

J.C. Broderick & Associates, Inc.

Environmental / Construction Consulting & Testing



January 4, 2016

Mr. Terrence Clark
Superintendent of Schools
Bethpage Union Free School District
Administration Building
10 Cherry Avenue
Bethpage, New York 11714

Re: Sampling of Groundwater Monitoring Wells at

**Site: Bethpage High School
10 Cherry Avenue
Bethpage, New York 11714
Site Visit: November 4, 2015**

JCB#: 15-32442

Dear Mr. Clark:

J.C. Broderick & Associates, Inc. (JCB) was retained to perform sampling of groundwater monitoring wells at the above referenced school building. The site visit was performed by experienced JCB Consultants on the above referenced date and consisted of the following:

- On November 4, 2015, the three (3) on-site monitoring wells were checked for the presence of Light Non-Aqueous Phase Liquid (LNAPL) utilizing a Solinst® Model 122 Product/Water Interface Meter and depth to the groundwater table was recorded to the nearest 0.01 ft. A Groundwater Gradient Map was generated from this data and is attached as Appendix-A, Figure-2. The data obtained indicates a groundwater flow direction to the south along Stewart Avenue.

The following table summarizes the survey and groundwater data:

Table No. 2: Depth to Groundwater Gauged with Interface Meter				
Well Number	Depth to Product (ft)	Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)
MW-1	No Product	118.83	53.37	65.46
MW-2	No Product	119.18	54.13	65.05
MW-3	No Product	119.18	54.48	64.70
Notes: ft = Feet				

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Subsequent to the gauging, JCB collected a groundwater sample from each groundwater monitoring well. Prior to sampling, the casing volume of the monitoring well was calculated and a minimum of three (3) casing volumes of water was purged utilizing a disposable polyethylene bailer.

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-1	11-04-15	Monitoring Well No. 1	EPA 524.2 List
MW-2	11-04-15	Monitoring Well No. 2	EPA 524.2 List
MW-3	11-04-15	Monitoring Well No. 3	EPA 524.2 List
Notes: EPA = Environmental Protection Agency			

Section No. 4.0: 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) utilizing Environmental Protection Agency (EPA) Method 524.2 List.

York Analytical Laboratories, Inc. (York) provided laboratory analytical services. Copies of York's NYSDOH certifications are available upon request.

The laboratory analytical results for the groundwater sample was reviewed and compared to Table No. 1 of the *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) (1.1.1)*.

The following table summarizes the Groundwater Analytical Results:

Table No. 1: Summary of Groundwater Samples Analysis Results				
Client Sample ID	Allowable Standards	MW-1	MW-2	MW-3
EPA 524.2 Volatiles List	µg/L	----	----	----
Benzene	0.7	ND	ND	ND
Bromobenzene	5	ND	ND	ND
Bromochloromethane	5	ND	ND	ND
Bromodichloromethane	50	ND	ND	ND
Bromoform	50	ND	ND	ND
Bromomethane	5	ND	ND	ND

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Table No. 1: Summary of Groundwater Samples Analysis Results				
Client Sample ID	Allowable Standards	MW-1	MW-2	MW-3
tert-Butyl-Benzene	5	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND
sec-Butyl-Benzene	5	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND
Chlorobenzene	5	ND	ND	ND
Chloroethane	5	ND	ND	ND
Chloroform	7	ND	ND	ND
Chloromethane (Methyl Chloride)	5	ND	ND	ND
2-Chlorotoluene	5	ND	ND	ND
4-Chlorotoluene	5	ND	ND	ND
Dibromochloromethane	50	ND	ND	ND
Dibromomethane	5	ND	ND	ND
1,2- Dichlorobenzene	3	ND	ND	ND
1,4- Dichlorobenzene	3	ND	ND	ND
1,3- Dichlorobenzene	3	ND	ND	ND
Dichlorodifluoromethane (Freon® 12)	5	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND
trans-1,2-Dichloroethylene	5	ND	ND	ND
cis-1,2-Dichloroethylene	5	ND	ND	ND
1,1-Dichloroethylene	5	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	ND
2,2-Dichloropropane	5	ND	ND	ND
1,3-Dichloropropane	5	ND	ND	ND
cis-1,3-Dichloropropylene	0.4	ND	ND	ND
1,1-Dichloropropylene	5	ND	ND	ND
trans-1,3-Dichloropropylene	0.4	ND	ND	ND
Ethylbenzene	5	ND	ND	ND
Hexachlorobutadiene	0.5	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND
Methyl-tert-butyl ether (MtBE)	10	ND	ND	ND
Methylene Chloride	5	ND	ND	ND
Naphthalene	10	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND
Styrene	5	ND	ND	ND
1,1,1,2-Tetrachloroethane	5	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND
Tetrachloroethylene	5	ND	ND	ND

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Table No. 1: Summary of Groundwater Samples Analysis Results				
Client Sample ID	Allowable Standards	MW-1	MW-2	MW-3
Toluene	5	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND
Trichloroethylene	5	ND	ND	ND
Trichlorofluoromethane (Freon® 11)	5	ND	ND	ND
1,2,3-Trichloropropane	0.04	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND
o-Xylene	5	ND	ND	ND
p- & m- Xylenes	5	ND	ND	ND
Chlorodifluoromethane (Freon® 22)	N/A	ND	24	0.9
Notes: µg/L = parts per billion N/A = Guidance Value Not Established by the New York State Department of Environmental Conservation at the time of this report ND = Not Detected				

The laboratory analysis results from the groundwater sample submitted from MW-1 **did not** reveal any elevated concentrations of VOCs, Freon® 11, Freon® 12 or Freon® 22 exceeding the above referenced guidance values.

The laboratory analysis results from the groundwater samples submitted from MW-2 and MW-3 **did not** reveal any elevated concentrations of VOCs, Freon® 11 or Freon® 12 exceeding the above referenced guidance values.

The laboratory analysis results from the groundwater samples submitted from MW-2 and MW-3 **did** reveal elevated concentrations of Freon® 22; however, no guidance value has been established by the New York State Department of Environmental Conservation (NYSDEC) regarding this compound.

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. All down-hole equipment which did not come into contact with sample material was pressure rinsed with potable water prior to the start of each boring. 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 between boring locations and 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.

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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 from MW-2 and MW-3 **did** reveal concentrations of Freon® 22; however, no guidance value has been established by the New York State Department of Environmental Conservation (NYSDEC) regarding this compound.

Groundwater elevation data obtained during the investigation indicates a groundwater flow direction to the south along Stewart Avenue. According to background research performed, an easterly component to the groundwater flow direction is usually present in this area of Long Island. It is likely that due to the groundwater remediation systems currently in operation for the adjoining property, the groundwater flow direction may be influenced.


Based on the findings of this sampling event, it appears the groundwater monitoring wells installed on the school property have revealed evidence of off-site contamination influencing the groundwater quality beneath the school property.

JCB recommends collecting a conformational sample from groundwater monitoring wells MW-2 and MW-3 and collect indoor Volatile Vapor Intrusion sampling of the administration building similar to last performed in August, 2014.

Sincerely,
J.C. Broderick & Associates, Inc.



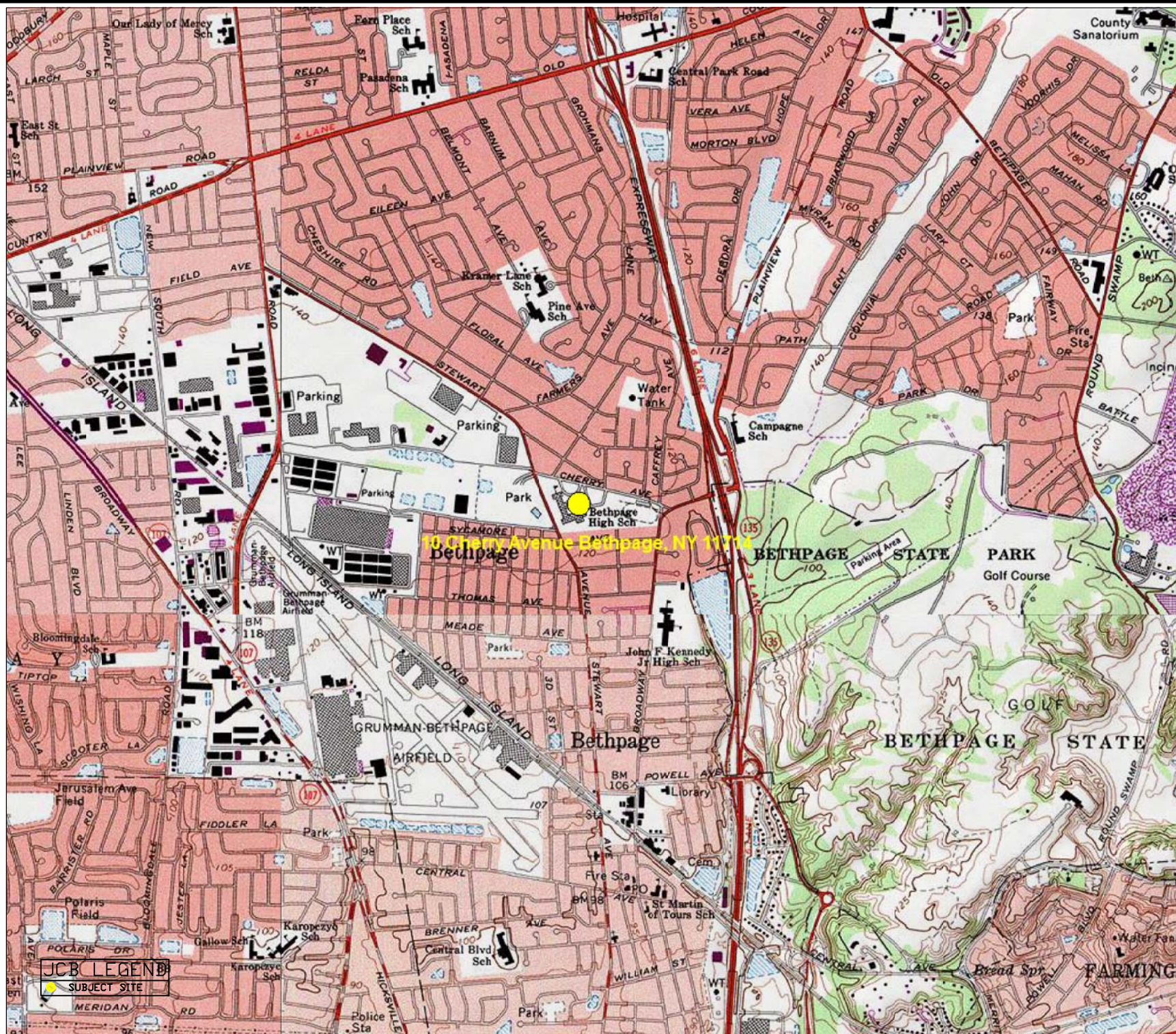
Jeffrey V. Nannini
Environmental Scientist



Steven Muller, PG
Project Manager

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 As Noted Project No. 15-32442 Date 11-04-15

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

Drawing No.

1



J.C. BRODERICK

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Notes:

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Drawing Title

Figure No. 2

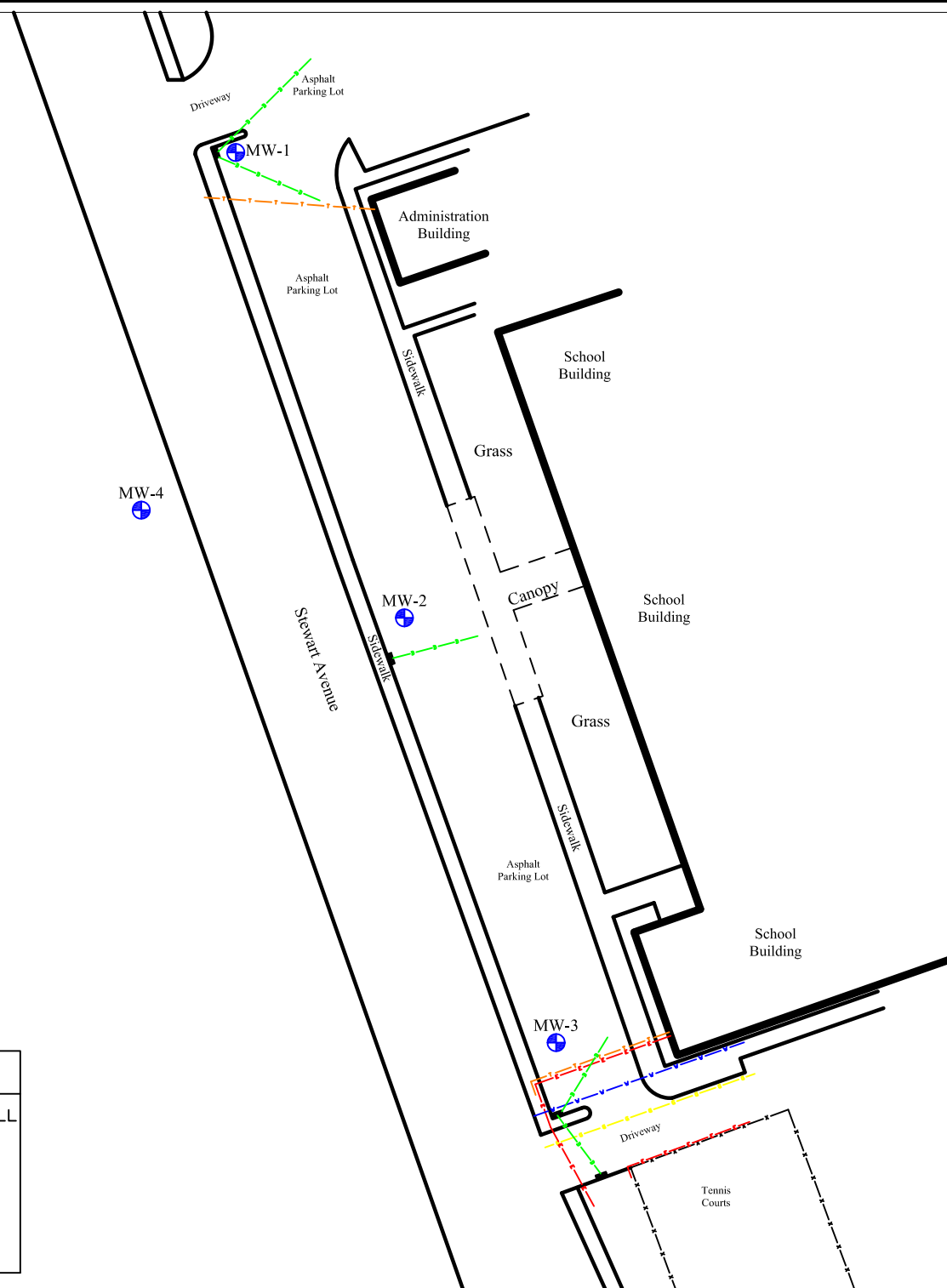
Underground
Utility and
Monitoring Well
Locations
Map

Scale	Project No.	Date
As Noted	15-32442	11-04-15

Drawn By	Checked By	Page No.
J.V.N.	S.W.M.	2 of 3

Drawing No.

2



20 0 40 80
Scale in feet

JCB LEGEND

- GROUNDWATER MONITORING WELL
- RECTANGULAR CATCH BASIN
- TELEPHONE LINE
- WATER LINE
- STORM DRAIN LINE
- ELECTRIC LINE
- VARIOUS FENCING
- NATURAL GAS LINE



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Notes:

Bethpage High School
10 Cherry Avenue
Bethpage, NY 11714

Drawing Title

Figure No. 3

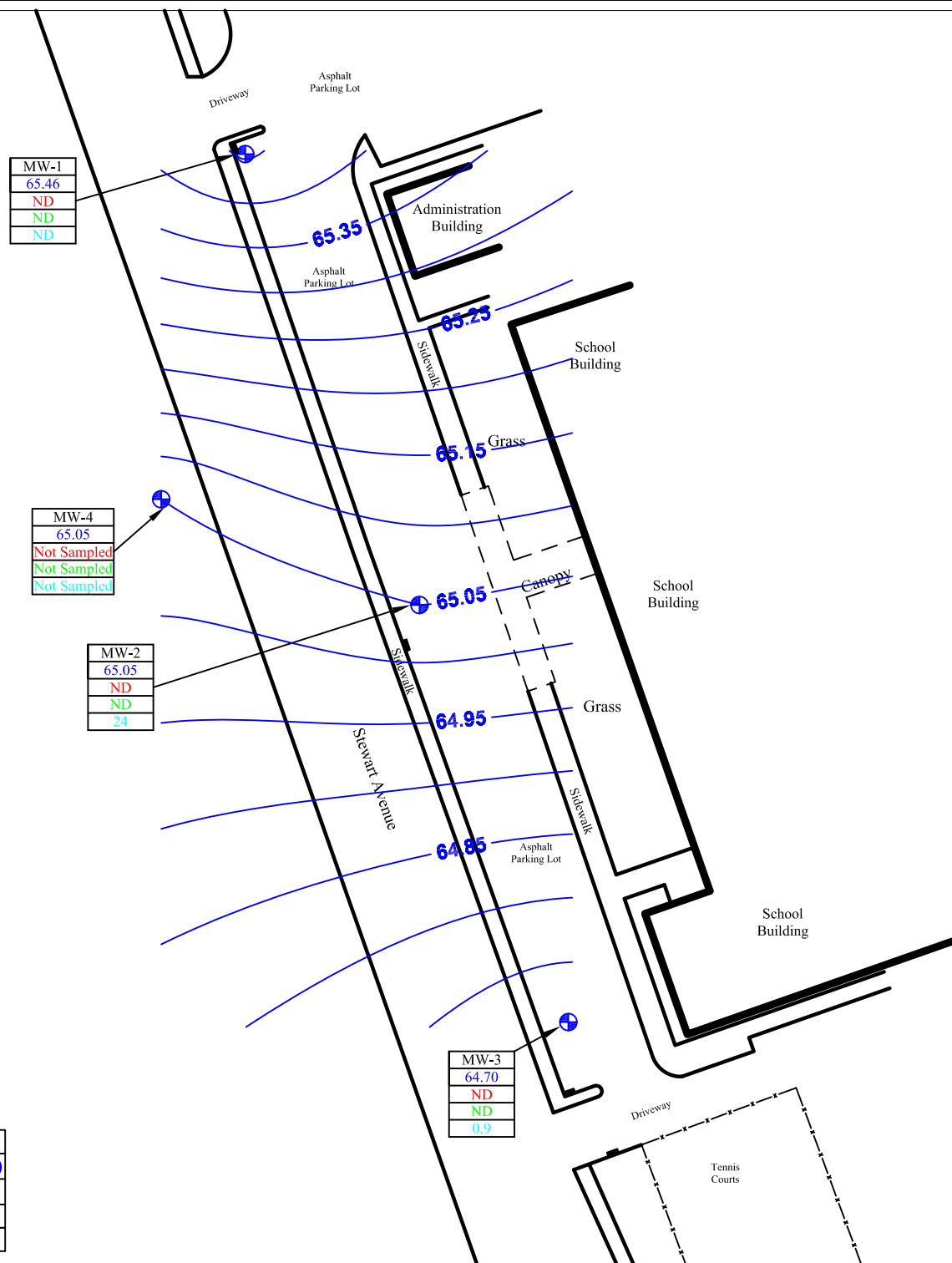
Groundwater
Gradient
and
Analytical Results
Map

Scale As Noted Project No. 15-32442 Date 11-04-15

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

Drawing No.

3



PROJECT



NORTH

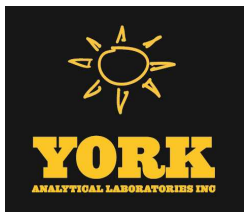
20 0 40 80

Scale in feet

WELL NUMBER
GROUNDWATER ELEVATION (ft)
TOTAL VOCs (µg/L)
FREON 12 (µg/L)
FREON 22 (µg/L)

Appendix B

Laboratory Analysis Report



Technical Report

prepared for:

J.C. Broderick
1775 North Express Drive
Hauppauge NY, 11788
Attention: Steven Muller

Report Date: 11/18/2015
Client Project ID: 15-32442
York Project (SDG) No.: 15K0183

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

Report Date: 11/18/2015
Client Project ID: 15-32442
York Project (SDG) No.: 15K0183

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 November 05, 2015 and listed below. The project was identified as your project: **15-32442**.

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

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

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

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

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

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
15K0183-01	MW-1	Water	11/04/2015	11/05/2015
15K0183-02	MW-2	Water	11/04/2015	11/05/2015
15K0183-03	MW-3	Water	11/04/2015	11/05/2015

General Notes for York Project (SDG) No.: 15K0183

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

Approved By:



Benjamin Gulizia
Laboratory Director

Date: 11/18/2015





Sample Information

Client Sample ID: MW-1	York Sample ID: 15K0183-01
York Project (SDG) No. 15K0183	Client Project ID 15-32442
Matrix Water	Collection Date/Time November 4, 2015 3:00 pm
Date Received 11/05/2015	

Volatile Organics, 524.2 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-43-2	Benzene	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
108-86-1	Bromobenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
74-97-5	Bromochloromethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.06	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
75-25-2	Bromoform	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
74-83-9	Bromomethane	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.09	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854	11/17/2015 16:43	11/18/2015 02:52	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
108-90-7	Chlorobenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
75-00-3	Chloroethane	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
67-66-3	Chloroform	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
74-87-3	Chloromethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
74-95-3	Dibromomethane	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.05	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.05	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS



Sample Information

Client Sample ID: MW-1

York Sample ID: 15K0183-01

York Project (SDG) No.

15K0183

Client Project ID

15-32442

Matrix

Water

Collection Date/Time

November 4, 2015 3:00 pm

Date Received

11/05/2015

Volatile Organics, 524.2 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
594-20-7	* 2,2-Dichloropropane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.04	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.09	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.07	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
75-09-2	Methylene chloride	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
91-20-3	Naphthalene	ND		ug/L	0.06	2.0	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
100-42-5	Styrene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS



Sample Information

Client Sample ID: MW-1

York Sample ID: 15K0183-01

York Project (SDG) No.
15K0183

Client Project ID
15-32442

Matrix
Water

Collection Date/Time
November 4, 2015 3:00 pm

Date Received
11/05/2015

Volatile Organics, 524.2 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
108-88-3	Toluene	ND		ug/L	0.05	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
79-01-6	Trichloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.07	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
95-47-6	o-Xylene	ND		ug/L	0.07	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854	11/17/2015 16:43	11/18/2015 02:52	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.2	1.0	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854	11/17/2015 16:43	11/18/2015 02:52	SS
75-45-6	Chlorodifluoromethane (Freon 22)	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: NELAC-NY10854	11/17/2015 16:43	11/18/2015 02:52	SS
1330-20-7	Xylenes, Total	ND		ug/L	1.5	1.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 02:52	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	108 %	69-130								
460-00-4	Surrogate: p-Bromofluorobenzene	117 %	79-122								
2037-26-5	Surrogate: Toluene-d8	102 %	81-117								



Sample Information

Client Sample ID: MW-2

York Sample ID: 15K0183-02

York Project (SDG) No.
15K0183

Client Project ID
15-32442

Matrix
Water

Collection Date/Time
November 4, 2015 3:00 pm

Date Received
11/05/2015

Volatile Organics, 524.2 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-43-2	Benzene	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
108-86-1	Bromobenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
74-97-5	Bromochloromethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.06	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
75-25-2	Bromoform	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
74-83-9	Bromomethane	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.09	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854	11/17/2015 16:43	11/18/2015 03:30	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
108-90-7	Chlorobenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
75-00-3	Chloroethane	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
67-66-3	Chloroform	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
74-87-3	Chloromethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
74-95-3	Dibromomethane	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.05	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.05	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS



Sample Information

Client Sample ID: MW-2

York Sample ID: 15K0183-02

York Project (SDG) No.
15K0183

Client Project ID
15-32442

Matrix
Water

Collection Date/Time
November 4, 2015 3:00 pm

Date Received
11/05/2015

Volatile Organics, 524.2 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-06-2	1,2-Dichloroethane	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
594-20-7	* 2,2-Dichloropropane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.04	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.09	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.07	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
75-09-2	Methylene chloride	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
91-20-3	Naphthalene	ND		ug/L	0.06	2.0	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
100-42-5	Styrene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS



Sample Information

Client Sample ID: MW-2

York Sample ID: 15K0183-02

York Project (SDG) No.
15K0183

Client Project ID
15-32442

Matrix
Water

Collection Date/Time
November 4, 2015 3:00 pm

Date Received
11/05/2015

Volatile Organics, 524.2 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
108-88-3	Toluene	ND		ug/L	0.05	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
79-01-6	Trichloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.07	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
95-47-6	o-Xylene	ND		ug/L	0.07	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854	11/17/2015 16:43	11/18/2015 03:30	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.2	1.0	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854	11/17/2015 16:43	11/18/2015 03:30	SS
75-45-6	Chlorodifluoromethane (Freon 22)	24		ug/L	0.2	0.5	1	EPA 524.2 Certifications: NELAC-NY10854	11/17/2015 16:43	11/18/2015 03:30	SS
1330-20-7	Xylenes, Total	ND		ug/L	1.5	1.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 03:30	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	105 %	69-130								
460-00-4	Surrogate: p-Bromofluorobenzene	114 %	79-122								
2037-26-5	Surrogate: Toluene-d8	104 %	81-117								



Sample Information

Client Sample ID: MW-3

York Sample ID: 15K0183-03

York Project (SDG) No.
15K0183

Client Project ID
15-32442

Matrix
Water

Collection Date/Time
November 4, 2015 3:00 pm

Date Received
11/05/2015

Volatile Organics, 524.2 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-43-2	Benzene	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
108-86-1	Bromobenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
74-97-5	Bromochloromethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.06	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
75-25-2	Bromoform	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
74-83-9	Bromomethane	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.09	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854	11/17/2015 16:43	11/18/2015 04:09	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
108-90-7	Chlorobenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
75-00-3	Chloroethane	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
67-66-3	Chloroform	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
74-87-3	Chloromethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
74-95-3	Dibromomethane	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.05	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.05	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS



Sample Information

Client Sample ID: MW-3

York Sample ID: 15K0183-03

York Project (SDG) No.
15K0183

Client Project ID
15-32442

Matrix
Water

Collection Date/Time
November 4, 2015 3:00 pm

Date Received
11/05/2015

Volatile Organics, 524.2 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-06-2	1,2-Dichloroethane	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
594-20-7	* 2,2-Dichloropropane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.04	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.09	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.07	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
75-09-2	Methylene chloride	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
91-20-3	Naphthalene	ND		ug/L	0.06	2.0	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
100-42-5	Styrene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS



Sample Information

Client Sample ID: MW-3

York Sample ID: 15K0183-03

York Project (SDG) No.
15K0183

Client Project ID
15-32442

Matrix
Water

Collection Date/Time
November 4, 2015 3:00 pm

Date Received
11/05/2015

Volatile Organics, 524.2 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
108-88-3	Toluene	ND		ug/L	0.05	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.08	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
79-01-6	Trichloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.2	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.07	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.1	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
95-47-6	o-Xylene	ND		ug/L	0.07	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854	11/17/2015 16:43	11/18/2015 04:09	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.2	1.0	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854	11/17/2015 16:43	11/18/2015 04:09	SS
75-45-6	Chlorodifluoromethane (Freon 22)	0.9		ug/L	0.2	0.5	1	EPA 524.2 Certifications: NELAC-NY10854	11/17/2015 16:43	11/18/2015 04:09	SS
1330-20-7	Xylenes, Total	ND		ug/L	1.5	1.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 16:43	11/18/2015 04:09	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	107 %	69-130								
460-00-4	Surrogate: p-Bromofluorobenzene	114 %	79-122								
2037-26-5	Surrogate: Toluene-d8	103 %	81-117								



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
15K0183-01	MW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15K0183-02	MW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15K0183-03	MW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



Notes and Definitions

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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