	telinquished by / Company	Date/Time	Samples Received by / Compa	ny		Date/Time	Samples Received in LAB by	Date/Time	Temp. Received at Lab
							7 gal 9/17	12, 1630	2. ( Degrees C

EMSL ORDER ID: 782107597 EMSL CUSTOMER ID: JCBR50

Reported Date: 10/27/2021 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 09/23/2021 at 20:00. The results are tabulated on the attached data pages for the following client designated project:

#### **Bethpage HS**

The reference number for these samples is EMSL Order #782107597. 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

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

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: 21-49924

**EMSL Project ID:** 

**Project Name:** Bethpage HS

Collected: 09/16/2021 08:30 Received: 09/23/2021 20:00 Analyzed: See Results

Phone: 631-584-5492 Email: smuller@jcbroderick.com Reported: 10/27/2021

## Laboratory Report- Sample Summary

EMSL Sample ID.	Client Sample ID.	Start Sampling Date	Start Sampling Time
782107597-0001	MW-5	9/16/2021	8:30 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 Date Report Revision Revision Comments** 10/27/2021 R0 Initial Report

> Dominic Gehret, Radiochemistry Laboratory Manager or other approved signatory

EMSL ORDER ID: 782107597 **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:** 21-49924

**EMSL Project ID:** 

Project Name: Bethpage HS

EMSL ORDER ID: 782107597

EMSL CUSTOMER ID: JCBR50

**Phone**: 631-584-5492

Email: smuller@jcbroderick.com

**Collected**: 09/16/2021 08:30 **Received**: 09/23/2021 20:00

Analyzed: See Results Reported: 10/27/2021

## Analytical Report

Sample Identification:	MW-5		Lab Sample #: 782107597-0001										
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	0.820	0.450	0.420	10/18/2021 18:04	10/18/2021 21:24	JW	Not Applicable	EPA 904.0				
Ra-226-EPA 903.0	pCi/L	0.381	0.0891	0.136	10/27/2021 08:46	10/27/2021 10:26	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 Date
 Report Revision
 Revision Comments

 10/27/2021
 R0
 Initial Report

Dominic Gehret, Radiochemistry Laboratory Manager or other approved signatory

RDN\_Generic\_NonLimsReport\_V4.4\_Feb 20211



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

smuller@jcbroderick.com

631-584-5492

**Customer PO:** 21-49924

**EMSL Project ID:** 

Project Name: Bethpage HS

**Collected**: 09/16/2021 08:30 **Received**: 09/23/2021 20:00

Analyzed: See Results Reported: 10/27/2021

## **Quality Control Report**

Sample Identification: MW-5 Lab Sample #: 782107597-0001							Date/Time Collected: 9/16/2021 08:30 AM									
Test Parameter	Tracer/ Carrier 1 Barium	<u>Spike</u>	<u>Result</u>	<u>% Rec.</u>	<u>Q</u>	Tracer/ Carrier 2 Yttrium	<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	Carrier Barium	56.6	61.3	108		Carrier	28.5	23.2	81		N/A					
Ra-226-EPA 903.0	Carrier	56.6	61.3	108		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.

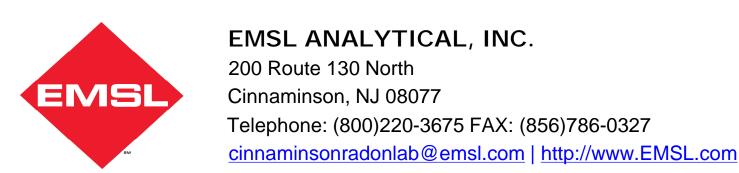
If "Preliminary Report" is displayed in the signature box; this indicates that there are samples that have not yet been analyzed, that are in a preliminary state, or that analysis is in progress but not completed at the time of report issue.

Report DateReport RevisionRevision Comments10/27/2021R0Initial Report

Pominic Gehret, Radiochemistry Laboratory Manager or other approved signatory

EMSL ORDER ID: 782107597

EMSL CUSTOMER ID: JCBR50



**EMSL ORDER ID**: 782107598 **EMSL CUSTOMER ID:** JCBR50

**Reported Date: 10/27/2021 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 09/23/2021 at 20:00. The results are tabulated on the attached data pages for the following client designated project:

# **Bethpage HS**

The reference number for these samples is EMSL Order #782107598. 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

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

Hauppauge, NY 11788

631-584-5492

Customer PO: 21-49924

**EMSL Project ID:** 

**Project Name:** Bethpage HS

Collected: 09/16/2021 09:00 Received: 09/23/2021 20:00 smuller@jcbroderick.com Analyzed: See Results

Reported: 10/27/2021

## Laboratory Report- Sample Summary

EMSL Sample ID.	Client Sample ID.	Start Sampling Date	Start Sampling Time
782107598-0001	MW-6	9/16/2021	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 Date Report Revision Revision Comments** 10/27/2021 R0 Initial Report

> Dominic Gehret, Radiochemistry Laboratory Manager or other approved signatory

EMSL ORDER ID: 782107598 **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

Phone:

Email:

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

Suite 1

631-584-5492

Hauppauge, NY 11788

**Customer PO:** 21-49924

**EMSL Project ID:** 

Project Name: Bethpage HS EMSL ORDER ID: 782107598

EMSL CUSTOMER ID: JCBR50

Collected: 09/16/2021 09:00 Received: 09/23/2021 20:00 smuller@jcbroderick.com Analyzed: See Results

Reported: 10/27/2021

## Analytical Report

Sample Identification:	MW-6		Lab Sample #: 782107598-0001 Date/Time Collected: 9/16/2021 09:00 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	0.260	0.470	0.480	10/18/2021 18:04	10/18/2021 21:24	JW	Not Applicable	EPA 904.0	(1)			
Ra-226-EPA 903.0	pCi/L	0.0219	0.0310	0.151	10/27/2021 08:46	10/27/2021 10:26	JW	Not Applicable	EPA 903.0	(1)			

## 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 Date Report Revision Revision Comments** 10/27/2021 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,

Suite 1

Hauppauge, NY 11788

smuller@jcbroderick.com

631-584-5492

**Customer PO:** 21-49924

EMSL Project ID:

Project Name: Bethpage HS

**Collected**: 09/16/2021 09:00 **Received**: 09/23/2021 20:00

Analyzed: See Results Reported: 10/27/2021

## **Quality Control Report**

Sample Identification: MW-6 Lab Sample #: 782107598-0001						7598-0001	Date/Time Collected: 9/16/2021 09:00 AM									
Test Parameter	Tracer/ Carrier 1 Barium	<u>Spike</u>	<u>Result</u>	<u>% Rec.</u>	<u>Q</u>	Tracer/ Carrier 2 Yttrium	<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	Carrier Barium	56.6	61.5	109		Carrier	28.5	22.2	78		N/A					
Ra-226-EPA 903.0	Carrier	56.6	61.5	109		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 Comments10/27/2021R0Initial Report

Dominic Gehret, Radiochemistry Laboratory Manager or other approved signatory

EMSL ORDER ID: 782107598

EMSL CUSTOMER ID: JCBR50

RDN\_Generic\_NonLimsReport\_V4.4\_Feb 20211



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: 10/27/2021** 

**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 09/23/2021 at 20:00. The results are tabulated on the attached data pages for the following client designated project:

## **Bethpage HS**

The reference number for these samples is EMSL Order #782107599. 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**: 782107599

**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

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: 21-49924

EMSL Project ID:

Project Name: Bethpage HS

Collected: 09/16/2021 09:30
Received: 09/23/2021 20:00
Analyzed: See Results

**Reported**: 10/27/2021

## Laboratory Report- Sample Summary

EMSL Sample ID.	Client Sample ID.	Start Sampling Date	Start Sampling Time
782107599-0001	MW-7	9/16/2021	9:30 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 Comments10/27/2021R0Initial Report

Dominic Gehret, Radiochemistry Laboratory Manager or other approved signatory

EMSL ORDER ID: 782107599 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

Phone:

Email:

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

Suite 1

Hauppauge, NY 11788

**Customer PO**: 21-49924

**EMSL Project ID:** 

Project Name: Bethpage HS

10/27/2021

EMSL ORDER ID: 782107599

EMSL CUSTOMER ID: JCBR50

Collected: 09/16/2021 09:30
631-584-5492 Received: 09/23/2021 20:00
smuller@jcbroderick.com Analyzed: See Results

Analytical Report

Reported:

Sample Identification: MW-7 Lab Sample #: 782107599-0001 Date/Time Collected: 9/16/2021 09:30 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	1.54	0.540	0.470	10/18/2021 18:04	10/18/2021 21:24	JW	Not Applicable	EPA 904.0	
Ra-226-EPA 903.0	pCi/L	0.892	0.141	0.186	10/27/2021 08:46	10/27/2021 10:26	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 Date
 Report Revision
 Revision Comments

 10/27/2021
 R0
 Initial Report

Dominic Gehret, Radiochemistry Laboratory Manager or other approved signatory

RDN\_Generic\_NonLimsReport\_V4.4\_Feb 20211



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:** 21-49924

**EMSL Project ID:** 

**Project Name:** Bethpage HS

09/16/2021 09:30 Collected: Received:

09/23/2021 20:00 Analyzed: See Results Reported: 10/27/2021

## **Quality Control Report**

Sample Identification: MW-7 Lab Sample #: 782107599-0001							Date/Time Collected: 9/16/2021 09:30 AM									
Test Parameter	Tracer/ Carrier 1 Barium	<u>Spike</u>	<u>Result</u>	<u>% Rec.</u>	<u>Q</u>	Tracer/ Carrier 2 Yttrium	<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	Carrier Barium	56.6	58.1	103		Carrier	28.5	22.7	80		N/A					
Ra-226-EPA 903.0	Carrier	56.6	58.1	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.

**Revision Comments Report Date Report Revision** 10/27/2021 R0 Initial Report

Dominic Gehret, Radiochemistry Laboratory Manager

or other approved signatory

EMSL ORDER ID: 782107599

EMSL CUSTOMER ID: JCBR50



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

782107 -

Contact Name:	Steven	Muller			Bill To Compa	<sub>iny:</sub> JC	Bro	oderic	k ar	nd A	Asso	ciate	s, Inc.	Sampled By (Sign):					
Company Name:	JC Brode	erick & As	ssociate	s, Inc.	Attent To:	ion								Sampled By (Name): Jeffrey Nannini					
Address: 1775 E	xpress Drive	North			Addres	ss:								Total # of Samples: <sup>3</sup>					
City: Hauppaug	e State: N	Υ	Zip Code: 1	1788	City: State: Zip Code:							Date of Shipping: 09-21-2021							
Telephone #: 63	1-584-5492	Fa	x: 631-584	3395	Telephone #: Fax :							Sample State/ Zip Code: New York / 11714							
Email: smuller@	jcbroderick.co	m			Project	Project Name: Bethpage HS						Purchas	se Orde	r: 21-4	49924				
Turn Around Time: □ 4 weeks (Standard) Clie					Specific:			48 Hours		96 H	Hours	□ 1 w	eek	□ 2 we	eks		3 W	eeks	
	Field Use - All	Information	Required!									Ar	nalytes						
Client Sample ID	Lab ID (For Lab Use only		Size (mL, g)	Date/	Time	Gross A NJ 48 Hrs	EPA 900	Gross Beta	Ra-228	Ra-226	Total Uranium	Gamma Emitters	Actinides (U, Th, Pu, Am)	Sr-89, Sr-90	1-131	Radon	Tritium	Tc-99	Note
MW-5	- 597	GW	1,000 ml	9-16-2021	/ 8:30 AM				X	X									
MW-6		GW	1,000 ml	9-16-2021	/ 9:00 AM			The state of the s	X	X							17	- (	7
MW-7		GW	1,000 ml	9-16-2021	/ 9:30 AM				Х	X							בו		
																	0	3 =	E P
																	3	MOON	STATED
																	3	2	
Report Requiren	nent*:	Level One	■ Level	Two		evel Thre	ee								The same of the sa				
Relinquishe	d by:	Date/ Ti	me		Receive	d by:		Da	te/ Tin	ne		Section	Note						
		09-21-2	021						,				Bethpa	ge High	Scho	ool			
679		41.12	10 10 10 10	A	m courier 9/23/21 8				pon	~	10 Che	rry Ave	nue, f	Bethp	age,	NY 1	1714		
*Level One =Res	ults only: Leve	Two = Resu	ults and OC:	Level Th	ree = Re	sults. QC	, Logs	Workshe	ets, Pri	ntout	/Spectro	um and C	Calibrations				X 10		g) 1: h